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## **The Functionality of Monetary Plurality in Cambodia**

**One Nation/One Money: Is it obsolete?**

*Translated from French Version  
The First Edition*



# **The Functionality of Monetary Plurality in Cambodia**

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**Under the direction of Pierre DOCKÈS**

**Grade: Très honorable avec les félicitations du Jury à l'unanimité  
(Excellent Cum Laude)**

To my parents

Kong and Seam

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## Map of Cambodia



## General Introduction

We generally see the circulation of several currencies in a sovereign country as an exceptional and pathological phenomenon due to the implicit norm of national monetary regime “One Nation/One Money”. This was called the principle of national monetary exclusivity (Blanc, 1998, 2000): the money of a sovereign state must be unique, exclusive and specific to that state. This model of national monetary exclusivity was widely distributed in the form of what Helleiner calls “territorial currencies”, which means the territory of the nation-state (Helleiner, 1997), and Cohen calls the “Westphalia model of monetary geography” (Cohen, 1998). This standard also has a strong influence at the political level. In 1983, the Israeli Minister of Finance was forced to resign after expressing the idea of a permanent replacement of the Israeli currency by the dollar (Ponsot, 2002, 2003).

However, monetary plurality is not a completely new phenomenon. The history of money shows the frequency and recurrence of such situations in the world. It was only in the 19<sup>th</sup> century that states called for the first time the legitimate monopoly of control over the issuing and management of currency (Cohen, 1998). After the 1800s, the state intervened to ensure its monetary sovereignty by removing other currencies from circulation.

It is observed that after the 1970s, a few currencies whose value is stable and whose economies are powerful circulate more outside of their issuer country (Balino, Bennett and Borensztein, 1999; Théret, 2003). Gradually, one or more foreign currencies were used in conjunction with the national currency, giving rise to the emergence of work of dollarization and currency substitution. In general, the dominant foreign currency, maintaining its purchasing power relative to the national currency even in times of crisis, was used in domestic monetary and financial practices.

Moreover, a country that knows this phenomenon is also often seen as a country whose economy is in crisis. Hyperinflation or macroeconomic and financial instability are usually used to explain this phenomenon. A large macroeconomic imbalances and hyperinflation were considered as the causes of dollarization in Chile, Colombia and Peru (Herrera and Valdés, 2005; Kokenyne, Ley, and Veyrune, 2010; Reinhart, Rogoff, and Savastano, 2003). In addition, financial repression and capital controls are advanced causes for the case of Nigeria, Venezuela and sub-Saharan Africa (Reinhart, Rogoff, and Savastano, 2003). Moreover, the call to the dollar to anchor macroeconomic stability was the cause for Argentina (Berg and Borensztein, 2000). Monetary plurality was often seen as an obstacle to growth and development. Moreover, it is seen as a constraint to the conduct of monetary policy, which is a key function of the central bank and considered essential by economists and experts (Ize, Levy, and Yeyati, 2005). Affected countries therefore tend to get out of this, sometimes at any cost. It is observed that there are countries implementing policies and measures, sometimes administrative, sometimes *market-driven*, sometimes both at the same time, in order to de-dollarize the country (Kokenyne, Ley, and Veyrune, 2010). However, few countries were able to escape successfully. Furthermore, dollarization is sometimes hollowed out to become full or official.

Among the dollarized countries, Cambodia is one of the most dollarized (Balino, Bennett and Borensztein, 1999; Duma, 2011). Several currencies circulate together: Khmer

riel and the U.S. dollar throughout the country, and Thai baht and Vietnamese dong in border regions. The coexistence of these currencies started from the early 1990s. The money supply in local currency is estimated at about 10 percent of the total money supply (Rumbaugh, Ishi, Liang and Masuda, 2000; Dabadie, 2006). Yet the country has experienced a spectacular growth rate, especially when the level of dollarization (foreign currency deposit/M2 ratio) was up sharply.

This leads us to ask if the traditional representation “one nation/one money” is still relevant today. If it is not, we must reassess the place of a theory of the plurality of monetary circulation in economic theory. At the same time, we can also ask: does the monetary plurality translate into a crisis for an economy? If this is not the case, how does it function? Does it accompany or even facilitate the economic growth?

These questions are our research questions. Cambodia is a particularly interesting case to answer these questions. Our thesis’s central theme focuses on “the diversity of currency circulation in Cambodian territory”.

Our research work is carried out based on both a literature review of economic theory concerning both the monetary uniqueness and plurality, analysis of the origin of the monetary plurality situation of Cambodia, and surveys on the currency circulation in Cambodia. With the strong support of the central bank (National Bank of Cambodia), we were able to obtain useful information and data, which are not publicly available. This information and data from various sources: assessment of the monetary situation, credit and financial reports related to our research question, especially made by the IMF, the World Bank, the Asian Development Bank and other international financial organizations, foreign central banks, and internal reports produced by the departments of NBC (especially, the departments of economic research, statistics, banking supervision, banking operation and foreign exchange management).

The plan of the thesis is structured into six chapters. The first chapter is devoted to the literature review of the economic theory on the monetary uniqueness and plurality. It sheds light on the emergence of the principle of international monetary exclusivity, while questioning the relevance of this principle nowadays when there are countries that use multiple currencies in their territory, and groups of countries that have common currency. Theories of monetary plurality are addressed to enable us to enter the heart of our topic.

The second chapter begins to investigate the case of monetary plurality in Cambodia. It leads us to travel back in time on the long history of monetary plurality in Cambodia, while showing that for Cambodia, it is the national monetary exclusivity that is the exception, not the plurality of monetary circulations. The history of monetary plurality over the last three decades of this phenomenon, which strikes the norm “One Nation/One Money”, was carefully examined. This chapter then leads us to question why monetary plurality could persist in Cambodia and more with a growing trend, and this is the subject of our analysis of the following two chapters.

The third chapter deals with the favorable environment to the persistence of monetary plurality. Among the many possible environmental factors, three were treated in this chapter. It is institutional, banking, and economic environments. The banking environment is a

fundamental part of the institutional environment, but we treat it separately because it represents an important, complex and most dollarized sector.

After analyzing the environment, we present in the fourth chapter, the factors that fuel the economy in foreign currencies. We also examine the roots of the development of monetary plurality. Two major supply channels of currencies are treated: capital flows and international trade activities. These analyses show us the factors causing the development of monetary plurality or dollarization. The inflow of foreign currencies through various channels and destinations was identified and the amounts of these flows were also estimated. This is the first identifications and estimates. They were never made in the work of previous research, or in the detailed reports of the central bank, nor in those of international financial organizations. As the identification of destination flows and estimates are based on a very limited document, the results of our surveys, which are present in the final chapters, appear important to confirm them.

The fifth chapter is devoted to treat the results of surveys of 3,232 economic agents having contact with foreign currencies. Regions previously defined, where foreign currencies circulate, which have formed the basis for the study are: the capital, tourist areas and border regions. Five economic agents were surveyed: the general population (households), the traders, the money changers, the expatriates, and the tourists. Our results are to interpret the use of currency of each agent by region. They also allow us to quantify the relative importance of different monies in circulation, etc.

Finally, we come to the last chapter, the sixth, which is both a synthetic and concluding chapter on the operation of monetary plurality. We present the situation and the financial and economic performance of Cambodia in a regime of monetary plurality. Next, the operation of the monetary plurality is discussed. We completed this chapter with the results of another survey focused more specifically on the foreign exchange market. Indeed, this market plays a very important role in an economy of monetary plurality.

# **Chapter 1: Exclusivity of Monetary Circulation and Monetary Plurality**

## **Summary**

### **Introduction**

#### **I. The Principle of One Money per Country: Is It Valid?**

- 1.1. Emergence of “One Nation, One Money”
- 1.2. Evolution of National Monetary Regimes

#### **II. Monetary Plurality and Economic Theories**

- 2.1. Features of Currencies Used Outside their Issuer Country
- 2.2. Dollarization and Currency Substitution
- 2.3. Money and Confidence
- 2.4. Hysteresis of Monetary Plurality

### **Conclusion of the Chapter**

## Introduction

The national currency is a vector of national identification because it carries monetary sovereignty of the country. In this regard, it plays a similar role to the flag or national anthem. In strictly economic terms, it allows the government to generate revenue related to its release, the “seigniorage”. The more it is used, the more seigniorage revenue increases. Moreover, its presence and its wide or exclusive circulation make monetary policy effective, if possible. The effectiveness of this policy depends significantly on the country’s economic stability; monetary policy helps to create an environment favorable to growth and a sustainable development. The national currency is illustrated, particularly during the crises under unpredictable nature, to the extent that it allows the central bank to play a role as a lender of last resort.

A quick review of these roles and capabilities of leveraging action on economic policy seems to affirm the need for a national currency, a central bank and thus the exclusive issue of a national currency, items that appear therefore priorities in the process of building a sovereign state. The idea of “one nation/one money” has gradually become a norm.

Yet, this principle was shaken in the last three decades by a growing number of hosting or undergoing dollarization of their economies. Some countries have explicitly or implicitly accepted the circulation of one to several foreign currencies in their monetary space. This trend does not seem cyclical, but rather develops over the years. The principle of exclusivity of national currency circulation is therefore highly questionable.

We thus propose in this chapter to briefly present the emergence of the principle “one nation/one money” and the evolution of national monetary regimes. We will then present the theoretical field quickly on monetary plurality and its possible persistence.

## Section I. Principle of “One Money per Country”, Is It Valid?

### 1.1. Emergence of “One Nation/One Money”

The concept of “One Nation/One Money” emerged at the same time as the birth of “nation state” in 1648, the year of the Peace of Westphalia (Hendrik and Spruyt, 1994, Cohen, 1998, Helleiner, 2003). Westphalia is recognized by politicians as a founding event that led to the establishment of the principle of absolute sovereignty based on an exclusive territory (Cohen, 2004). Yet it was not until the 19<sup>th</sup> century that territorial currencies were created. Largely influenced by the experience and the ideal of the French and American revolutions, the 19<sup>th</sup> century was a period of rising nationalism and centralization of political authorities within national borders. These were defined by sovereign nations. Another possible element of sovereignty then, is the presence of an effective government that builds a nation by eliminating anything that threatens the exercise of its legitimate constraint, both the outside and the inside. Then, money is one of the attributes the State must control to achieve this objective.

Before the 19<sup>th</sup> century, although there were sovereigns minting their currency, several other currencies could move freely within the national territories. They were national and foreign origins. National and private agents also minted the currency. The currencies whose intrinsic value was reliable were used in international trade and in this way were used in areas other than their own. According to Cohen (1998), there were at least seven international metal currencies before the creation of territorial currencies. The first international currency was the silver *drachma* of Athens, issued at the beginning of the 5<sup>th</sup> century BC. This currency continued to circulate widely until the time of the Roman Empire. During the latter, the *denarius* became the second international currency. After the fall of the Roman Empire, the third international currency was the *bazant*, minted in the Byzantine Empire between the 4<sup>th</sup> and 15<sup>th</sup> century. The fourth international money was the *florin gold*, issued between 1252 and 1340. The *Florin* was replaced by the *ducat* between 1284 and the 16<sup>th</sup> century. This was the currency of Venice. Finally, the last international currencies as metal were the Mexican-Spanish *peso* or *real* (16<sup>th</sup> - 19<sup>th</sup> century), the *thaler* of Maria Theresa, the *silver coin* of Austria (1751-1780).

Various measures were implemented by the state to ensure its issue monopoly of sovereign currency. Two main measures were taken: standardization of the national currency, and limitation of circulation of foreign currencies. In Great Britain, the exclusivity of the circulation started in the early 19<sup>th</sup> century, in the United States and in Europe, and in Japan from the 1850s and during the second half of the 19<sup>th</sup> century. In the mid-twentieth century, the exclusive monetary authority of the states was universally recognized and set in international norms (Cohen, 2004). Cohen (2004) also noted that after being released from colonization after of the Second World War, the new states established very quickly their central bank and currency. The three states of Indochina did the same; Cambodia created its central bank and its currency in 1954 when it had just gained independence in 1953. Connolly stated that “the money of the country is the psychological, political and historical reality” (Connolly, 1995). For Jean Bodin (1992): “*sovereigns must become the sole issuers of currency within the territories they each governed*”

Therefore, the concept of “one money per country” became a general principle, which slipped out of the research program of most economists. As noted by Hicks (1967), analysis of the reasons for holding money in Keynes was made in a context where the monetary system was already defined. Keynes therefore implicitly admitted that there is only one national currency in the economy and that economic agents hold this currency because it is a perfectly liquid asset and can fulfill three functions: transaction, precaution and speculation. In addition, we also note that, in the function of demand for money developed by the monetarists, money supply is solely performed by a central bank. The relationship between the inflation rate and money supply therefore underlies the implicit assumption of the existence of only one national currency in the economy.

## 1.2. Evolution of National Monetary Regimes

Since the 1970s, a growing number of countries were affected by a phenomenon that economists call “dollarization” or “currency substitution” (Boismery (1996), De Nicoló, Honohan and Ize (2005); Levy-Yeyati (2006)). At the same time, the theoretical corpus of the money was strongly renewed, theories based on monetary plurality gradually emerged (Blanc et al, 2011). Therefore, dollarization or currency substitution became research topics of scholars and experts. The most studied are Latin American countries including Argentina, Bolivia, Peru, and Uruguay. In Asia, an increasing number of dollarized countries were studied: especially Cambodia, Laos, Vietnam, and Indonesia. According to the study of Balino et al. (1999), at least half of the countries that have an agreement with the IMF are dollarized or, for a significant number of them, highly dollarized. In 2009, no less than ten countries were completely and officially dollarized: they used this foreign currency as “*legal tender*” and 47 countries had foreign currency deposits over 30 percent of total deposits (Kokenyne, Ley, Veyrune, 2010).

Parallel to the development of dollarization, we also observe the creation of common currency unions in which member countries abandon their own national currency in favor of a supranational one. Thus, even if only one currency circulates exclusively in the countries of the currency union, it does not belong to one individual country. The most recent case is the euro, which was introduced in 1999. Before the euro, we also saw the creation of the currency union in African and South American countries: the “Zone Franc CFA” from 1962-1964, the “*Eastern Caribbean Currency Union*” in 1965 and “*Common Monetary Area*” between Lesotho, Namibia, South Africa and Swaziland in 1986. Moreover ASEAN, which will soon establish the ASEAN Economic Community in 2015, also began to discuss the question of the establishment of one common currency. Discussions on the creation of a currency union also took place in developed countries, for example the currency union between Canada and the United States, between New Zealand and Australia, and between Belarus and Russia.

The evolution of the national monetary system therefore widely challenged the principle of exclusivity of monetary circulation. A growing number of countries, especially developing countries, are experiencing monetary plurality. Some countries abandon their own currency and adopt a foreign currency as *legal tender*, while others abandon their currency to share a common currency with other countries in the same community. Some economists go so far as to consider the exclusivity of currency circulation as not a principle but rather an extreme case in the spectrum of monetary plurality. For others, it is difficult to consider the

principle of national currency exclusivity (one nation/one money) seriously called into serious question (Blanc, 2002).

## Section II: Monetary Plurality and Economic Theories

### 2.1. Features of Currencies Used Outside their Issuer Country

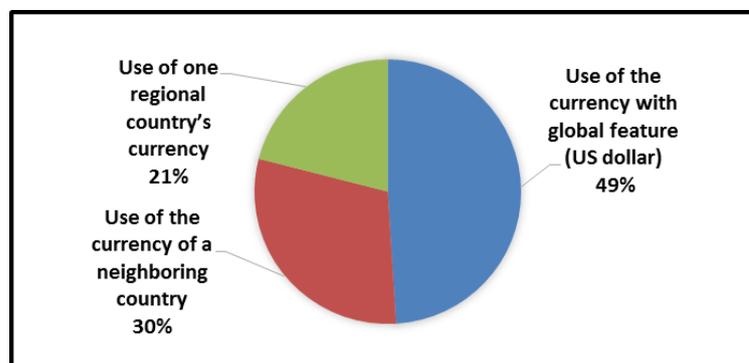
The currencies which are able to enter the economies other than their issuer country are those that have a global feature, strong and convertible currencies with regional feature, or those of neighboring countries (Blanc, 2001). Only one currency can be considered so far as having a global feature, the US dollar. The latter is the currency of billing and account, and most used in international trade. It is also a currency of international capital flows used in investment in foreign countries. In addition, it is also a currency of reference for other currencies in the world. Most central banks in the world consider it the most important reserve currency.

With these capital flows, international trade, and tourist flows, the dollar penetrated into every country in the world. Since the 1970s, private economic agents in a growing number of countries have used it not only as a store of wealth, but also as a means of payment and unit of account within the countries (Ecuador, El Salvador, Panama, Cambodia, Laos etc.).

But there are also strong and convertible currencies that have a regional scope, used by economic agents in countries other than the issuer countries. Circulated in twelve European countries, the euro has become the most powerful regional currency in Europe. Some countries in Eastern Europe and countries formerly colonized by European countries use directly this currency: Kosovo (since 1999), Montenegro (since 1999), Andorra (since 2002) ... The Australian dollar is also recognized as a regional currency and is used in conjunction with Tuvalu's official currency (the Tuvalu dollar) in 1892, and Kiribati since 1943.

Finally, some strong and convertible monies enter the economy of their neighbors. In general, the strength of one currency and the market power of the country are main factors that lead to its use in a more or less extensive area within a neighboring country (Blanc, 2001). For example, the Thai baht was long used in Cambodia (since the 1990s), Laos and Myanmar (since 1999) in the contiguous zones to the Thailand border. The Singapore dollar is accepted in the capital of Malaysia and also used to settle wages in some Indonesian islands close to Singapore such as the island of Rio.

**Figure 1-1: Status of foreign currencies (1988-1999)**



Source: Blanc, 2000, "The parallel currencies: Unity and diversity of monetary fact"

### 2.2. Dollarization and Currency Substitution

Although many researches were published on dollarization, its definition remains unclear. The terminology “dollarization” is itself ambiguous. Foreign currency used in a so-called “dollarized” economy is not necessarily the dollar, this may actually be the euro, the Singapore dollar, the Thai baht, and the Chinese yuan etc. The second ambiguity lies in the classification of types of dollarization regimes. The conventional definition defines dollarization as a phenomenon where residents of a country hold a significant portion of their assets in the form of foreign currency assets (Balino et al., 1999 and 2003). Several regimes have been proposed by different studies. There are at least two attempts of classification of dollarization. The first classification is the degree of foreign currency penetration into the monetary practices. The second focuses on the choice of public authorities.

- **Dollarization regimes by degree of foreign currency penetration**

Depending on the degree of penetration, the dollarization regime is considered as being full or partial. Full dollarization refers to the phenomenon where one foreign currency is adopted by a country as legal tender; this foreign currency is thus the only currency circulating in the economy. In this case, the country is experiencing monetary exclusivity (Ponsot, 2003), without monetary sovereignty. The regime of partial dollarization is characterized by a phenomenon where one or more currencies coexist with the national currency. The national currency is no longer then in the position of fulfilling the triple economic functions.

- **Dollarization regime by choice of public authorities**

In this classification, the dollarization regimes depend on the choice of public authorities. If they officially recognize the use of one or more currencies within the country, then the regime is “official dollarization”. If, in contrast, the currency used by private economic agents is not officially recognized by the authorities, the regime is called “*de facto* dollarization”.

In practice, a country can experience several types of dollarization. Thus, full dollarization is normally official and *de facto* dollarization is usually partial. The case of *de facto* and partial dollarization is the most often encountered monetary fact in developing countries. Ponsot (2003) created a matrix from these two classifications. This matrix possesses four sub-regimes of dollarization that we will not discuss here.

For Cohen (2004), dollarized countries are divided into five categories: i- fully dollarized countries, ii- near-dollarized countries, iii- bi-monetary countries and iv- *currency board* countries.

- Fully dollarized countries are sovereign countries that grant the exclusive right of legal tender to only one foreign currency. For example, Andorra, Montenegro, Palau, Nauru, etc.
- The near-dollarized countries are sovereign countries that depend mainly on one or more foreign currencies, but also continue to issue their own national currency. For example, Ecuador, El Salvador, Panama, etc.

- The bi-monetary countries are countries where one or more foreign currencies circulate. These currencies are legally recognized but complementary to the national legal tender (Bahamas, Bhutan etc.). Cambodia seems to enter into this type of regime.
- *Currency boards*: these are countries whose currency has a formally irrevocable exchange relationship with a foreign currency. Both currencies circulate as legal tender but are completely inter-exchangeable: Hong Kong, Argentina (between 1991 and 2002), Djibouti etc.

Although there are several types of dollarization, we will focus on the type of partial and *de facto* dollarization, which is the most common. The *de facto* dollarization is seen as a process of assets substitution and currency substitution (Ponsot, 2003). The analysis of dollarization is therefore made from the triple functions of money. Indeed, assets substitution refers to the use of one or more currencies as a store of value, while currency substitution is a situation where one or more currencies are used as a unit of account and means of payment. Arma, Ize, and Levy and Yeyati (2006), describe the substitution of assets as “financial dollarization” and currency substitution as “*transaction dollarization*”.

Numerous studies on dollarization are interested in macroeconomic instability and hyperinflation as the main causes of assets and currency substitutions (Salama, 1989; Salama and Valier, 1991; Galindo and Leiderman, 2005; Herrera and Valdés, 2005; Kokenyne, Ley and Veyrune, 2010; Reinhart, Rogoff and Savastano, 2003).

#### **- Assets Substitution**

Assets substitution is considered as the beginning of dollarization process. When macroeconomic risk and hyperinflation appear, economic agents increase a demand for foreign assets which are exercised through portfolio shifts between domestic assets and foreign assets in order to protect the value of their wealth. Indeed, hyperinflation and the sharp depreciation of the national currency linked to it are the main causes of reduction in the value of agents’ assets. According to Bolino et al. (1999), in a hyperinflation, dollarization typically spreads because the public seeks to protect themselves against losses from holding assets denominated in national currency.

#### **- Currency Substitution**

Several researchers have attempted to construct a model of currency substitution from the function of demand for money to explain the determinants of the demand for domestic and foreign currency. Thus we find proposals of models in Ortiz (1983), Agénor and Khan (1992), Blanc (1998) etc. We base on the model of currency substitution of Blanc (1998) to translate the phenomenon of currency substitution. Taking as basis the triple reasons for holding Keynesian money (transaction, precaution, speculation), Blanc tried to reconstruct a function of demand for general money, not only for the national currency, but also for foreign currencies and other types of payment methods. It is limited in our case to the function of demand for domestic currency and foreign currency. This model of currency substitution focuses on function of payment of money. Indeed, the function of unit of account is not integrated in the function of demand for money and the reserve is not specifically monetary.

The demand for money is a sum of functions of demands for each currency of payment  $i$  (domestic and foreign currency):

$$M = \sum_U^{i=1} M_i$$

Where  $M$  is the demand for money  
 $i$  is national or foreign currency

The form of each function of demand for money  $i$  is written:

$$M_i/P_i = L_i (P_i^*, r_i^*, E_i^*, T_i, c_i, t_i, w, I)$$

Where:

- $P_i^*$ , anticipated evolution in the general level of prices evaluated in monetary unit which corresponds to currency  $i$ .
- $r_i^*$ , anticipated real return on currency  $i$
- $E_i^*$ , anticipated depreciation of exchange rate of currency  $i$  against other currencies.
- $T_i$ , quantity of performed transactions with currency  $i$ . This corresponds to the number of economic agents for whom currency  $i$  gives access and the quantity of operations carried out by these agents.
- $c_i$ , conversion cost of currency  $i$  into the other money.
- $t_i$ , transaction costs related to money  $i$ , that is, the cost of finding counterparties of that money. The transaction cost is considered *a priori* as null or insignificant if the national currency is the only one to be used, since then all is well counterparty. However, this transaction cost rises when there is contesting of national currency as it becomes more difficult to find a counterpart.
- $W$ , real wealth, which is the sum of all demands for currencies of payment, each one is calculated according to the exchange rate in local currency.
- $I$ , various institutional factors that are difficult to quantify, such as the existence of a free exchange market, the existence of possibility to transfer assets abroad, the trust, etc.

From this model, the demand for money is the sum of demands of national and foreign currency. In a context of plurality, these two demands are positive, which means that the economic agents have both national and foreign currency. The more the demand for foreign currency over that of the national currency, the more the economy is dollarized. The demand for one currency is determined by a combination of profitability (return on national and foreign currency), risks (related to depreciation and inflation), transaction cost (conversion cost between national and foreign currency, costs of searching counterpart that accept currency  $i$ , quantity of transactions performed with currency  $i$ ). It is also determined by the level of real

wealth and institutional factors such as the existence of a free exchange market, the existence of opportunities to transfer assets abroad, the confidence etc.

Bogetic (2000) stated that the holding of foreign currencies is closely linked to national and foreign inflation rates. The more the domestic inflation exceeds the rate of the foreign currency, the more the foreign currency is held by residents.

Studies of Salama and Valier (1990) linked hyperinflation and dollarization in Latin American countries in the 1980s. Having experienced a debt crisis, Argentina, Brazil, Mexico, Peru and Bolivia were faced with the exponential acceleration of the increase in the price level. According to Salama and Valier (1990), hyperinflation in these countries gradually deprived the national currencies of their economic functions. First, the function of unit of account is affected. Indeed, at the beginning of the existence of hyperinflation, all components of economic activity tend to be indexed on the evolution of inflation rate and exchange rate. The national currency gradually loses its function of account along the rooting of the inflation. In this phase, the economic agents continue to use national currencies for current payments, but not for large transactions and markets for durable goods and equipment. In the second phase, when inflation becomes uncontrollable, unpredictable and chaotic, agents always expect the increase in the inflation rate, and these expectations in turn maintain a higher rate of inflation. Indexes do not follow therefore the rate of inflation. The foreign unit of account is finally used to the detriment of the national one. The national currency thus ceases to perform its function of account. The loss of function of account then causes the direct use of dollars in transactions, which increases the demand for the dollar and the economy becomes therefore dollarized. In their analyses, Salama and Valier (1989) only focus on the function of account and payment because they believe that the national currencies of developing countries no longer fulfill the function of store of value. The latter is ensured by the dollar, gold, investments in indexed public securities etc.

### **2.3. Money and Confidence**

Causal explanations of monetary plurality from the instrumentalist analyzes of money, that money is a mere instrument for ensuring monetary operations, do not seem to be satisfactory. According to Gilbert and Heileiner (1999), “*Money’s functions are also often not just economic but also political (e.g., an instrument of power), social (e.g., facilitating various social relationship), and cultural (e.g., transmitting or reflecting cultural value)*”. Money is a strong symbol of belonging to the same political, economic and social entity (Thérêt, 1998). It is an institution, an integral part of the social order (Aglietta, 2001). The phenomenon of monetary plurality in which one/several foreign currencies play the same role as the national currency, reflect not only a currency crisis but also institution crisis. The national currency could no longer guarantee exclusively its functions; it loses its legitimacy and so do the institutions. Analysis focusing on the socio-political dimensions of currency allows us to understand the *de facto* dollarization as a crisis of legitimacy of the domestic unit of account that gradually erodes the pillars of monetary sovereignty (Ponsot, 2002, 2003).

The national currency is not based anymore on its intrinsic value as a commodity-money of the 19<sup>th</sup> century, but on trust. It is called “fiduciary money”. This word comes from the Latin *fiducia*, which returns a value based on trust in the one who emits. It grew and spread

increasingly across all countries of the world in the 19<sup>th</sup> and 20<sup>th</sup> centuries (Helleiner, 2003). The confidence also gives rise to fiduciary money. Sovereign money is the trust.

According to Aglietta and Orléan (1998) and Théret (2007), we can distinguish three types of trust: the “methodical trust” (*confidence*), the “hierarchical trust” (*credibility*) and “ethical trust” (*trust*). Money requires the interplay of these three forms of trust (Théret, 2007). Methodical trust of the money is based on the fact that people have and use the money because they believe that others routinely do the same and accept it in trade. Regularity of payments allows the emergence of benchmarks for future action. The routine is the source of this form of trust.

Hierarchical trust of money refers to the fact that the stability of the system of unit of account and the value of the means of payment is guaranteed by a collective power. The latter plays a protective role in the system and ensures the convertibility of the currency. The hierarchy is also based on the hierarchical structure of the banking system. The central bank, issuing fiduciary money, occupies a top position over commercial banks, issuing scriptural money. It supervises the banking system by implementing regulations and prudential measures to ensure the stability of the banking and monetary system. When this system is guaranteed, people have confidence in the stability of unit of account and the value of the money and through this confidence, money is held. To ensure this trust, the central bank acts as the lender of last resort to safeguard the permanence of the banking system. The hierarchical trust therefore depends largely on the ability of the authorities in their protective function of the monetary system.

Finally, the third trust is the ethical trust. This trust is placed on the upper level of the hierarchical trust which is higher than the methodical trust (Aglietta and Orléan, 1998). Ethical trust comes under symbolic authority of the system of values and social norms, which base on social class (Théret, 2007). Values and norms are guaranteed by the fact that the modes of issuing, distribution and circulation of money ensure the reproduction of society.

These three forms of trust are closely related to each other. Methodical trust is guaranteed by the hierarchical trust which is itself founded by ethical trust (Théret, 2007). This can be seen through financial crises. As lender of last resort, the central bank lends to a banking system that is temporarily facing liquidity problems. By doing this, the central bank transforms private debts into social debt. This intervention therefore causes social costs and therefore violates the rules implemented by the central bank itself. So the hierarchical trust is saved at the expense of ethical trust. But the deterioration of ethical trust causes the decrease of trust in the ability of the authority to ensure the stability of unit of account and the value of money. Then the loans ultimately create what is called moral hazard for banks. With the support provided by the central bank during crisis, these commercial banks will be less cautious about the risks that could not only bankrupt but also destabilize the entire banking system. Finally, these risks deteriorate methodical trust in the business world after the crisis.

These three types of trust therefore form the basis of the stability of the national unit of account and this one allows the persistence of national monetary regime. Because the viability of the latter depends on the persistence over time of the trust placed in the unit of account (Aglietta

2001). When dollarization occurs, the national unit of account is destabilized. The external unit of account is used in a monetary system which already has its own unit of account.

The fact that the State or the central bank no longer appears capable of ensuring monetary stability, especially during the period of monetary crises (hyperinflation, sharp depreciation of the exchange rate) makes the stability of the national unit of account unstable and therefore undermines the collective trust in the currency, its acceptability is therefore questionable. As the money is trust, monetary crises are also crises of trust (Théret, 2007).

#### **2.4. Hysteresis of Monetary Plurality**

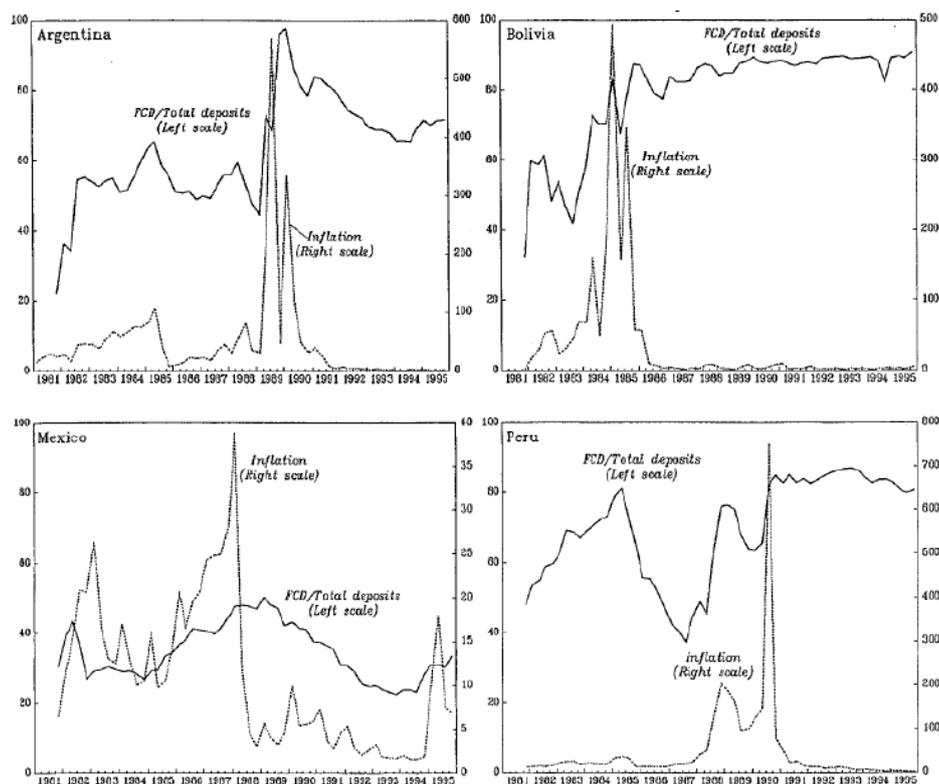
The currency substitution may result, as we have seen in the previous paragraphs, in macroeconomic instability and the crisis of legitimacy of the national currency. Yet we see that even in a situation of macroeconomic stability with low inflation rate and a stable exchange rate, dollarized countries continue to be dollarized and some even increase their dollarization. Balino et al. (1999) stated that “*Remarkably, the increase in dollarization in some Latin American and Asian countries has continued and even accelerated in recent years following successful stabilization*”.

By focusing on the evolution of dollarization in Latin American countries (Argentina, Bolivia, Mexico and Peru), Ize and Levy-Yeyati (2003) find that although these countries know dollarization<sup>1</sup> from the early 1980s due to hyperinflation and other macroeconomic instability, and then stabilized their economies, they do not leave dollarization at all. After inflation had fallen to a low and manageable level, the degree of dollarization remained high even it declined in some countries (Argentina and Mexico). For other countries, this level remains stable and others following a growing trend.

#### **Figure 1-2: Persistence of dollarization in Latin America from 1981 to 1995**

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<sup>1</sup> Measured by the ratio of foreign currency deposits/total deposits



Source: Ize and Levy-Yeyati, 2003, “Financial dollarization”, *Journal of International Economics*

Some models attempted to make a response to the dollarization based on network effects of the use of currencies and analyzing the connection between these effects and transaction costs related to holding of currencies. The extension of currency substitution will depend therefore on relative transaction costs of the use of national and foreign currencies. The relative transaction costs are, in turn, determined by network externalities generated by the users of foreign currencies and the national money and the exchange cost between the foreign currency or currencies and the national currency. When depreciation of the national currency is anticipated, the economic agents try to substitute the currencies that other agents already employ in conjunction with the national currency (Edga et al., 2003). The network externalities tend to reinforce the rewards of holding these currencies. When the level of dollarization exceeds a certain threshold, it perpetuates and creates a phenomenon called “hysteresis of dollarization”. The “hysteresis” refers to the fact that dollarization remains high or even increases as the macroeconomic situation stabilizes. The hysteresis occurs because the costs of return to an exclusive circulation of national currency increases depending on the degree of dollarization and thus discourages the countries to de-dollarize. In other words, the network externalities associated with the use of foreign currencies reduce the costs of their use.

What is the threshold of the hysteresis? This threshold is reached when the costs of the use of the foreign currencies is equal to the cost of exchange of the national currency.

There are different models of network externalities that determine the conditions under which the use of foreign currencies dominates the use of the national currency: Dowd and Greenaway (1993) and Oomes (2001).

- **The Dowd and Greenaway’s model (1993)**

The Dowd and Greenaway's model (1993) studied the utility function of holding foreign currencies by economic agents to understand the decision to hold foreign currency instead of national currency. Three possible decisions of economic agents are offered by this model:

- i- The continued use of the national currency.
- ii- The total substitution of the national currency by the agents, which refers to the phenomenon of full dollarization.
- iii- The partial substitution of national currency which is the phenomenon of monetary plurality.

So there are two functions of utility: the utility resulting from the use of the national currency and the utility from the use of foreign currencies:

**- The utility function from the use of the national currency**

The utility function of economic agents regarding the use of the national currency:

$$U(T) = (a + bn) \int_T^{\infty} e^{-r(t-T)} dt = (a + bn)/r$$

Where:

- u (T) is the utility in time T obtained from the use of the national currency of the time T to infinity
- $t \geq T$  is the period of time T in the future
- r is the discount factor
- n is log of N
- If there are no network externalities, the parameter (a) reflects the value of return of the use of the national currency when other agents do not use it. In reality, a represents the substitution of assets.
- bn, where  $b > 0$ , represents the benefit from network externalities from the use of the national currency by the other agents. bn represents currency substitution.

**- The utility function from the use of foreign currency**

The same logic is used to determine a utility function of the use of foreign currency. Thus, it is equal to:

$$U^*(T) = (a^* + b^*n^*) \int_T^{\infty} e^{-r(t-T)} dt = (a^* + b^*n^*)/r$$

**- The model results**

If and only if the utility obtained by the holding of the national currency for purposes other than payments is greater than the utility of the use of the foreign currency when all agents use it (reducing the usual costs of converting foreign currency into the national currency - *switching costs* -), then all agents will hold the national currency. Thus, all agents will use the national currency when:

$$a / r > (a^* + b^*n^*) / r - s$$

In contrast, all agents will use the foreign currency if the utility from its use when no other agent uses it is greater than the sum of the utility derived from the use of the national currency when everyone uses it, plus exchange costs. Therefore:

$$a^* / r > (a + bn) / r - s$$

Both results above show the extreme case of the model. The agents will decide whether to use only the national currency or only the foreign currency. In other words, the economy will be the exclusive monetary circulation or full dollarization. In addition, another result of the model refers to the situation where economic agents use two currencies simultaneously. Foreign currency coexists with the national currency. This would be the case of partial dollarization or monetary plurality.

This intermediate case is indeterminate unless the agents have a mechanism to determine the gains of assets substitution or a mechanism to anticipate whether other agents replace the national currency by foreign currency. Without these mechanisms, the agents are ambiguous and this consequently leads to a situation of monetary plurality. If the agents perceive the value of return from holding two currencies and the likelihood that other agents replace the national currency by foreign currency, they will use foreign currency when the sum of the anticipated present value of returns from assets and currency substitution, deduced from exchange costs, exceeds the anticipated present value of returns from assets and currency substitution to national currency, i.e.:

$$(a^* + b^*n^*) / r - s \geq (a + bn) / r - s$$

The assets substitution represented by (a) depends on the value of return of currency. The value of the national currency depends, in turn, positively on the coverage of the monetary base by international reserves (c) of the central bank. The increase in (c) causes the appreciation of the national currency and thus the value of return of the national currency, and vice versa. We can thus write:

$$a = a(c)$$

Where

$$- c = e_{(BM)} R [BM]^{-1}$$

- R: international reserves of the central bank

- BM: monetary base BM = currency in circulation + demand deposits in national currency + term deposits in national currency.

The agents set their anticipations on the number of people who hold foreign currency based on the evolution of exchange rate. When the exchange rate depreciates, the agents anticipate that there will be more people who exchange national currency into foreign currency. We can thus write:

$$n = n(e), \quad dn/de < 0$$

The utility function from the use of national currency could eventually be written:

$$U(T) = [a(e)C_{(BM)} + bn(e_{(BM)})]r^{-1}$$

• **The Oomes' model (2001)**

This model is originally used by Oomes (2001) to explain the hysteresis of dollarization in Russia. It shows the result of positive network externalities from the use of foreign currencies. This model is based on *cash-in-advance* model. Sellers and buyers have a choice in the use of currency: the national currency (m) or foreign currency (m\*) in their transactions. Each agent who is a buyer in one period will become the seller in the next period.

The question for a given agent (i) which currency they should hold after getting money from a random buyer at the beginning of the period (t) and before meeting the random seller (j) who will accept the currency they hold at the end of the period.

The depreciation of the national currency ( $e_t$ ) represents the cost of holding it. Similarly, there are also costs associated with the use of the foreign currency. It is primarily transaction costs related to searching and transaction of exchange office ( $\sigma_t$ ), which is called "*shoe-leader cost*". These costs exist when sellers accept currency that buyers hold. The second cost that Oomes included in his model is the tax on purchases of foreign currencies ( $\tau$ ) introduced by the Russian Government. Yet this category of tax does not always exist in other countries such as Cambodia. Finally, there are also the costs of the use of foreign currencies in transactions concerning the constraints introduced by the Government; they are appointed as institutional barriers (q).

The decision to hold a currency by the buyer is under constraints of the choice of holding currency of the seller, or represented by a matrix of costs as follows:

Matrices of costs for agent i

	$m_{j,t+1} = m$	$m_{j,t+1} = m^*$
$m_{i,t} = m$	e	$e + \sigma + \tau$
$m_{i,t} = m^*$	$\sigma$	q

Where:  $m_{i,t} \in \{m, m^*\}$

Apart from the costs of holding the foreign currency below, the decision of the buyer of holding national currency or foreign currency also depends on anticipations of sellers' preference. That is, if the buyer i anticipates that the random seller j would prefer to hold the

foreign currency in period t+1 (represented by a probability  $p_{t+1}$ ), they will also holds that currency at that time. The  $p_{t+1}$  therefore represents the ratio of dollarization in period t+1.

The anticipated costs of holding the national currency  $C(m_t)$  in period t and those of the foreign currency  $C(m_t^*)$  may be written:

$$C(m) = (1-p_{t+1}) \hat{e}_t + p_{t+1} (\hat{e}_t + \sigma_{t+1} + \tau_{t+1}) \text{ and}$$

$$C(m_t^*) = (1-p_{t+1}) \sigma_{t+1} + p_{t+1} q_{t+1}$$

Oomes also introduced two variables of random utility:  $\varepsilon_{i,t}$  and  $\varepsilon_{i,t}^*$  to capture unobserved variables affecting the costs or benefits of holding the national and foreign currencies, respectively. If  $\varphi$  measure the impact of these variables on the anticipation of the total cost, the probability  $p_{i,t}$  of a given agent i of holding foreign currency may be written:

$$p_{i,t} = \Pr \{ C(m_t^*) + \varphi + \varepsilon_{i,t}^* < C(m_t) + \varphi + \varepsilon_{i,t} \}$$

$$= \Pr \{ \varepsilon_{i,t}^* - \varepsilon_{i,t} < 1/\varphi [\hat{e}_t - \sigma_{t+1} + (2\sigma_{t+1} + \tau_{t+1} - q_{t+1}) p_{t+1}] \}$$

Finally, Oomes integrates three key assumptions:

- i- the risk of confiscation is assumed constant:  $q_t = q$
- ii- the costs of *shoe-leader cost* are assumed decreasing by the ratio of dollarization because when dollarization increases, exchange offices are emerging, or  $\sigma_t = \gamma_1 - \gamma_2 p_{t-1}$ , where  $\sigma_t > 0$
- iii- the agents estimate that the depreciation rate would remain the same with the probability  $\alpha$ , but would equal the maximum rate of depreciation with probability  $1 - \alpha$  :

$$\hat{e}_t = \alpha e_t + (1-\alpha) e_t^{\max}$$

Ooms' model therefore concludes that the more the costs of holding foreign currency are lower than those of the holding of the national currency, the more the likelihood of holding foreign currency is high. Costs of holding the national currency are primarily related to its depreciation, while the costs of holding foreign currency involve transaction costs related to searching and transaction of exchange office, institutional barriers, and anticipation of the seller preference for the currency.

## Conclusion of Chapter

The principle of exclusivity of national currency circulation became a norm from the 20<sup>th</sup> century, although the concept emerged since the mid-17<sup>th</sup> century. Before that date, several currencies, royal or private, national or foreign, circulated in the territory of a sovereign country. This recent phenomenon has subsequently been questioned because of the evolution of national monetary regimes in the world. Groups of countries have agreed on the creation of monetary unions. Similarly, one or more foreign currencies whose value is stable or are sought in the border or international trades penetrated in neighboring or distant economies of their issuer countries.

The use of foreign currencies was most often caused by economic factors and confidence. Hyperinflation and macroeconomic instability are frequently seen as the causes of the emergence of monetary plurality. Moreover, the issue of confidence, which is often overlooked by the economists in their analyses of the phenomenon, is also a crucial factor in explaining this phenomenon. The loss of confidence in the national currency may encourage residents to use foreign currencies. This confidence comes to three types: methodical, hierarchical, and ethical trust. A currency is held because it possesses these triple elements of confidence.

The analyses of the persistence of monetary plurality finally come to describe this phenomenon as “hysteresis”. Different economic models seek to explore the reasons why dollarization persists even after the country had regained macroeconomic stability. The effects of networks of the use of foreign currencies, the costs of holding the national currency and the costs of replacement of foreign currency or the costs of return to use the national currency are critical components which result in the persistence of dollarization.

## **Chapter 2: Long History of Monetary Plurality in Cambodia**

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#### **Conclusion of Chapter**

## Introduction

“The different categories of currencies, including the most rudimentary, had coexisted in Cambodia up to the late 19<sup>th</sup> century and almost up to our day” (Gardère, 2009, pg. 19)

If we are to believe the myth of “one money per country”, monetary plurality<sup>2</sup> would be a unique phenomenon. Cambodia, where several currencies coexist, would be an exceptional case. The majority of Cambodians and even foreigners who visit the country think it is abnormal and different from other countries’ practices, especially in the region. We obviously cannot purchase goods with dollars at the market in France or with the euro in the United States. Thai traders accept only the Thai baht for payments within their countries. Similarly, you cannot use currency other than Malaysian ringgit in Malaysia etc.

The circulation of several currencies in the monetary field is also considered a new phenomenon in the eyes of Cambodians. In retrospect, if we return to the earlier period of the Khmer Republic (1970-1975), the Sihanouk regime (1953-1970) or the French Protectorate (1863-1953), those who have experienced these periods would speak of exclusive use of one single currency: the riel, after the Independence, or the Indochinese piaster under the Protectorate. The riel in particular fulfilled well all the traditional functions of money (unit of account, means of payment and store of value).

However, if we extend our observation to the period before the Protectorate or even the beginning of the Protectorate (before the end of the 19<sup>th</sup> century), we will see that the exclusivity of the monetary circulation did not exist in Cambodia. The economy was generally dominated by trade in kind and use of exotic money since the beginning of its history. Monetary plurality of the past decades is only the reappearance of a former phenomenon. However, the causes, consequences and uses of currencies are not quite the same for the contemporary period and the previous period.

The history of monetary plurality in Cambodia is not exceptional. Moreover, it also follows more or less the evolution of monetary phenomenon in the world. The monetary history of the world shows us that it is mostly during the nineteenth century that states claimed for the first time and legitimized the right to monopolize the issuing control and management of currency (Cohen, 1998). After the 1880s, the state intervened to ensure its monetary sovereignty by removing other currencies from circulation. The model of the national monetary exclusivity was widely spread. However, since the early 1970s, it was observed that the phenomenon of monetary plurality reappeared, particularly in developing countries (Calvo and Rodriguez, 1977, Girton and Roper, 1981, Helleiner, 2003). The currencies whose values were stable such as the U.S. dollar, the deutsche mark and now the euro, began to penetrate and circulate more or less freely within economic areas of the countries other than their issuer countries.

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<sup>2</sup> Although monetary plurality can take different forms, we limit it to the coexistence of currencies (national currency and one/more foreign currencies) in an area of the country.

In this chapter, we aim to clarify the history of monetary plurality of Cambodia since its history until now. The aim is to highlight that monetary plurality is not a new phenomenon in Cambodia. Therefore we will begin by presenting a very brief history of monetary plurality since the beginning of the history of Cambodia (1<sup>st</sup> century) to the period of money abolition (1975-1979). We will then present the appearance of monetary plurality and its evolution over the past three decades. Finally, we also find out the persistence of monetary plurality and its environment.

## Section I: History of Monetary Plurality in Cambodia

The history of Cambodia dates back to the first century A.D. The country experienced a period of extraordinary growth in political, territorial and monumental terms between the beginning of the 9<sup>th</sup> century and the beginning of 14<sup>th</sup> century, however Cambodia was unable to mint its own currency until the 16<sup>th</sup> century. In addition, there was a sharp discontinuity of minting the royal money. Despite several attempts to mint currency by some kings between the 16<sup>th</sup> and 19<sup>th</sup> century, the minted currency had a more symbolic rather than economic role (Gardère, 2009). The economy was dominated by in kind trade and the use of foreign currencies.

This section will present very briefly the history of the use of various currencies in Cambodia since the beginning of its history until the end of the genocidal regime of Pol Pot. As a first step, we will discuss the use of several currencies before the French Protectorate period. The history of monetary exclusivity in the French Protectorate and after independence will be presented in a second step. We will finally present the history of the abolition of money in the Khmer Rouge regime.

### 1.1. Before the French Protectorate Period

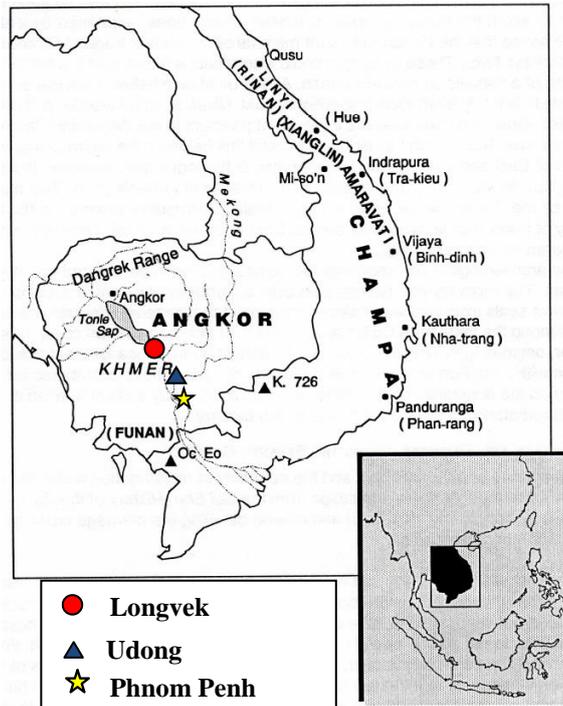
#### 1.1.1. Pre-Angkorian period

The pre-Angkorian period from the 1<sup>st</sup> to 8<sup>th</sup> century was dominated by the time of Funan<sup>3</sup>, the first Kingdom of Cambodia in the first century to the sixth century. Funan's economy was primarily an agrarian economy (rice cultivation, fishing and vegetable cultivation), and that of donation and offering (Wicks, 1992). Inside the country, monetary trade was rare and the barter system dominated. Products such as paddy, sugar cane, salt, poultry, were often used as means of payment. At the same time, commodity money and metal money of foreign origin (gold and silver) were also accepted in international trade on Cambodian territory. According to Wicks (1992, p. 183, 186), *“there are indications of monetized transactions in the time of Cambodia's first historical kingdom, Funan, and during the eight century, when silver and cloth appeared as explicit measures of values in land purchases.*

### Figure 2-1: Map of Funan

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<sup>3</sup> Funan is a Chinese name. The source of Khmer history comes mainly from China. In Khmer, Funan means Phnom, mountain.



Source: Robert S. Wicks, 1992

**Table 2-1: Major shifts of capital of Cambodia**

Period	Date	Capital
<b>Funan</b>	1 <sup>st</sup> - 6 <sup>th</sup> century	<b>Vyadharapura</b> (currently in the south of Vietnam, <i>OcEo</i> is the main port of Funan from the 1 <sup>st</sup> to the 6 <sup>th</sup> century)
<b>Chenla</b>	6 <sup>th</sup> - 8 <sup>th</sup> century	<b>Bhavapura, Isanapura</b> (currently in Kampong Thom province)
<b>Angkor</b>	9 <sup>th</sup> - 15 <sup>th</sup> century	<b>Angkor</b> (in Siem Reap province)
<b>Chaktomok</b>	Mid 15 <sup>th</sup> - Mid 16 <sup>th</sup> century	<b>Phnom Penh</b>
<b>Longvek</b>	Mid 16 <sup>th</sup> - late 16 <sup>th</sup> century	<b>Longvek</b> (Currently in Kampong Chhnang province)
<b>Udong</b>	17 <sup>th</sup> - 19 <sup>th</sup> century	<b>Udong</b> (40 km northwest of the capital Phnom Penh, now in Kampong Speu province)
<b>From French Protectorate (1863)</b>		<b>Phnom Penh</b>

Enjoying a good location on the Mekong Delta in the south of present-day Cambodia, Funan had a port that allowed convenient access to maritime trade in the region, with China, India and Malaysia. Traders came to the port of Funan using commodity money, and some of metal money, which in turn came from elsewhere (Europe). It seems that the word “*Psar*” market in Khmer, that Cambodians use today, comes from the Malay “*Psar*”. It’s probably the Malaysian and the Chinese who introduced the exact concept of market in Cambodia. Funan was therefore able to develop its economy from not only the agricultural sector but also from international trade, which was the primary source of entry of foreign currencies. Wicks (1992) noted that maritime trade was active from 1<sup>st</sup> to 6<sup>th</sup> century in Cambodia. The king of Funan even sent traders to Guangzhou in China to trade and Funan formed an important trade link between the east and the west.

Despite the development of trade, Funan did not mint its own money. As confirmed by Wicks (1992, p. 186), “*there is no evidence for the issuance of coinage with Funan realm itself...*”. There were probably three reasons that did not prompt the kingdom to mint its money. First, the economy was characterized by the gift and barter of commodities by domestic trade. It did not require therefore monetary use. Second, taxes were collected in kind. Jin Su<sup>4</sup> showed that the taxes were paid only on luxury goods because Funan was involved in international trade and the most effective way to ensure a continuous flow of precious and rare goods was to specify them as the only acceptable means of payment to fulfill the fiscal obligation. Finally, metals were rare in Cambodia. Gold and silver used in trade were imported.

Means of payment used in trade in Cambodia at the time came from foreign traders. These included silver, fabrics, clothing and other commodity money. In Oc-Eo archaeological site on the southeast side of the Mekong Delta, which was considered an important port of Funan, several silver coins were found. They were all foreign and sometimes from distant countries: Burmese, Thai, seals with Indian scripts, as well as Roman gold coins (Louis Malleret, 1962<sup>5</sup>).

The international trading system was well developed, however, at the time of Funan. When the eighth century arrived, the notion of “value” appeared for the first time and created the beginning of the credit system in Cambodia (Wicks, pg. 191). Silver and items of fabrics and clothing that came from abroad were used as a measure of value. It is very likely that there was relatively fixed exchange rate between silver and items of fabrics and clothing and paddy (Gardère, 2009). For actual transactions, it is estimated that farmers often used paddy as payment. The buyer could also make a service work to the seller to acquire the goods.

The reason why silver and items of fabrics and clothing were used as a unit of account is that there were specific measures of silver and items of fabrics and clothing, and there was not real and unique measure of paddy. The definition influenced by Chinese traders. Silver and items of fabrics and clothing were measured by *Tamlin/damling*<sup>6</sup> and *yau*, respectively. Wicks (1992) studied the transactions of purchases of land for rice cultivation in the *Inscription* of the 8<sup>th</sup> century, and showed that the value of land was set in silver and items of fabrics and clothing. As silver was rare, payments could be made in performing work or paddy. Silver was therefore used as a unit of account.

**Table 2-2: Transactions recorded in the inscription of the 8th century**

Object Acquired	Services Rendered	Barter Price	Values
A9-19 rice field	Labor of <i>sampot</i> women	Paddy	5 tamlin (silver)
11-12 rice field	Oblation of the god	Paddy	4 tamlin (silver)
13-14 rice field	Ghrita (liquid butter) of the god	Paddy	5 tamlin (silver)
15-17 rice field	Oblation of the god	Paddy	1 tamlin (silver)
C1-3 rice field	Oblation of Svayambhu	Paddy	12 tamlin (silver) 1 yau of double cloth

Source: Robert S. Wicks, 1992, p. 193

<sup>4</sup> Cited by Wicks (1992)

<sup>5</sup> Louis Malleret, 1962, "Archaeologie du Delta du Mekong," *École Française d'Extrême Orient (EFEO)*, N. 43

<sup>6</sup> The Tamling/damling is equal to 375 grams.

### 1.1.2. Angkorian period

After the Funan period, the Kingdom was divided. The capital of Cambodia moved and distanced itself more and more from maritime ports and finally settled for nearly six centuries in Angkor, in the north of the country next to one of the largest lakes in the world, the Tonle Sap, which joins the Mekong. The soil there was very fertile. Conditions were very favorable for rice and vegetable cultivation, and fishing, but the country turned its back on trade due to the distance from the ports. The country was able to build some magnificent monuments from the efforts of domestic agricultural production. Focused on a system of agrarian economy and slavery, and being far from the port where international trade took place, the country did not really need money for its trade. The abundance of agricultural production and internal peace helped Cambodia become the Khmer Empire between the 9<sup>th</sup> and 13<sup>th</sup> century. The economy was primarily agrarian: rice cultivation, raisings of pigs and roosters, forestry exploitation, fishery, etc. According to Wicks (1992, p. 183), “*There is no firm evidence for monetized transactions from 9<sup>th</sup> century to latter part of the thirteenth century*”... Bernard P-Groslier (1956, 1979) also confirmed that between the 11<sup>th</sup> century and the 13<sup>th</sup> century, the Angkor Empire had no money; barter dominated in small trade; rice was used to exchange against utensils, veils and fabrics from China. The gold, silver and some coins were certainly brought by the Chinese to buy goods (Jelen, Janos and Gabor Hegyi, 1991). But they were used as means of payment in large transactions (Groslier, 1956).

By examining the inventory of inscriptions related to transactions on purchases of land and slaves from 944 to 1027, Wicks (1992) found that the means of payment used varied a lot. These were fabrics, containers, livestock, silver, rice, copper, oil, wax, salt, stops and elephants. In general, gold, silver, cattle, buffalo and elephants were used to settle large transactions. Skins, iron bars and copper, and fabric pieces were used for transactions on a smaller scale. Meanwhile, poultry, rice, wax breads and palm sugar were mostly used for everyday trade. Gold and silver were used as offerings to the Hindu gods and for decoration of temples built by the kings and dedicated primarily to their predecessors or their future lives (Gardère, 2010, pg. 43). The payment system was not unified; there was not a real unit of account as we saw in 8<sup>th</sup> century (Georges Groslier, 1921). The market was not well developed, as noted by Zhou Daguan, a Chinese traveler who visited Cambodia in 1297:

*In Cambodia, women take charge of the trade... Market is held every day from six O'clock until noon. There are no shops in which the merchants live (as is the practice in China), instead upon the ground. Each has allotted place. I have heard that the authorities collect rental for each space<sup>7</sup>.*

The Chinese immigration seems to begin in Cambodia in the late 13<sup>th</sup> century. Zhou Daguan observes that “*The Chinese presence must have been considerable... Since rice is easily had, woman easily persuaded... and trade easily carried on, a great many (Chinese) sailors desert to take up permanent residence (Zhenla Fentuji)*<sup>8</sup>.”

The Chinese therefore helped to develop trade and use of money in Cambodia during Angkor period by introducing their money (gold, silver ingot and Chinese coins). This is most likely

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<sup>7</sup> Zhenla Fenjuji, Zhou Daguan, “Customs of Cambodia”, cited by Wicks, pg. 206

<sup>8</sup> Zhenla Fenjuji, Zhou Daguan, Customs of Cambodia, cited by Wicks, pg. 206

from the late 13<sup>th</sup> century that Chinese sapecs entered and circulated in Cambodia. Its value is low and it is used in payments for small transactions. In domestic trade, Zhou Dagan noted that the Khmers had three different spheres of trade<sup>9</sup>:

- For small transactions, they used rice.
- For medium transactions, they used clothing.
- For large transactions, they used gold and silver.

At the end of the Angkor period, trade with the Chinese and Chinese immigration allowed the entry and use of commodity money, gold, silver and sapecs in Cambodia. These monies were used in conjunction with other domestic commodities such as paddy, wax, buffalo etc. on Cambodian territory.

### **1.1.3. Post-Angkorian period**

The history of money in Cambodia cannot be well understood unless we distinguish commercial and political uses of money. The minting of money by Cambodian kings was essentially political, symbolic, and referred to royal sovereignty. They were rarely used in commercial transactions which were made possible by the use of foreign monies, such as Siamese or Vietnamese, or even Chinese.

After the decline of Angkor in the 14<sup>th</sup> century, Cambodia had been constantly in war, sometimes internal, sometimes with the Siamese (old name of Thai), sometimes both at the same time. The country was often divided into two or three royal or competing entities. Kings appealed for assistance from neighboring countries such as Siam (Thailand) and Annam (Vietnam) to intervene in the internal affairs. As a result, they became influenced by these neighbors (Mak Phuong, 1981). The political influence of its neighbors also had an impact on the use of money in Cambodia. It is observed that the money of Thai origin and sapec used in Vietnam entered Cambodia, from post-Angkorian period until the late 19<sup>th</sup> century or early 20<sup>th</sup> century.

Due to incessant attacks of the Siamese against Angkor from the 14<sup>th</sup> to early 15<sup>th</sup> century, Cambodia's capital was moved in the middle of 15<sup>th</sup> century toward the west of Phnom Penh. Then the capital was moved to the middle of the 16<sup>th</sup> to Longvek (Kampong Chhnang Province today), which lies at the confluence of the Mekong and Tonle Sap. This localization enabled Cambodia, for the second time, to develop some international trade and receive foreign currencies. Portuguese and Spanish travelers (Gardère 2009) who visited the capital noted that there was international trade in precious stones, metals, silk and cotton, incense, ivory, lacquer, livestock (including elephants), and rhinoceros horns. The main trading partners were Chinese, Malay, Japanese, Arabs, Spaniards and Portuguese. Mexican coins probably entered Cambodia at that time. Mexican coin was well minted, carefully weighted and had a very silver content stable, which was brought by the Spaniards and Portuguese in Southeast Asia in the 16<sup>th</sup> century. It weighed 27.07 grams; its title was 90.27 or 24.44 grams of fine silver. Because of these specific traits it was accepted immediately by traders.

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<sup>9</sup> Zhenla Fenjuji, Shiba Yoshinobu, "Commerce and Society in Sung China, p. 153, 1970

At the beginning of the 16<sup>th</sup> century, King Sri Jetthà (1512-1526) who claimed part of the territory of the East, minted his own money, called *sleng*, with the effigy of a Naga, in gold and money. He was the first king who minted money in Cambodia (Mak Phuong, 1981). According to Moura (1873), a *sleng* weighs 2.34 grams of silver. Another source noted that the *sleng* also existed in bronze (Adhémar Leclère, 1914). Yet it was more symbolic than economic. Indeed, the value of *sleng* is initially less than the Thai coin (Tical) that weighed 2.6 grams, which was already present there. On the other hand, the amount of *slengs* minted was very limited due to the low availability of metal resources. The *sleng* circulated in conjunction with the Thai and Chinese coins. During this period, much of the land was also under the control of King Ang Chan, who then took the territory of Sri Jetthà and unified the country. According to Quarles Brownes (1962) who studied trade in English East India, in Cambodia between 1651-1656, the *sleng's* worth 1/16 *damlings* (or *taels*). The *damling* is a Chinese measure expressed in weight of silver ingot. It weighs 37.5 grams of silver ingot and is divided into 10 *chis*. According to Moura, the *sleng* can be divided in 2 *fuongs* of 1.17 grams of silver.

**Table 2-3: System of money weight in gold and silver bar**

<ul style="list-style-type: none"> <li>- The nen is divided into ten damlings</li> <li>- The damling is equal to 10 chis</li> <li>- The chis is 3.75 grams of silver</li> </ul>
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At the end of the 16<sup>th</sup> century, Longvek was taken by Siam and the capital was moved to Udong. The early 17<sup>th</sup> century was the second period of money minting in Cambodia. Cambodian manuscripts show a “new minting of money for commercial transactions under the reign of Paramaràjà VII”, between 1602 and 1619 “at the initiative and under the authority of the eldest prince Jayajetthà” (Gardère 2009, p. 70). This new currency was also called *sleng* and like its predecessor, it was not widely circulated because of the low volume of production of these coins.

The Chinese sapecs and ligatures<sup>10</sup> and Thai ticals seemed to widely circulate from the 17<sup>th</sup> to 19<sup>th</sup> century, by the intervention of the Siamese and Vietnamese<sup>11</sup> on Cambodian politics and territory. During this period, Cambodia was politically influenced sometimes by Siam, sometimes by Vietnam, and sometimes by both simultaneously, depending on their strength. Hence, Cambodia was shared, to the north, under the influence of Siam and to the southeast, under that of Vietnam. When Vietnam became weak by the rebel of Taysonin 1774, it had less influence compared to Siam. Cambodia therefore came under the control of the Siamese. These two neighbors, who used the money largely from the first millennium (Wicks, 1992) brought and used their money in Cambodia. Siamese brought the *tical* and Vietnamese brought the sapec. The use of *tical* and in particular the sapec expanded. The Siamese *tical* weighed 8 or 16 grams of silver. The sapec having a square hole in the center existed in copper and zinc. It was already present in Cambodia since the late 13<sup>th</sup> century because of Chinese traders. Its value was low. The sapecin copper was worth about 6 of its counterparts in

<sup>10</sup> Ligature is a Chinese measure. A ligature is equal to 60 sapecs.

<sup>11</sup> Vietnamese used sapecs at the Chinese presence on its territory since the 3<sup>rd</sup> century. Yet the use of money became economic and commercial in the middle of the 12<sup>th</sup> century (Gardère, pg. 59-60)

zinc. There are various Chinese measures of sapec: tien/tiep and ligature. A ligature is 10 tiens and a tien is 60 sapecs. The influence of Vietnam accelerated the circulation of sapecs inside the countries in the early 17<sup>th</sup> century.

In the early 19<sup>th</sup> century, while Cambodia was under the political and economic tutelage of Siam, King Ang Duong (1841-1844 and 1845-1860)<sup>12</sup> acquired a minting machine from Siam, in the mid 1850s to mint the Siamese coins for use in trade in Cambodia. But instead of minting the Siamese tical, Ang Duong used it to mint his own money on the basis of tical. According to Adhémar Leclère (1914), the coins minted by Ang Duong were called *Prak-bat* or *Prasat*. It existed in three categories: the largest is 4.5 ligatures, the average is a little over a ligature and the smallest is just over half a ligature. According to Moura, *Prasat* (the largest) weighs about 15 grams of silver (Moura, 1873) and therefore is about a Siamese tical weighing 16 grams. According to Adhémar Leclère, Ang Duong also issued banknotes called piaster. Taking into account the intrinsic value of *Prasat*, lower than the Mexican piaster, the very limited volume of minted money, and the first introduction of paper money, the metal coin and the paper money of Ang Duong seem to be very little used. After the death of his father, King Norodom (1860-1904) also minted money of his own effigy. However, minted coins by King Ang Duong and Norodom did not circulate or did very little (NBC).

Another form of money that was used was the iron bar manufactured by the tribes Kouys<sup>13</sup> in the northeast of Cambodia and along the Mekong valley. The production of iron of Kouys probably started in the pre-Angkorian period, but it was used as a currency in the post-Angkorian period until the 20<sup>th</sup> century (Louis de Carné). According to Depaigne (1987), this currency weighed 200 to 250 grams.

During the post-Angkorian period, several currencies coexisted on Cambodian territory. The Mexican piaster, Chinese sapec, Siamese tical, gold and silver coin and iron bars were used.

## **1.2. Toward the Exclusivity of Monetary Circulation**

### **1.2.1. Use of the Indochinese Piaster**

After the signing in August 1863 of a Protectorate agreement with France by King Norodom (1860-1904), Cambodia was placed under French Protectorate until 11 November 1953. According to the Yearbook of Cambodia 1891, Cambodia was undergoing circulation of several foreign currencies: Chinese sapec, Mexican piaster, French piaster; these were in zinc, gold or silver. There were two categories of money: Cambodian currencies and other currencies that existed in Cambodia. The money considered Cambodian consisted of zinc money, sapec, silver money and gold money. The reasons why these were classified as Cambodian money by the Protectorate was due to the fact that they circulated in Cambodia before the arrival of the French, even if they were mostly foreign (as sapec that came from

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<sup>12</sup> King Ang Duong tried to overcome the Siamese occupation and appealed for the protectorate from France. But it was not until his death in 1860 that France signed the treaty of protectorate with Cambodia in 1863.

<sup>13</sup> The exploitation of iron must have started in the 6<sup>th</sup> century, if not before, at Prey Kok (in Kampong Thom province now) and at Koh Ker (Siem Reap) (Bernard Depaigne, 1987 “masters of iron and fire”, doctoral thesis EHESS)

China or Vietnam.) This classification therefore confirms the existence of a monetary plurality before the Protectorate and at its beginning.

In addition, the Yearbook of Cambodia (1891) also presents money classified in existence in Cambodia, such as the Mexican piaster and the French piaster.

**Table 2-4: Money in circulation in Cambodia in 1891**

<b>1-Cambodian money:</b>	
- Zinc sapec	<ul style="list-style-type: none"> <li>• It is the most used and never varies.</li> <li>• It takes 60 sapeque to make a tien whose value is 0f.90 and it takes 10 tiens for one ligature of 0f.90. The compound of 10 ligatures, together in mould, is named <i>bachkas</i>.</li> </ul>
- Money of silver	<ul style="list-style-type: none"> <li>• Silver bar (<i>nên</i>), parallelipidic ingot, worth 100 ligatures, invariably. The value in piaster is variable, but the average is 16 piaster.</li> </ul>
- The Cambodian piaster, <i>Prac bat</i> or <i>Prasat</i>	<ul style="list-style-type: none"> <li>• The value is 4 ligatures or 4 chis.</li> </ul>
- Money of gold	<ul style="list-style-type: none"> <li>• The large gold bar (<i>chdormes</i>), which weighs 10 grams or 375 tamleng, worth 16 <i>nên</i> of silver.</li> <li>• The small gold bar, whose value is half of the previous one.</li> </ul>
<b>2-Money that existed in Cambodia</b>	
- Silver money	<ul style="list-style-type: none"> <li>• Mexican piaster</li> <li>• French piaster of trade</li> <li>• Coin of 50 centimes</li> <li>• Coin of 20 centimes</li> <li>• Coin of 10 centimes</li> </ul> <p>The rate of piaster is set each month by the Governor General of Indochina</p>
- Bronze money	<ul style="list-style-type: none"> <li>• 1 cent coin, the hundredth part of the piaster</li> <li>• French sapec, fifth part of cent</li> </ul>

Source: The Yearbook of Cambodia 1891, p. 36-37

At the beginning of the French Protectorate period, the monetary field was composed of several currencies in circulation. According to this yearbook, the zinc money was probably the sapec in zinc provided by the Annamese (Vietnamese) via trade and immigration. Gardère (pg. 110) suggests that the coin in zinc is worth 1/600 piaster. The sapec in copper and the Mexican piaster were indeed present in the spheres of trade, especially in urban areas. From the post-Angkorian period until the early 20<sup>th</sup> century, sapec was probably the most common money (Gardère, pg. 101). The sapec served as the divisional currency and was used in the settlement for small transactions, while the Mexican piaster, well recognized and reliable, was rather used as a means of payment for large transactions. The use of sapec and Mexican piaster was also made possible by the Chinese and Vietnamese migration to Cambodia, which was more or less encouraged by the French Protectorate. These two populations brought sapec and piaster with them to Cambodia, and participated actively in the internal and external trade. The Chinese engaged in pepper trade and salt work concessions... we see them everywhere... Vietnamese also flocked as shopkeepers, foremen... (Gardère, 2009, pg. 126)

The French Protectorate of Indochina, in turn, delegated the issue authority to the Bank of Indochina in 1875<sup>14</sup> to mint the Mexican piaster and the sapec. On 8 January 1876, the Bank of Indochina introduced a banknote denominated in Mexican piaster (Gardère, pg. 142). These currencies were imposed in Cambodia and especially used by traders.

At the same time, metal money (the *damleng* of gold and silver) was still used in rural areas and land transactions in some important areas (Gardère, 2009, p. 117). The value of gold and silver was relatively constant, which encouraged farmers to hoard and use them as payment for large transactions.

Moreover, the iron bar of Kouy still existed in Cambodia. It was used for trade against other commodities. According to Dupaigne (1987) who studied the price of the iron bar, in 1866, the iron bar from 200 to 240 grams was worth 2 to 2.2 kilos of rice before harvest and from 8 to 8.8 afterwards. In 1876, a dozen of iron bars of 600 grams allowed one to get 1 deer skin, 40 kilos of paddy. An iron bar could acquire 10 slices of palm sugar. At the same time, the iron bar also had a price relative to other money. It took 106 to 250 bars to get 375 grams of silver ingot, 18 to 21 bars to get a Mexican piaster and it took 10 to 12 bars to get a Siamese tical of silver in 1884 (Aymonnier, 1900-1904). The iron bar was abandoned as money in 1880 when the Chinese and European iron was increasingly imported into the region.

According to Gardère (2009, pg. 138), the years of 1860-1880 were marked by a composite fuzzy and otherwise difficult monetary situation. However, the use of various money, especially the sapec and Mexican piaster, weakened by the end of the 19<sup>th</sup> century. The Protectorate gradually reduced the circulation of different monies by the introduction of the Indochinese piaster in 1885.

How was the Protectorate able to reduce the circulation of other currencies in Cambodia?

The solution of the French Protectorate to reduce the circulation of multiple currencies in circulation was to create an Indochinese currency while strengthening and monetizing the fiscal system. In 1885, the French Protectorate, through the Bank of Indochina, did not bring the French franc but the French piaster of trade. This new currency was in the form of silver coins and banknotes<sup>15</sup>. People and traders accepted this new currency well. Indeed, its name was already familiar to Cambodians and the value of the piaster of trade was slightly higher than Mexican piaster. At the beginning of its introduction, the piaster of trade weighed 24.49 grams of fine silver and the Mexican piaster weighed 24.436 grams of fine silver. And then, in 1895, the weight of piaster of trade was reduced to 24.3 grams of silver to avoid the phenomena of demanding and monetary shortage. In addition, the French Protectorate campaigned to make this new currency known. Then, the Protectorate strengthened the fiscal system in Indochina to better collect taxes, and to increase the use of its currency. At the same time, the Customs Union of Indochina was introduced to increase intra-Indochina trade. According to Gardère (2009), in 1893, the Protectorate implemented measures to increase its income by asking each colony to contribute to the expenses of civilian and military

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<sup>14</sup> The Bank of Indochina was a private bank. The French Protectorate had no stake in the bank.

<sup>15</sup> The introduction of this new currency was conducted in accordance with the Decision of 24 December 1878 of the Minister of Marine and Colonies. The minting was entrusted to the Monnaie de Paris and the banknote was issued by the Banque de France by Decision of the Minister of Finance dated 9 October 1878. (Gardère, 2009)

government and the general expenses of the state<sup>16</sup>. Taxes were paid in Indochinese currency. They increasingly put weight on Cambodian people and contributed to monetize the Cambodian economy consequently. However, in remote areas, monetization was still low.

Monetary plurality of previous centuries ceased gradually in Cambodia with the introduction of Indochinese currencies, fiscal and administrative measures and trade policy of the General Government of Indochina, especially in the late years of the 19<sup>th</sup> century and the early of 20<sup>th</sup> century. Yet it will not disappear completely (Gardère, 2009).

### **1.2.2. First issue of the national currency**

Under the French protectorate regime, the use of the Mexican piaster ended after the introduction of the Indochinese currency. During this period, the circulation of the Chinese sapec and ligature was greatly reduced. At the end of the French Protectorate, its currency dominated the monetary sphere throughout Indochina. Domestic trade was largely conducted in “French” piaster. After political independence of the states of Indochina in the early 1950s, France tried to maintain its monetary power in Indochina by creating Monetary Union, by a quadripartite agreement (France, Cambodia, Laos and Vietnam) in November/December 1950 and December 1951 (*le Monde Diplomatique*, 1963). The Issue Institute of Associated States with headquarters in Phnom Penh, was established to issue the new currency of Indochina under the influence of France. It replaced the French piaster of trade issued by the Bank of Indochina, which lost the privilege of issue on 1st January 1952. The banknotes issued by the Bank of Indochina were systematically withdrawn from circulation. However, the use of the new currency did not last long because the three countries of Indochina claimed their monetary independence and therefore their right to issue money. They received it in December 1954, putting an end to the quadripartite agreement.

Each state created its own central bank to issue its own money. The National Bank of Cambodia, (Cambodia’s central bank), was established by Krâm N. 922-NS in 23 December 1954 (website of the NBC<sup>17</sup>) to issue the national currency, the riel. The latter was defined by a weight of 25.3905 milligrams of fine gold and is secured by the assets in gold and foreign currencies by the National Bank of Cambodia. The issue of its own currency intervened in the context of obtaining complete independence from France, not only political, but also economic and monetary. Benefiting from the domination of the Indochinese currency in economic system of Cambodia and from Cambodians’ habit of using paper money during the French Protectorate, the new currency, the riel, was successfully introduced and replaced the French piaster. It dominated the Cambodian monetary field. The country finally experiences what some economists call the exclusivity of monetary circulation.

In his article in *Le Monde Diplomatique* in 1963, Son San, as the Governor of the new Central Bank of Cambodia confirmed that “*Because of the wise and far-sighted policy of the Head of State, the National Bank of Cambodia made its course of action, the riel has seen its value to strengthen every year ...*” (Son San, 1963).

From 1953 to 1975, the economic situation in Cambodia was marked by a high degree of dependence on aid from abroad, particularly from the United States. The volume of U.S. aid

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<sup>16</sup> Article 42 of the Code of Finance of 28 April 1893 on the allocation of colonies’ contribution to the expenditure of France (Gardère, 2009).

<sup>17</sup> <http://www.nbc.org.kh>

dollars was considerable at the time. Between 1955 and 1963, apart from military aid in the amount of 83.7 million dollars, the United States provided 409.6 million dollars to help the economy (the U.S. Embassy in Cambodia, 2011)<sup>18</sup>. The aid was intended to repair damage caused by the war for independence with France, to support internal security forces and build physical infrastructure<sup>19</sup>. According to Prud'homme (1969), foreign aid was about thirty million dollars per year between 1955 and 1965. U.S. aid halted in 1963 and resumed under the Khmer Republic to reach 1.18 billion dollars in military assistance and 503 million dollars in economic assistance between 1972 and 1975.

Although Cambodia was very dependent on foreign aid and the volume of aid was very important during these periods, the economy was not strictly dollarized, especially under the regime of Sihanouk (1953-1972). Indeed, most of the inflow of dollars was used to finance the deficit of the trade balance and increase international reserves. Banks used the dollar through a highly regulated system, but did not do all their operations in dollars, quite the contrary. There were, of course, leakages due to corruption, especially under the Khmer Republic (1970-1975). However, the dollar did not circulate widely within the country as it does today. It remained in the hands of the privileged and people close to the government (Gardère, 2009). According to Tal Nay Im, former General Director of the National Bank of Cambodia, *“everything was still counted and paid in riel during the time of the Khmer Republic. There was no dual monetary circulation (riel and dollar<sup>20</sup>).”*

The riel therefore circulated widely in both urban and rural areas. Payments of salaries of the civil servants and the private sector were done in riel. The government imposed taxes in riel and made increasing public expenses in riel.

Besides the riel, gold and jewelry were still means of saving for farmers in rural areas, and the barter economy was not negligible. From the late 1960s until the fall of the Khmer Republic, it is very likely that gold remained a means of saving of the population, due to political uncertainty and the depreciation of the national currency. The exchange rate of USD-KHR went from 55.54 to 130 and 250 in 1968, 1972 and 1973, respectively; at the same time, however, the dollar depreciated against gold and other currencies of the world.

### **1.2.3. Radical Destruction of Money**

The Khmer Rouge regime of Democratic Kampuchea (1975-1979) ended the sovereign exclusivity of monetary circulation in Cambodia. For Saloth Sar, alias Pol Pot<sup>21</sup>, the leader of the regime, *“the Cambodians do not use money anymore”*. There was no more circulation of foreign currencies. Even gold, silver and precious stones, which had been a means of payment for centuries in Cambodia, was banned from use. Democratic Kampuchea wanted to transform Cambodia into a society as *“pure”* as the primitive society. This regime aimed to create a revolutionary new society that does not need money<sup>22</sup>. The hierarchy of social classes was

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<sup>18</sup> <http://www.state.gov/r/pa/ei/bgn/2732.htm>

<sup>19</sup> Of the U.S. aid to the economy, much was used for the construction of a road between the capital and Sihanoukville, which enabled Cambodia to have direct access to the port.

<sup>20</sup> Cited by Gardère, 2009

<sup>21</sup> Pol Pot is the revolutionary name of Saloth Sar

<sup>22</sup> The idea of removing money of Pol Pot was probably influenced by the concept of Karl Marx that *“individualism could cause the destruction of communism”*. Money is the source of individualism. According to Marx, money and private property promotes individualism over community. Mao Zedong also planned to abolish the Chinese currency during the Great Leap Forward, but he did not do so for fear of social upheaval. (East-

removed; there were only farmers. Urban populations were evacuated to rural areas to work in the fields and rice paddies. People were placed in communities where they worked and ate together, deprived of any sort of individual right, money, market, relations, and trade. Working conditions were extremely harsh and people only received meager food rations by Angkar<sup>23</sup> as a reward of their work. It was the only country in the world that abandoned the use of money, key medium to development of trade and the division of labor, the source of economic growth. Money was abolished because it was considered a source of corruption, the key factor that increases the wealth of the capitalists at the expense of the poor and therefore creating hierarchies and social classes in society. This was against the ideology of Pol Pot who dreamed to have a pure society where there is only a single social class without exploitation between classes. Democratic Kampuchea actually issued its own currency in China in the early 1970s before taking the appeal, but it did not circulate it because Pol Pot changed his mind (East-western Center, N. 49, 2001, p.5). At the beginning of the regime, there was a debate among its leaders on the introduction of currency in society, but Pol Pot was against the circulation of currency. Those who expressed ideas against him and in favor of the use of money, were interviewed, then imprisoned and killed. It was a regime where the value of rice, salt and some other commodities was extremely higher than that of gold, diamond etc. Very few trade transactions were made inside the country because the people who indulged were punished with death if they were discovered. Foreign trade was limited to China and North Korea. In his doctoral thesis, Khieu Samphan (1959) concluded that, “international integration is the root of underdevelopment of the Khmer economy<sup>24</sup>. The Khmer Rouge regime exports rubber, rice, animal products, teak logs etc. and import weapons, machinery, agricultural equipment, chemical products, clothing etc.” (Prasso 2001, p. 5).

In conclusion, different payment methods and exotic currencies coexisted in Cambodia until the late 19<sup>th</sup> century. Before the Angkorian period, exotic currencies and some goods came from China, Malaysia, India, etc., and were used in international trade. After a period (between 9<sup>th</sup> and 13<sup>th</sup> centuries) when the researchers could not find any indication of monetary uses in Cambodian society (especially because of the move of capital away from the port which hosts trade), Chinese currency began to enter the economy in the late 13<sup>th</sup> century and this use increased to the end of the 19<sup>th</sup> century. At the same time, the currencies coming from neighboring countries (Thailand and Vietnam) also entered both through trade and immigration, and through the political influence from the 14<sup>th</sup> to the late 19<sup>th</sup> century, during which the country was virtually shared by these two neighbors.

Based upon the agrarian economy and donation culture and less openness to the outside, the country did not mint its own currency even during the Angkor era, when the country became an Empire. Gardère (2009) describes this phenomenon as “Empire without money”. The minting finally appeared in the 16<sup>th</sup> century, but it was unable to impose or continue. Some kings tried to mint their money, but it was largely symbolic in nature, more than economic, mainly because of the very limited amount of this money. Metal sources were rare in Cambodia (Gardère, 2009). Money production was essentially made based on other metal coins. One of the key reasons behind the delay in the minting was the fiscal system of the country. Before installing the French Protectorate in 1863, taxes were only paid in kind. This

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western Center, “The Riel Value of Money: How the World’s Only Attempt to Abolish Money has Hindered Cambodia’s Economic Development”, N. 49, 2001).

<sup>23</sup> Angkar is the term used by the Pol Pot regime to describe the organization of the regime.

<sup>24</sup> Khieu Samphan, 1959, doctoral thesis, cited in “Cambodia 1975-1978, Rendez-vous with death” under the direction of Karl D. Jacson 1989, p. 42.

system also induced a structural weakness of public finances and did not allow the state to collect the necessary metals for money.

At the end of the 16<sup>th</sup> century, when Europe began to arrive to Asia (the Philippines and Malaysia in particular), the Mexican piaster was introduced and penetrated throughout Asia, including Cambodia, for international trade. This currency, however, coexisted with the Chinese money (the sapec) which was also used in Vietnam, the Thai money (tical) and other commodity money of domestic and foreign origin.

Cambodia was then taken down the path that allowed it to experience the latest exclusive circulation of the national currency. At the end of the 19<sup>th</sup> century, the French Protectorate strengthened the fiscal system in Indochina and also the system of trade between Indochina and outside. The tax imposed by the French General Government was to be paid more with money. They committed, ultimately successfully, to remove other foreign currencies from circulation by issuing the French piaster for Indochina. Although gold, silver and Chinese sapec were widely used in rural areas, French money dominated the monetary field. This exclusive circulation of local currency did not yet provide Cambodia monetary sovereignty. We cannot say that it is a real exclusive circulation of the national currency as this currency was also used by Laos and Vietnam. However, Cambodian continued to use one single money more than before, the French piaster, to trade and pay taxes. The exclusivity of the circulation of national currency or territorial currency emerged only after independence in 1953, when the country was able to create its own central bank and its national currency. Unfortunately, it did not last long. The Khmer Rouge regime destroyed radically the money, not only the national currency, but all other forms of money. There was no exclusive circulation of currency, no monetary plurality in the regime. There was neither trade nor money.

## Section II: Re-emergence of Monetary Plurality and Its Evolution

Over the last three decades, Cambodia has experienced again the phenomenon of monetary plurality. The monetary field in Cambodia consists not only of the national currency, but also an international currency and two currencies of the neighboring countries. The relative importance of these four currencies has evolved over time. This trend indicates the dynamics of circulation of each currency in the same sovereign space. After the liberation in 1979, a barter system appeared. Multiple payment methods such as trading of commodities, money, gold and jewelry, were used. The reintroduction of the national currency in 1980 did not put an end to the barter, but they coexisted well until the economic reform started in the second half of the 1980s. The circulation of the national currency had little impact until the late 1990s. Besides the national currency, three other foreign currencies (dollar, baht and dong) have also circulated on Cambodian soil. Apart from the dong, two other currencies emerged more or less at different times, but their importance began at about the same period. That was when the country opened its economy to the outside world in the early 1990s. The dollar is the most common of currencies in the monetary field. Its relative importance continued to increase gradually. While the baht had widely circulated, starting in the provinces near the Khmer-Thai border, it has seen its gradual decline in recent years in favor of other currencies (dollar and riel), and is now mainly concentrated in the border areas. The dong has not widely circulated on Cambodian soil, even if it was the first currency present in Cambodia after the fall of the Khmer Rouge regime. Its circulation is currently low compared to the baht and negligible compared to the dollar.

We will discuss in this section the evolution of the circulation of each currency, while analyzing the causes of their appearance and their evolution since the liberation of Cambodia from the Khmer Rouge regime (1975-1979). We will also find out the issue of complementarity and substitutability of each currency.

### 2.1. Khmer Riel (KHR)<sup>25</sup>

#### 2.1.1. Revival of the national Currency

After the liberation<sup>26</sup> on 7 January 1979 from the genocidal regime led by Pol Pot, Cambodian people experienced a new life. They consider this date as their second birthday. Nearly two million Cambodians died, including the vast majority of intellectuals. Almost all social and economic infrastructures were destroyed. The government therefore rebuilt the society and revived the economy from zero.

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<sup>25</sup> The riel is the official currency of Cambodia. This name dates back to 1952 when the Monetary Union of Indochina was established between the states of Indochina and France. The three countries of Indochina agreed to use the common currency, the piaster. Besides this common name, there were also three other different names for each country of Indochina on the same banknote: the *riel* for Cambodia, and *dong* for Vietnam and *kip* for Laos. In total, there were four names on the same banknote. The history of this name is unknown. It appeared naturally when it came to find a name for the new national currency in the early 1950s (Gardère, 2009). However, according to IM, former General Director of the NBC, the word “riel” was just a name of a type of small fish in Mekong and Tonle Sap. This fish is abundant in Cambodia. Cambodians use it to make the cheese called *prohoc*, and other supplies. Its skin is colored silver. But the word “riel” comes from the word “real” to most Western historians (Gardère, 2009). The *real* name was given to the Mexican piaster, which came into Asia in the 16<sup>th</sup> century.

<sup>26</sup> With military intervention of Vietnam, the National Liberation Front of Cambodia released most of the territory of Cambodia on 7 January 1979. But the Khmer Rouge forces were not all removed. They settled in the forests and especially the Thai border.

The barter system appeared and lasted until the second half of the 1980s. All goods were rare. The economy started with the production of agricultural products, especially rice, to feed the citizens. Some industrial products were imported from friendly nations: the Union of Soviet Socialist Republic (USSR), Vietnam and some countries in Eastern Europe, in the form of aid or through loans. Goods were traded against other goods or labor. Rice, a daily essential food in the lives of many Cambodians, was the most sought after for means of payment in trade, especially for medium and small transactions because of the homogeneity of its value in the country (Gardère 2009, pg. 394). It was also used very often as the unit of account of other goods. Besides rice, we also used from time to time other goods such as fish, tobacco and medicine to serve as means of payment in trade. Regarding the settlements of large transactions such as purchases of houses, buffalo, bicycles etc., gold and jewelry were used as more credible means of payment.

The role of rice in the current payment account was gradually replaced by the riel after its reappearance. On 10 October 1979, the central bank was indeed recreated and the riel was circulated on 20 March 1980. For the government, the re-introduction of riel had at least three essential goals: first, to mark the end of the Pol Pot regime and to show the political, economic and monetary sovereignty of Cambodia on the international scene, and secondly, to fund public spending, such as to pay the salaries of civil servants and other public expenses, and finally, to develop the economy by providing credits to state enterprises as well as farmers.

The creation and circulation of the new currency were performed with the economic technical assistance of Vietnam and the USSR. The money was manufactured in the USSR and transported to Cambodia. Vietnamese experts helped the government to manage the circulation of the new currency. The definition of the value of the riel is very interesting. It was not defined either in relation to a weight of gold/silver, or currency/a basket of currencies, as what is normally done by central banks in the world, but in relation to the weight of rice, actually by the amount of rice put in a tin of condensed milk (Gardère, 2009). A riel is thus equal to one kilogram of paddy or four cans of condensed milk<sup>27</sup>. One of the main reasons why rice was chosen to set the value of riel is that its value was homogeneous throughout the country and had been used in practice as the unit of account of other goods.

In the first half of the 1980s, the supply quantity of the new currency was limited and injection channels of riel were still limited. According to Margaret Slocomb (2003), in its first year of existence, 400-450 million riels were circulating, of which 55-65 percent were wages paid to agents of the state, and 22-25 percent corresponded to the counterparty of public purchases and loans made to farmers. The government injected riel through four main channels: 1- payments of wages of public servants, 2- payment of wages of employees in public enterprises, 3- the state purchases of agricultural products, especially rice, to farmers and 4- bank loans to farmers<sup>28</sup>. In 1981, the Government created the Central Committee of Rice Purchase which aimed to supply rice to the military, as well as to inject riels. On 22 November 1982, custom taxes were established and in early 1984, the state created so-called “patriotic tax” to increase the state budget, fund the war effort and promote the circulation of riels in the economy, which was still under monetized. It was not until a few years after their issuance that the new riels were widely used (Gardère, 2009). In 1979 and early 1980, the salaries of civil servants and

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<sup>27</sup> In practice, farmers considered that 1 kg of paddy equals to 4 cans of condensed milk.

<sup>28</sup> Between 1980 and 1993, the Cambodian banking system was a monobank system where the central bank played the role not only of the central bank, but also commercial bank.

public employees were still paid in kind with rice, corn, sugar, salt, condensed milk etc.<sup>29</sup> Then until 1986, payment of public employees combined payments in kind and in riel (Tim Samy<sup>30</sup>, 2009).

Moreover, under the communist regime, the economy was centralized and planned, and in the absence of any economic and social structure, the state had to take the initiative to develop the economy and society, especially through the creation of public enterprises and state stores that sell products of primary needs to farmers. Private property was not yet developed in the 1980s. Farmers bought products at state stores with subsidized prices. However, the quantities of sold products were far from being sufficient to the demand and the sales through state stores were also not frequent. The gap between supply and demand fostered offers of Vietnamese and Thai products. Cambodians first used gold to buy products from Vietnamese and Thai (William Shacross 1981)<sup>31</sup>, but gradually, they used the baht and the dong. According to Pov Saveuy, the former branch manager of Battambang and Sok Kolay, the Acting Director of the branch of Svay Rieng<sup>32</sup>, baht and dong began to enter Battambang and Svay Rieng, respectively, since 1979, through border trade carried out by farmers and traders which, at the time, was illegal. In his 1989 report (NBC), Cha Rieng, the former Governor of the National Bank of Cambodia noted that: *“In the East, the Vietnamese dong circulated well until the mid-80s, while essentially the Cambodian economy operated with Thai baht, gold, silver, and precious stones”*. Although the riel was gradually replacing the monetary function of rice and other commodity money, it could not substitute for gold in the settlements of large transactions. The trust in the riel remained weak in the 1980s and early 1990s (Quintyn and Zamróczy, 1998). Gold gradually lost its role as a store of value and means of payment of large transactions when currencies emerged and were used more and more, especially from the early 1990s. Nevertheless, even today, gold has not disappeared because it remains the most credible store of value in rural areas or the means of payment of the few large transactions that take place among the rural population.

### 2.1.2. Slow Growth of riel

Circulation of the riel has grown since the early 2000s, especially in the second half. Between 1989 and 2000, the amount of riels in circulation varied slightly and was around 100 million dollars, while the economic growth rate exceeded 5 percent on average. In contrast, it increased by about 20 percent between 2001 and 2010. This allowed the volume of the banknotes in circulation to pass from about 100 million dollars in the period of 1989-2000 to nearly 800 million dollars in 2010. Yet bank deposits in riel remain very low; they represent less than 5 percent of the total deposits. According to the graph below, they were negligible before 2000. It increased by 14.2 million dollars in 2001 to 30.3 million dollars in 2007 and increased to 45.3 and 100.8 million dollars between 2008 and 2010, respectively. The increase

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<sup>29</sup> Interview with Mr. Cham Piseth, Minister of Commerce of Cambodia by Jean-Daniel Gardère, on 15 January 2009: “When I worked for Foreign Affairs, I was paid in rice, ten kilos, in corn, half a dozen kilos, in sugar and milk”.

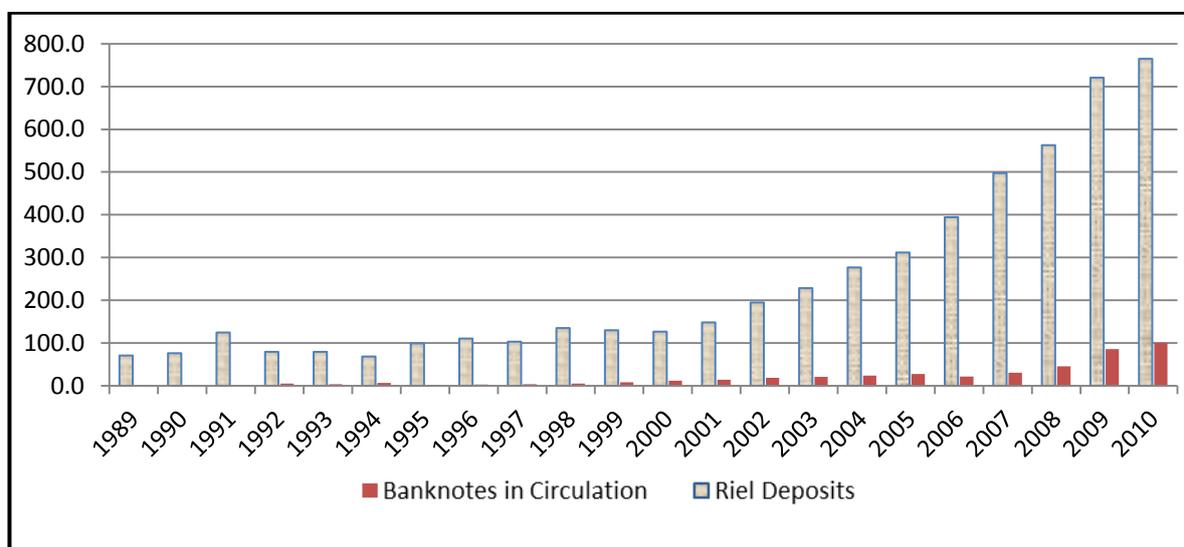
<sup>30</sup> Interview between Mrs. Tim Samy (currently Deputy General Secretary of the National Bank of Cambodia) and Gardère, cited by Gardère, 2009.

<sup>31</sup> In 1981, William Shacross noted that the settlement of purchases from Thai sellers was mostly done in gold. Gold and foreign currency leakage to Thailand was estimated at half a million dollars or 15 to 20 kilos of gold. Cited by Gardère, pg. 410.

<sup>32</sup> - Interview with Mr. Sok Kolay, Former Director of the branch of the National Bank of Cambodia in Battambang Province. He worked since 1980, before retired at the early 2011 and - Interview with Mr. Sok Kolay, Acting Director of branch of Svay Rieng Province of National Bank of Cambodia. Both interviews were conducted in surveys on the circulation of currencies in Cambodia from August to October 2010.

in the volume of banknotes in circulation and bank deposits shows that the phenomena of monetary plurality in Cambodia is not entirely due to the phenomenon of currency substitution, but the increasing foreign currency inflows (Menon, 2008 and Duma, 2011).

**Figure 2-2: Banknotes in circulation and riel deposits: 1989-2010 (in millions of dollars)**



Source: National Bank of Cambodia

These increases in the circulation of deposits in riel in early 2000s could be explained by several factors: i/- strong economic growth since the late 1990s, ii/- tax and budgetary reform, iii/- measures taken by the government to promote the use of the national currency (payments of taxes, collective services in riel, banking payments of wages of public employees etc.), and iv/- increase in the trust of the riel.

First, economic growth has grown at a spectacular rate since the second general election in 1998. It went from 7% in the second half of the 1990s to over 9% in the 2000s. At the macroeconomic level, this rapid growth was accompanied by the increase in global demand for final consumption and investment (household and government) and therefore the demand for the riel. As the riel is not the currency of private investment and is not used in the government's capital expenses<sup>33</sup>, the final consumption expenses could be an indicator that shows the upward trend in demand for riels produced by economic growth.

Final consumption consists of two components: the household and the state. Much of the first one is settled in foreign currencies while the second one is mainly made in national currency. According to Zamróczy and Sa (2002), 74.6 percent of the government's current expenses was paid in riel in 2000, and this share rose to 76.7 percent in 2001. In 2006, it increased to 86 percent (Huot, 2008). The government is committed to settling all its domestic expenses in the national money currency<sup>34</sup> and therefore we see that the share of public expenses is rising over time.

<sup>33</sup> The dollar in practice is the money in the contracts of investment transactions.

<sup>34</sup> According to Zamróczy and Sa (2002), a good portion of expenses of the State was settled in foreign currencies. It represented 43.9 percent and 67.4 percent in 2000 and 2001.

Only part of the transactions of private final consumption (small transactions) was performed in riel and current expenses of the government settled in riel represented less than 9 percent of the total final consumption (see table below). Therefore, although the demand for the riel experienced an increase (due to growth in final consumption), the rate was much lower than the demand for foreign currencies. The average final consumption rose from 7,105 billion riels in the 1990s to 17,063 billion riels between 2000-2005, an increase of 2.5 times, and to 33,279 billion riels between 2006-2010, or nearly five times.

**Table 2-5: Evolution of the total final consumption and its components**

	Total final consumption (billion riels)	Government's final consumption/final consumption
1990-1999	7,105	6%
2000-2005	17,063	7%
2006-2010	33,279	7.8%

Source: Cambodian Ministry of Economy and Finance

Moreover, the fiscal performance was at the heart of the promotion of the demand for national currency. As more than 95% of fiscal revenue was collected in riel<sup>35</sup>, increased fiscal revenue resulted in increased demand for the national currency of the private sector. The government adopted a policy of fiscal reform to increase revenue to reduce the budget deficit and dependence toward external financing. In 2000, the level of fiscal revenue/GDP ratio was considered one of the lowest in the world and was largely dependent on international taxes (taxes on international trade<sup>36</sup>), the government did not have sufficient resources to improve public services or for the purpose of development in the social sector such as education, health and public infrastructure (IMF, 2000). In the early 1990s, the fiscal revenues represented only 4-5 percent of GDP<sup>37</sup>. The fiscal reform began in 1993, but the situation seemed to be improving in 1999 when the value added tax (VAT) was introduced, after the new coalition government was formed at the end of 1998. During the 2000s, the tax base was broadened and tax collection was strengthened, the ratio of fiscal revenue/GDP increased by about 11-13 percent in this period, and more than doubled as compared to the early 1990s. In addition, the IMF and the government estimated that the fiscal revenue/GDP would increase at an annual rate of 0.5%, because of the reform program called *Public Financial Management Reform Program*, launched by the government (IMF, 2011). At the same time, the revenue excluding taxes, came mainly from privatization, representing about one-third of the total state revenues, also increased in absolute terms. It doubled between 2002 and 2010. It helped increase demand for riels like the payment in foreign currency. In 2000, 65% of the revenues excluding taxes were paid in foreign currencies. This rate increased to 73.5% in 2001 (Zamróczy and Sa, 2002) and reached 75% in 2006 (Huot, 2008). In total, state revenues increased from approximately 8.5 percent of GDP in 1999 to 12 percent of GDP in the late 2000s (Duma, 2011).

Despite the fiscal reform, which has gradually increased fiscal revenue, the fiscal revenue/GDP ratio remains the lowest in the region, or 12% compared to 17% in the developing countries of Asia. In addition, the tax revenue still depends mostly on taxes from some imported products (oil, and car) despite the problem of smuggling (IMF, 2011).

<sup>35</sup> According to Zamróczy and Sa (2002), the revenue in foreign currency/revenue of taxes 4.4% and 2.6% in 2000 and 2001, respectively. This ratio did not change much in 2006; it was 5% (Huot, 2008).

<sup>36</sup> More than half of the tax revenues were collected from international taxes (IMF, 2000).

<sup>37</sup> In the 1980s, under the socialist regime, the modern taxation system did not exist.

Besides improving the state revenue, the government has also increased expenses on salaries of public employees and civil servants and other employees in public institutions such as the central bank, state enterprises (Electricité du Cambodge and Water Authority), and etc. The wages, considered very low compared to the private sector, have only been paid in riel since the introduction of riel in 1980. With support from the World Bank and other development partners, the government launched a reform program in the early 2000s called the “*National Program for Administrative Reform (NPAR)*” in order to increase wages and remunerations of civil servants<sup>38</sup>. Although the NPAR program developed very slowly (IMF, 2007)<sup>39</sup> and some programs were stopped, the salaries of civil servants gradually increased. In 2002, the average monthly wage of civil servants was 28 dollars per month (equal to one third of the salary of employees in the garment industry), it increased to 52.5 dollars in 2006. The government has a policy to increase the basic salaries of public employees by 20% per year. With this increase, the average monthly salary is estimated to reach 100 dollars in 2013 (IMF, 2007, pg.13).

The third factor contributing to the increase of circulation of the riel were measures taken by the government to promote the use of the riel. First, since 2000, the use of riel is required for the payment of benefits of collective services provided by state enterprises (Dabadie, 2006)<sup>40</sup>. Therefore, the bills of Electricité du Cambodge and Water Authority are denominated and paid in riel. Some banks have offered payment services through ATM (*Automated Teller Machine*) and mobile phone, which makes use of the national currency possible in the banking system<sup>41</sup>. In addition, the salaries of public employees in some ministries and public institutions have been gradually paid by the banking system since 2005. This facilitates the use of riel and increases riel deposits in the banking system. In addition, the central bank has also given riel loans to microfinance institutions to promote riel credits (NBC, 2011). Although the amount of these loans is not large, and the duration of these loans is short (about 6 months), they actually participated in increasing the circulation of riel in poor and rural areas. Other measures, more or less effective, have also been implemented such as improving the quality of banknotes, the introduction of large banknotes (equal to 25 USD), reducing the differential of rate of required reserve in foreign currencies and in riel of bank deposits (8 percent for riel deposits and 12 percent for those in USD), the regulation on pricing in national currency (this Regulation is not applied), etc.

Finally, the stability of the exchange rate of USD-KHR has greatly helped to restore trust in the riel. From 1991 to 1998, the value of the riel against the dollar depreciated significantly and therefore trust in the riel has eroded. The depreciation average rate was about 35 percent per year during this period. In 1999, the exchange rate did not vary much; its variation was less than one percent from 1999 to 2010. This stability has increased public confidence in the riel over time and thus supported the growing riel holding and riel deposits in the banking system.

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<sup>38</sup> Other programs were also introduced in the 2000s to increase the wage level of civil servants such as Priority Missions Groups (PMGs) in February 2003 (IMF, 2003, pg. 30) and Merit-Based Pay Initiative (MBPI) in September 2005 (IMF, 2007, pg.19). By the mid 2000s, the Government launched a policy of increasing the net salaries of 20 percent per year (from 1<sup>st</sup> January of each year).

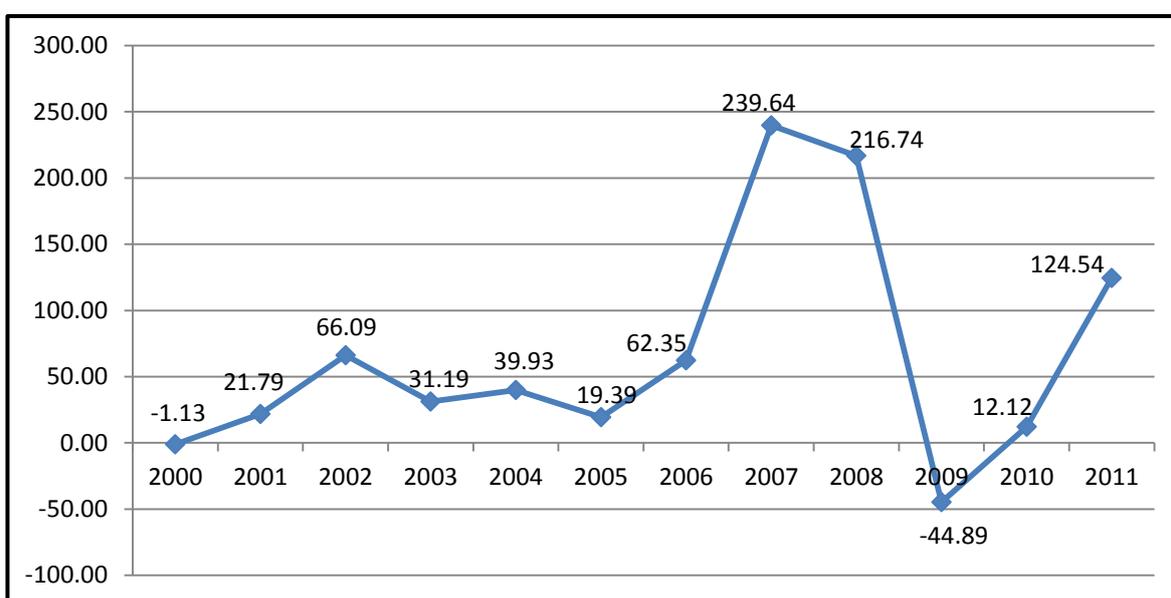
<sup>39</sup> Matt Davies, Joseph Ntamatungiro and Pipat Luengruemitchai, IMF, 2007, Selected issues and statistical appendix

<sup>40</sup> The payment of electricity and water is made in riel in Phnom Penh, but in some provinces where the companies that offer these services are private, the dollar and baht are also accepted. For example, in Koh Kong, the bills for these services are only in baht and Siem Reap, the dollar is accepted.

<sup>41</sup> Payers may also use the dollar to settle these services, but the bank will convert it into riel and credit to the account of these public enterprises.

Overall, the increase in demand for riels in the economy could be expressed by changes in the trend of net purchases of dollars by the NBC from the government, which receives a portion of dollar revenues in the form of taxes (excluding taxes and foreign aid in the form of “budgetary support”), as well as banks and particularly money changers who are very active in the exchange markets. In absolute terms, the amount of riels injected by the central bank has generally followed a growing trend in the 2000s, except in 2009 when it fell to a negative value (that is to say that NBC sold more dollars than it purchased. In 2009 the NBC conducted an auction sales of 48 million dollars to stabilize the exchange rate of the riel, which experienced a decline due to the global financial crisis of 2008-2009. In 2010 and 2011 (October), net purchases of dollar resumed their upward trend.

**Figure 2-3: Net purchases of dollars of NBC: 2000-2011 (October) in millions of dollars**



Source: National Bank of Cambodia

**Table 2-6: Purchasing-sales of dollars of NBC: 2000-2011**

	Net purchases in Public Sector			Net purchases from Banks and Money Changers			Total net purchases
	Govern.*	EDC**	Total	Banks	Changers	Total	
2000	-1.0	-	-1.0	-15.0	14.9	-0.1	-1.13
2001	9.7	-	9.7	-4.1	16.2	12.1	21.79
2002	37.2	-	37.2	-0.6	29.5	28.9	66.09
2003	21.6	-	21.6	-3.8	13.4	9.6	31.19
2004	32.8	-	32.8	-8.8	15.8	7.1	39.93
2005	38.1	-13.4	24.7	-11.5	6.1	-5.3	19.39
2006	13.1	-7.5	5.6	10.2	46.6	56.8	62.35
2007	10.2	-1.0	9.2	20.4	210.1	230.5	239.64
2008	-23.3	-92.8	-116.0	16.5	316.3	332.8	216.74
2009	-46.6	-43.0	-89.6	9.8	34.9	44.7	-44.89
2010	51.0	-120.5	-69.5	7.4	74.3	81.7	12.12
2011 (Oct.)	-3.6	-47.0	-50.6	24.3	150.8	175.1	124.54

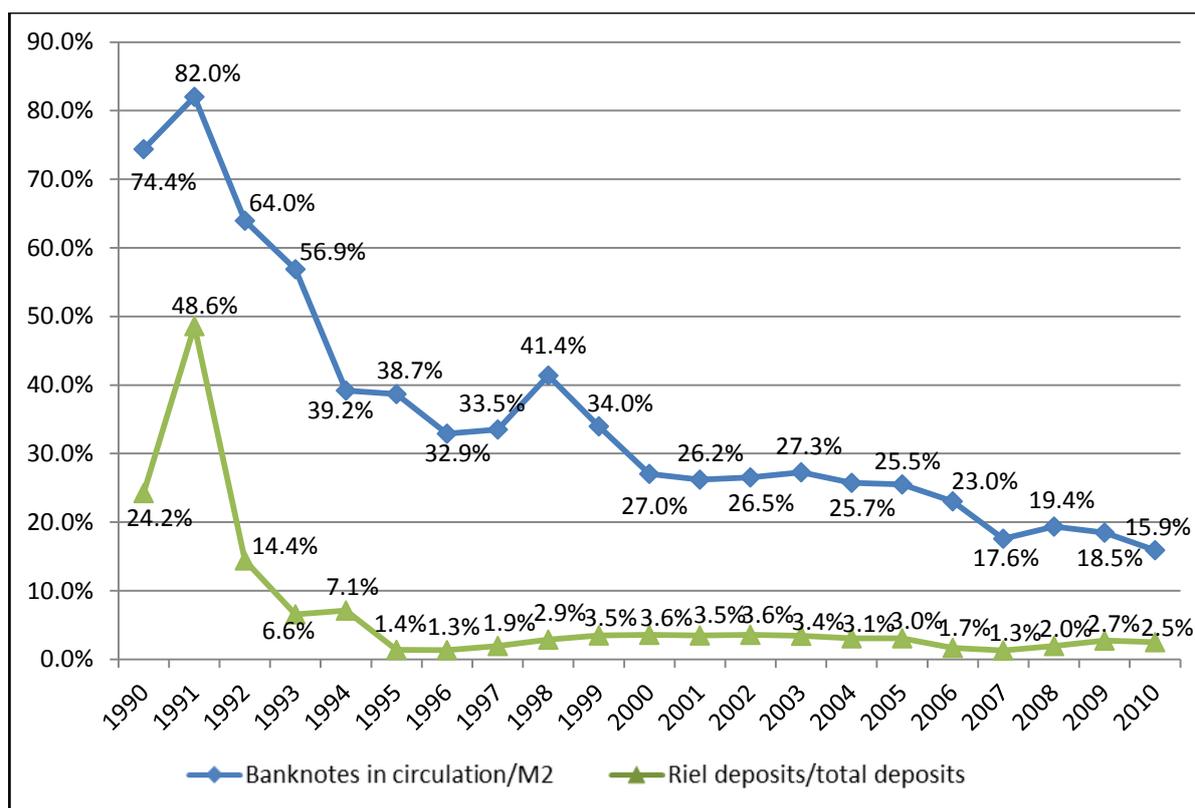
\*Government agents who buy/sell dollars-riels are: the Ministry of Economy and Finance, the Department of Taxes and Department of Taxes of the Municipality of Phnom Penh

\*\*EDC: Electricité du Cambodge

Source: National Bank of Cambodia

However, the volume of banknotes in circulation (riel) and bank riel deposits, are still very low compared to dollar deposits. The riel generally remains the currency of small transactions. In 1995, the volume of banknotes in circulation (riel) was equal to 99 million dollars, while that of the dollar was estimated at 1.2 billion dollars (Zamróczy and Sa, 2002), or the amount of dollars in circulation was more than 12 times higher than that of riels. In 2000, the estimated gap widened to 23 times with the increasing level of dollarization (the ratio of foreign currency deposits/M2). It is very likely that this gap has widened further. At the same time, although the riel deposits have increased in recent years, they represent only less than 5 percent of total bank deposits. Moreover, in examining the development of riel and foreign currency deposits, we see that the dollar deposits grew much faster than the riel deposits, or 15 times more than the riel deposits in 2000 and 30 times in 2010 (NBC, 2010). Moreover, the graph below shows that the increase of banknotes in circulation is much less than money supply. The banknotes in circulation/M2 ratio tended to decrease by 36.1 percent in the second half of 1990, 26.4 percent in 2000-2005 and 18.9 percent in 2006-2010. This also indicates that the foreign currencies in circulation grew faster than riels in circulation. Moreover, we observe that even if the riel deposits at banks grew in the second half of the 2000s, their share in total deposits (riels plus foreign currencies) fell and represents only less than 3 percent for this period.

**Figure 2-4: Banknotes in circulation/M2 and riel deposits/total deposits: 1990-2010**



Source: National Bank of Cambodia

## 2.2. U.S. Dollar (USD)

From the mid-1980s, the state allowed the entry of humanitarian and emergency aid from the UN and non-governmental organizations<sup>42</sup> as well as financial aid from families abroad to Cambodia (Zamaróczy and Sa, 2002). Therefore, the U.S. dollar began to enter and be used by these organizations and their staffs. It was tacitly tolerated by the Cambodian government (Kang, 2005). The dollar was accepted first for payments and was hoarded by Cambodians in urban areas. The role of a “store of value” that had been fulfilled by gold and jewels was fulfilled in turn by the dollar. This replacement has intensified since the early 1990s when the acceptance of the dollar spread.

### 2.2.1. “Tsunami of dollar”

The early 1990s was marked by the emergence of an increase in wealth of the U.S. dollar in the Cambodian economy and thus made Cambodia a very highly dollarized country (Zamróczy and Sa, 2002, pg. 20). The Paris Peace Agreement, signed on 23 October 1991, led Cambodia to the path of peace, national unification and reconciliation that many Cambodians had been waiting for. All political parties<sup>43</sup> agreed to stop fighting and allowed the UN Transitional Authority in Cambodia (UNTAC) to come to Cambodia to organize the first

<sup>42</sup> According Tuyet L. Cosslett (1987), these organizations are: *International Committee of the Red Cross, UN Children’s Fund, Food and Agriculture Organization (FAO), World Food Program (WFP) and UN High Commissioner for Refugees, Oxfam, American Catholic Relief Services, American Friends Service Committee, Church World Service, World Council of Churches, Lutheran World Service, CARE and the International Cooperation for Development and Solidarity.*

<sup>43</sup> There were four political parties who signed the Paris agreement: that of the government, of Pol Pot, of Norodom Sihanouk (King of Cambodia) and of Son San (former Governor of the National Bank of Cambodia).

general election<sup>44</sup> since the fall of the Sihanouk regime in 1970. Peacekeeping operations by UNTAC in Cambodia are considered the most expensive of this type of operation by the United Nations. In the period of 1992-1993, UNTAC expenses reached nearly two billion dollars, or 75 percent of GDP in Cambodia in 1993<sup>45</sup>. These expenses in highly liquid form (salaries, allowances, purchase of office equipment, construction of barracks, etc.), spread dollars throughout the country, largely captured by the urban population, especially Phnom Penh residents. A small segment of the population with apartments and houses (allocated by the state or bought with cheap price though small starting capital, political introductions, English proficiency, etc.) provided income to the few locals who could provide food, housing, equip and etc., to the UN staff.

Along with the influence of dollars injected by UNTAC, dollars also entered with the return of many Cambodian refugees and expatriates to the country in the early 1990s (Zamróczy and Sa, 2002), and due to massive foreign aid for reconstruction (especially infrastructure). Under the form of loans and donations, foreign aid reached several hundred million dollars. In 1992, the IMF provided special loans of 9 million dollars to help systemic transformations, and then 120 million dollars in 1994. The Asian Development Bank, in turn, funded an emergency reconstruction program of 67.7 million dollars in 1992. The World Bank also brought in over 90 million dollars in 1993 for emergency projects. In addition, other bilateral and multilateral fund donors injected tens of millions of dollars to Cambodia. In total, foreign aid was approximately 250 million dollars in 1992 (CRDB<sup>46</sup>). From 1993 to 1999, it was, on average, 377 million dollars per year, or 11.8% of GDP (IMF, 2004)<sup>47</sup>. Moreover, the volume of dollars was inflated with the development of foreign direct investment (FDI) in 1994. On average, FDI was of 194 million dollars per year, or 5.8% of GDP from 1994 to 1999. The money transfers of Cambodians living abroad, exports of textile products, tourism etc. are also sources of dollar supply in Cambodia since the early mid-1990s<sup>48</sup>.

The affluence of dollars in the early 1990s was a shock to the Cambodian economy. The use of dollars in Cambodia was imposed to Cambodians especially in urban areas. All dollar banknotes, from one to a hundred, were used with the exception of coins and was quickly accepted by the people. Since the early 1990s, the dollar has fulfilled three traditional functions of money: unit of account, means of payment, and store of value.

Why was the dollar easily accepted and used to gradually complete these three functions?

The fact that the dollar is an international currency appears to be a relevant explanation as to the function of store of value, but not a sufficient reason for the other two functions of money.

According to economists and experts, the use of the dollar does not seem to result from a deliberate political choice by the authorities (Zamróczy and Sa, 2003 Dabadie, 2006). Rather it follows a series of independent decisions, exploited or amplified by a spontaneous movement (Gardère, 2009). It also follows the priority set by the UN. It was felt that at the time, peace, normalization, and free elections were more a concern than monetary stability and control of money issues. Facing a very weak and also *de facto* or poorly convertible

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<sup>44</sup> The first election was held from 23 to 28 May 1993.

<sup>45</sup> Statistics on the most economic and monetary indicators are available from 1993.

<sup>46</sup> CRDB (Cambodian Rehabilitation Development Board) is a branch of *Cambodian Development Council (CDC)*, in charge of coordination of foreign aid

<sup>47</sup> The figure is calculated based on data of the IMF report, 2004 "Selected Issues"

<sup>48</sup> We will discuss in detail about these flows in Chapter 4

currency (riel), preference for the dollar could only be high. In addition, the policies of the UN and foreign financial experts who assisted the Government of Cambodia in the early 1990s considered the monetary globalization of the dollar as a good formula (it was a full hyper-liberal wave).

Traditional causes of the currency substitution phenomenon argued by economists, are they relevant to explain the use of the dollar in Cambodia?

Cambodia experienced a monetary crisis in 1989-1992. The fall of the Soviet Union which was the main donor to Cambodia and the withdrawal of Vietnamese assistances from Cambodian territory in the late 1980s caused a shock to the economy as well as politics. This shock attacked the source of revenue for the state as well as its expenses. As the young Cambodian economy was highly dependent on foreign aid, it did not receive any more funding from Vietnam, or from the USSR to ensure the continuity of government operations. In addition, military expenses had to significantly increase since Vietnamese troops were no longer present to assist the government against the return of the Pol Pot regime. These expenses increased significantly and reached 30 percent of the national budget between 1989 and 1992. The state had to find emergency financing sources. They had to monetize the budgetary deficit. The central bank was the only institution that could supply these deficits at the time. Being a state bank, it printed a lot of banknotes to meet the needs of financing the budget deficit between 1989 and 1992 (IMF, 1998). The annual growth rate of money supply increased sharply before declining in 1993 (table below). This created what economists call the “budgetary inflation”. The annual inflation rate rose sharply from 90 percent in 1989 and 1991 and at a three-digit rate in 1990 and 1992. However, it was reduced to 31 percent in 1993 and 3 percent in 1995 since budget support was financed by development partners and reforms tended to use the financing from the government with the central bank (Quintyn and Zamróczy, 1998). At the same time, the official and market-USD-KHR exchange rate depreciated sharply, the exchange rate passed from 484<sup>49</sup> (412<sup>50</sup>) riels per dollar in 1990 to 856 (704), 1,363 (1,267) and 2,906 (2,689) in 1991, 1992 and 1993, respectively.

**Table 2-7: Evolution in money supply, budgetary deficit, and exchange rate of KHR/USD from 1989 to 1994**

	1989	1990	1991	1992	1993	1994
Money supply	69.8%	240.9%	28.6%	214.0%	34.4%	34.9%
Variation of budgetary deficit	25.0%	34.5%	68.4%	97.8%	242.3%	31.8%
Inflation	90.5%	152.3%	87.9%	176.8%	31.0%	26.1%
Depreciation rate of KHR against USD	50%	61.3%	76.9%	59.2%	113.2%	-11.4 %

Source: National Bank of Cambodia

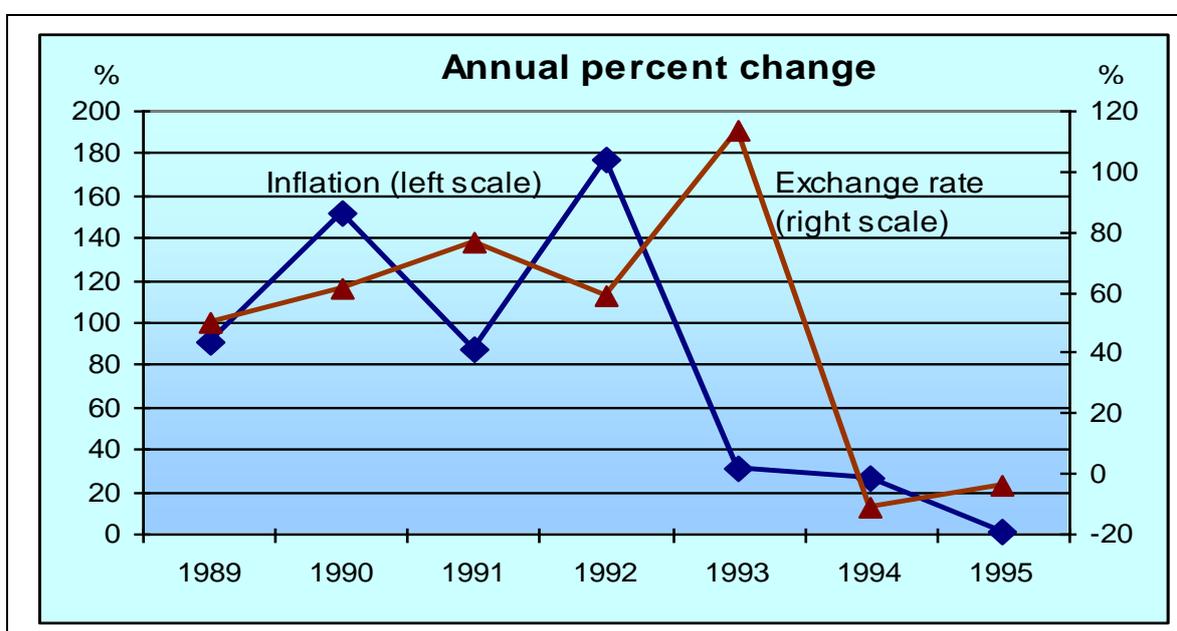
Rising inflation and sharp depreciation of the exchange rate, of course, caused the decline in the purchasing power of the riel and a shortage of the means of payment. According to Salama and Valier (1990), rational economic agents seek available foreign currencies whose value is the most stable to maintain their wealth, and when the crisis is very violent, they use it as a unit of account and eventually as a means of payments. However, the level of inflation did not match the concept of hyperinflation (hyperinflation is often referred to as an inflation rate

<sup>49</sup> Market exchange rate

<sup>50</sup> Official exchange rate

exceeding 50% per month<sup>51</sup>), which could lead economic agents to switch the national currency for the dollar. Moreover, the crisis was not as violent as hyperinflation as inflation was stabilized in 1994 and remained at a reasonable level since then. Furthermore, as the graph in the sub-section 2-1-2 of the chapter shows, the level of supply of riel did not decline much. It remained, *conversely*, relatively stable. Zamróczy and Sa (2002) also conducted an econometric study on the causal link between inflation and dollarization in Cambodia over the period of October 1995 to August 2001, using the Granger methodology (1969). They found that dollarization in Cambodia was not explained by inflation and that inflation was not explained by the dollarization in the following years, over the studied period. Similarly, in his doctoral thesis, Ishi (2009) confirmed that although inflation and dollarization have a long-term relationship in Vietnam and Laos, this did not apply in Cambodia over the period of 1995-2007.

**Figure 2-5: Inflation and depreciation of the exchange rate: 1989-1995**



Source: Dabadie, 2006, the dollarization of the Cambodian economy

### 2.2.2. Expansion of the circulation of dollar

The dollar continues to enter the Cambodian economy through various channels (international aid, foreign direct investment, transfers of private funds etc.<sup>52</sup>). Two different but complementary approaches can measure dollarization: the quantity of foreign currency circulation in the economy and the ratio of dollar deposits/M2. Both methods have shown increasing dollarization in Cambodia since the early 1990s. According to the rough estimate of Zamoróczy and Sa (2003) who studied the evolution of the dollar in circulation between 1995-2000, the amount of dollars in circulation was estimated to have increased by 1.2 billion dollars in early 1995 (or approximately one third of GDP in the same year) to 2.9 billion dollars in early 2001 (or almost two-thirds of GDP). The dollar therefore dominated the monetary field. Between 1995 and 2000, the authors divided the evolution of the use of dollar in four stages:

<sup>51</sup> Philip Cagan, 1992, in Jérôme Blanc, 1998 "Parallel Currency", Doctoral Thesis

<sup>52</sup> We will discuss them in Chapter 4

- From February 1995 to March 1996: This is a stage of increasing the amount of dollars in circulation. This increase can be explained by the affluence of bilateral and multilateral foreign aid. The amount of aid increased from 335 million dollars in 1995 to 437 million dollars in 1996. Secondly, by the return of the foreign direct investment which experienced an increase from 151 million dollars in 1995 to 294 million dollars in 1996. Third, by the flow of private transfers of Cambodian expatriates settling abroad.
- From April 1996 to March 1998: The evolution of dollars in circulation was irregular. The fluctuation of the amount of dollars in circulation during this period was due to the political uncertainty in July 1997<sup>53</sup> and the Asian crisis of 1997-1998 that affected the flow of foreign direct investment and international aid.
- From April 1998 to the end of 1998: During this period, the evolution of dollars in circulation was on the rise. This is because the country experienced political stability after the election in July 1998. One of the main drivers of this increase is the significant inflow of foreign direct investment in the garment sector.
- From January 1999 to December 2000: This is the stage where the amount of dollars in circulation is relatively stable. Zamaróczy and Sa consider that the entry of foreign aid and foreign investment was stable during this period.

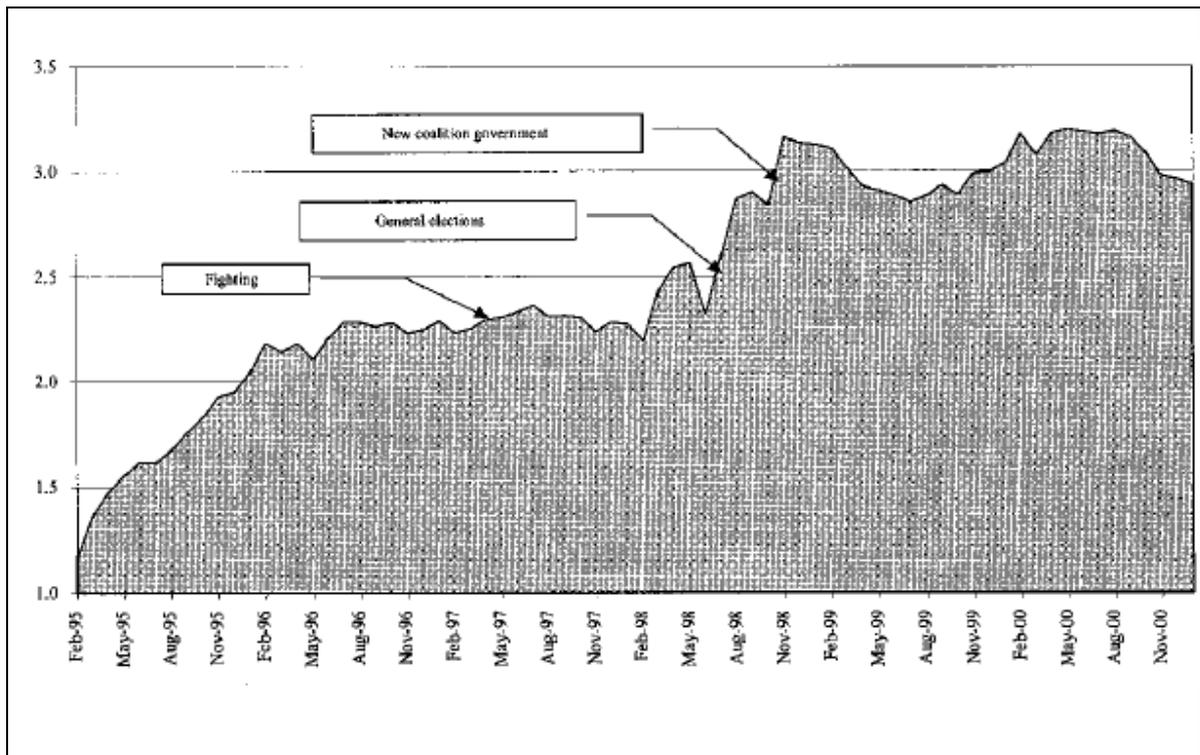
Although this estimation was performed on a database considered very limited and less reliable<sup>54</sup> by the authors, the results of this analysis allows us to observe an increasing trend in the use of the dollar in the Cambodian monetary field over the studied period.

**Figure 2-6: Estimate of the amount of dollars in circulation outside the banking system in Cambodia: 1995-2000 (in billion USD)**

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<sup>53</sup> In July 1997 there was a coup d'état by Hun Sen who ousted Norodom Ranaridh from power.

<sup>54</sup> Zamaróczy and Sa (2002): We would like to emphasize that our empirical attempt at measuring cash dollars in circulation is hampered by severe data limitations... some of data used are of mediocre quality, especially data on national accounts. (Pg. 17)



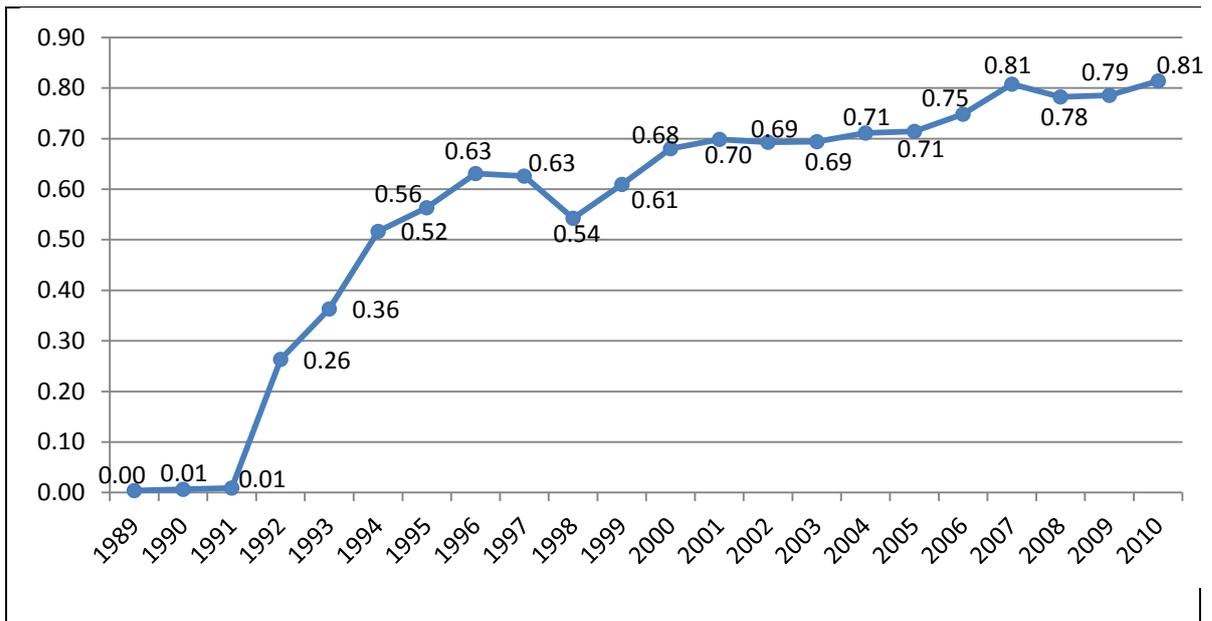
Moreover, the trend towards the use of dollar described by Zamróczy and Sa was confirmed by several experts. Based on the ratio of dollarization<sup>55</sup> represented by the ratio of foreign currency deposits and the monetary supply between 1993-2005, Dabadie (2006) estimates that dollarization in Cambodia has evolved by a growing trend. The latter is driven in part by uncertainty about expected inflation and partly by the riel depreciation.

By conducting a study on dollarization over the period of 1998-2008, Menon (2008) also confirmed that dollarization was on the rise during the studied period. The degree of dollarization measured by foreign currency deposits/M2ratio, which was 54 percent in 1998, rose to 75 percent in 2008. The explanation of the causes of the rise of dollarization is interesting. Instead of reasoning based on the currency substitution phenomenon as was often made by the experts, Menon believes that this increase is due to the increased confidence in the political and economic situation. Indeed, this confidence has attracted much entry of foreign investors and the return of dollars of the residents and non-residents deposited in banks abroad, such as in Singapore, Hong Kong, etc. (Menon, 2008, pg. 3). In addition to the analysis of Menon, Duma (2011) also confirmed the increased use of the dollar in recent years. She showed that the degree of dollarization is always on the rise, as it was 60 percent in the late 1990s or 80 percent in early 2011. As Menon concluded, this increase originates from the *quantum effects* or quantitative effects, the increase in dollarization being caused by foreign currencies inflows. The significant influx of foreign aid, foreign direct investment, tourism and exports of textile products in the mid-1990s, have contributed to the increase in volume of significant dollars in the Cambodian economy (Duma, 2011 pg.6).

**Figure 2-7: Dollar deposits/M2: 1989-2010**

%

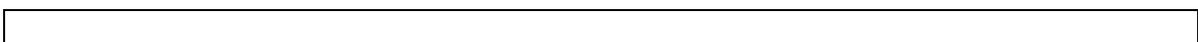
<sup>55</sup> This ratio is the ratio of dollar deposits and the monetary supply. For Zamróczy and Sa, Dabadie, Menon, dollarization means the use of dollar, not that of other foreign currencies (baht or dong).



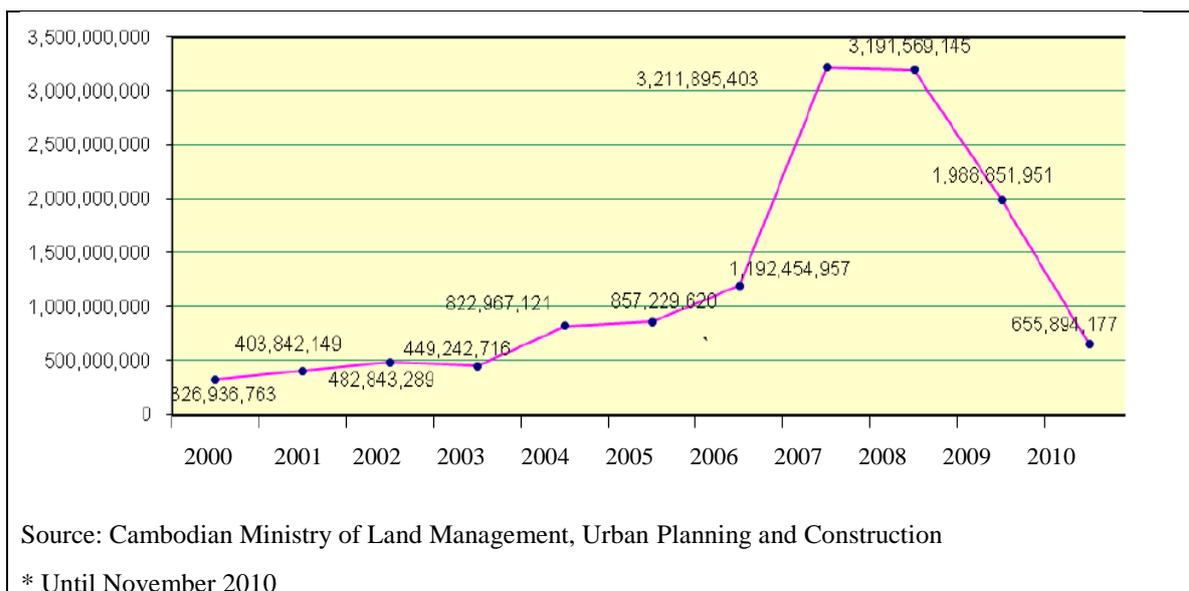
Source: National Bank of Cambodia

Another factor likely to increase the use of the dollar was the boom in the real estate sector, which captured a lot of capital from both residents and non-residents to invest in Cambodia. Peace was fully restored in 1998. The Khmer Rouge forces dissipated and or integrated into the government military force. Foreign investors had a clearer vision of investment opportunities in Cambodia in the various sectors, including real estate. Capital flowed in, especially from South Korea (CDRI-ANZ Royal Bank, 2009). Land and buildings saw their prices increase unprecedentedly from 2004 to 2007, at rates ranging from 25 percent to 40 percent per year (Global Property Guide, 2011)<sup>56</sup>. According Global Property Guide (2011), the increase in land prices was first limited to Phnom Penh, Siem Reap and Sihanoukville, and then the boom spread throughout Cambodia. Other provinces affected by the boom were the border areas with Vietnam and Thailand and to a much lesser extent with Laos. At the national level, the value of building projects approved by the Cambodian Ministry of *Land Management, Urban Planning and Construction (MLMUPC)* increased from 449 million in 2003, almost doubling in 2004 and increased respectively from 1,192 and 3,191 million dollars in 2006 and 2008 (MLMUPC, 2010). The bubble burst in mid-2008 with the global economic crisis. The latter almost cut the flow of dollars in real estate sector in Cambodia. Investors affected by the crisis, especially Koreans, could not mobilize their funds as before.

**Figure 2-8: Value of approved real estate projects: 2000-2010\***



<sup>56</sup> <http://www.globalpropertyguide.com/Asia/Cambodia/Price-History>



During this period of boom in the real estate sector, speculation in real estate prices accelerated throughout the country. The number of players in the sector increased steadily, from ordinary people to the emergence of professional agencies. Aside from foreign capital invested in this sector, more and more capital was invested abroad by residents who returned to their country of origin (Menon, 2008). Much of that capital (unfamiliar to the authorities) was invested in real estate. Investments made by the residents seemed to have covered a wide range of areas, while the foreign investors concentrated on economic areas, the capital and its suburbs, and in some provinces with strong economic potential. The only currency used in these operations was the dollar. The dollar therefore penetrated throughout the country through sales of land and houses. People who were very one day became very rich the following day. The dollars were then prevalent in urban areas and also the borders. Although the boom was temporary and only lasted about five years, the large influx of dollars from sales of real estate directly from the sellers (rich or poor, urban and rural areas and border provinces) had a significant impact on the use of dollar.

**Table 2-8: Interview with Mr. Nin Bunchomroeng, Branch Director of the National Bank of Cambodia, Steung Treng province, 30 October 2010\***

Steung Treng lies to the north, near the Laotian border. Mr. Nin was born in Steung Treng and has lived there since then. He said the province is economically considered as a rural rather than border area. Trade in this province are mainly performed with the capital. There is very little cross-border trade. It is not in the same situation as that of Thai and Vietnamese border areas. Kip, the official currency of the People’s Democratic Republic of Laos, does not circulate within the province. When farmers want to visit Laos, farmers can bring with them either baht or kip or dong or dollar as Lao accepts and use them in their country.

Mr. Nin observed that the dollar began to be used since the presence of UNTAC in the early 1990s and passage of the central and planned economy to a market economy in 1993. Its use is still rising, especially from the 2000s, when trade with the capital accelerated. With economic growth of the province and the parallel increase in the use of the dollar, a commercial bank (ACLEDA) moved there in late 2004, followed by a few microfinance institutions (MFIs currently three). In 2011, another commercial bank (Canadia Bank)

opened a branch. He also noted that since its opening, dollar operations of ACLEDA and a branch of the NBC, dollar deposits and transfers, are experiencing a constant growth.

## **2.3. Thai Baht (THB)**

### **2.3.1. Increased use of baht**

Baht, the official currency of Thailand, ranks second in the monetary space of foreign currencies and the third in the overall monetary field. It is the most widely used currency in the provinces near the Thai border, especially Banteay Meanchey and Koh Kong. The baht was used in these border provinces since 1979. At first, it was used at the same time as gold in trade with the Thai. Yet, its use was still limited in the first half of the 1980s due to the planned and centralized economic system of the communist regime at the time. It gradually penetrated after the liberalization of the Cambodian economy in 1986-1987. Since then, it became the most sought currency in these border provinces and its domination lasted until now. It was also prevalent in some urban areas (Phnom Penh, Siem Reap, Sihanoukville) and domestic trade networks of goods imported from Thailand in the 1990s. Until the late 1990s, the baht came to Cambodia by four main ways: border trade, illegal timber exports, and the immigration of Cambodian workers in Thailand and the integration of territories under the control of the Khmer Rouge.

The domination and interpenetration of economic networks of a country to another sometimes results in the circulation of currency of the first in some areas of the second, near the border (Blanc, 1998). Shortage of goods in Cambodia forced many Cambodians to get goods and supply from its neighbors, especially Thailand after the official opening of the Khmer-Thai border in the early 1990s (CDRI, 2005, pg. 31). This opening allowed the Cambodians to start trading with the Thais. Imported products are consumer goods, agricultural equipment, clothing, and cosmetics. While the products sold to Thai are agricultural commodities (rice, corn, potato, etc.). The baht is the only currency used in these trades. Because of the proximity to the Thai markets, these areas were economically very dependent on the Thai market. The majority of goods were imported from Thailand; at the same time, the production of these areas was also intended to Thai markets. Traders and farmers also needed baht to buy Thai goods and receive revenues largely in baht for their product to sell to Thai or Cambodian intermediaries that collected products from the farmers to sell in Thailand. The baht thus become a currency of account and payments in these areas so far. In addition, the baht was also a very sought after currency by domestic commercial networks. As imports from other countries had not yet developed in the 1990s, Thailand was the leading provider country in Cambodia.

The needs of Thai products were also accelerated by the influence of Thai culture (through films in particular) on the consumption behavior of Cambodians. In the 1990s when telecommunication systems were improved, all television channels would broadcast the Thai films that were very popular in Cambodia at the time. Cambodians therefore were hungry of Thai products, especially clothing. Phnom Penh traders imported largely Thai goods (especially clothing), or bought them from Cambodian intermediaries living in the border area with Thailand, to resell in Phnom Penh and other provinces remote from the Thai border. Transactions in these trading networks were essentially done in baht, except between Phnom Penh traders and their counterparts in provinces remote from the Thai border in which the dollar and the riel were used.

The official opening of the border was also marked by the emigration of Cambodian workers in Thailand, whose economic prosperity really needed many unskilled workers. As the two countries signed no agreement on migrant labor before the early 2000s, the Cambodian migrants worked illegally in Thailand. Most of these workers came from border areas in the 1990s. They borrowed informal networks to send funds to their families. Informal networks for the transfer from Thailand were at the border areas. The baht would come in before being re-transferred to other areas where families lived. This source of baht was an increasingly important source of money in these areas.

The baht was also injected into the Cambodian economy in the 1990s by illegal timber exports to Thailand. These exports were so important in 1989 that the Thai government introduced a law prohibiting deforestation in the country. Thailand therefore became very dependent on imports of timber from neighboring countries, including Cambodia. Due to the lack of good forest management, timbers were cut down and exported abroad especially to Thailand during the 1990s, because of its proximity to areas of deforestation. Most deforestation activities were illegal and anarchic as noted by the IMF report of 1998: *“uncontrolled logging has led to rapid deforestation ... Illegal logging and exports remain the most important issue”* (pg. 20-21). The Government took action against deforestation, but no significant improvement was observed in forest management since 1997 (IMF, 1998, pg. 21). The report also noted that the situation deteriorated rapidly after July 1997, with the intensification of the cut and illegal exports (IMF, 1998, pg.22). The government estimated that illegal logging in 1997 covered 51,000 cubic meters. But it is estimated at more than 50 times that figure by independent sources (IMF, 1998, pg. 22). According to official data of the Ministry of Agriculture, Forestry and Fisheries, timber exports accounted for 80,458, and 459 million USD in 1993, 1994 and 1995, respectively.

The volume of baht coming through this channel would therefore be considerable. It would be distributed in several provinces of the country through the expenses of those who obtained revenues in baht from timber exports to Thailand: exporters, exploiters, farmers who cut wood and workers. In 1990, the forest area accounted for 73 percent of the country, it fell to 65 percent in 2000 (Data from the World Bank, 2011).

Third, integration of territories controlled by the Khmer Rouge (KR), during the 1990s<sup>57</sup> is another factor that has increased the use of baht. Most of these territories are at the Thai border. After 1985, powerful Thai traders established direct trade links with the leaders of the resistance led by Pol Pot (French, 2002). The Khmer Rouge leaders received baht revenues by allowing Thai firms to exploit the forest resources and precious stones. It is estimated that KR earned more than 10 million dollars per month by timber exports to Thailand (Wof, 1996, pg. 435). The “KR deforestation” continued until their gradual integration into the system. The baht was therefore the only currency available to the leaders and people in the territories controlled by the KR Forces. Their integration resulted in the increase of baht entry in the economy.

### **2.3.2. Geographical concentration of baht circulation**

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<sup>57</sup> Territories controlled by the force of Pol Pot were all integrated to the Government in 1998.

The baht was widely circulated outside the banking system. It was not until May 2007 that the baht was recorded for the first time in banking operations, in the form of bank deposit (data from the NBC, 2011). It was then used to provide credit from the month of November of the same year. It seems that microfinance institutions began to give baht credits before commercial banks. In the absence of studies on the use of baht, it is impossible to trace its evolution<sup>58</sup>. We conducted interviews with managers of financial institutions and farmers by selecting those from the province to obtain their comments on the progression of the use of the baht. According to these interviews, baht circulation experienced rapid growth in the 1990s, but then tended to decrease and was limited more to the Thai border in the late 1990s. This also matched Duma's observation (2011): *“Earlier, even the Vietnam dong and Thai baht were highly used, but their use has declined over time and became limited to the border areas with respective countries”*.

For Mr. Pov Saveuy, Former Director of the Battambang branch, the tendency to use the baht has been decreasing since the late 1990s. The evolution of the use of the baht could be divided into three stages: the first stage from the mid-1980s to the early 1990s, the second stage from the early 1990s to the end, and the third stage from the early 2000s until now.

The first stage demonstrated penetration of the baht in Battambang through commercial activities, the second is when the baht was widely used and the third is marked by the penetration of the dollar and the rise in the use of riel at the expense of baht. It seems that the dollar has gradually replaced the baht. Currently, there are three currencies circulating in Battambang: the riel, the baht and the dollar. The dollar came essentially from Phnom Penh, while the baht remains well used in agriculture and trade of Thai products. The riel is used for food purchases and also in agriculture.

Interviews with farmers in Samlot district, next to the Thai border, in Battambang province, also showed us that the dollar and the riel arrived after the baht. Samlot was under the control of the forces of Pol Pot and was then integrated into government-controlled territory in 1996-1997. Before this date the forces of Pol Pot and the farmers of Samlot knew only the baht. The year of integration was also when the riel began to penetrate in Samlot. The riel and the baht initially coexisted. The riel gained ground slowly when farmers came into contact with other farmers and traders in Battambang province and other provinces. In the early 2000s, farmers observed that the riel had been increasingly used. One of the key reasons is that Cambodian intermediaries, who bought products from farmers to sell in Thailand, tried to pay the farmers in riel to benefit from a favorable exchange - these intermediaries sold to Thai people in baht, which was likely to appreciate after the 2000s. It was therefore advantageous for Cambodian intermediaries to pay for their purchases in riel to the farmers, however this was not always accepted by farmers for large transactions who wanted baht. In addition, the dollar only started to really circulate in the mid 2000s when there was a boom in land prices. Farmers of Samlot saw the price of their land increase by several hundred times. The land purchasers (mainly people outside of the district, particularly from Phnom Penh) used the dollar to pay for the land, which then brought an influx of the dollar to Samlot. Currently, the unit of account in Samlot remains the baht, even though the payments are made in riel or dollars.

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<sup>58</sup> This is why we conducted surveys on the circulation of currencies. We will discuss it in Chapter 4.

Farmers in Pailin province<sup>59</sup>, the smallest province, rich in cultivated land and precious stone mines, are in a similar situation of those farmers in Samlot. Pailin is a small province in northwest Cambodia along the Thai border. It was under the control of Pol Pot from 1979 to 1996. Thai companies exploiting precious stones and timber had close ties with the KR forces in Pailin. The baht was the only currency they brought to pay the Khmer Rouge. In 1996, Pailin was integrated into government-controlled territory. The riel came there in 1997-1998 through the purchases of traders in other provinces. Then, through commercial channels and sales of land, the farmers started to obtain dollars. In Pailin, settlement of agricultural products was made in baht as most of the agricultural production in this province was intended for the Thai market. Currently, small transactions, including purchases of food, are paid in riel. The dollar is not widely used in Pailin.

According to Mr. Lim Khary, Deputy Director of the branch of the National Bank of Cambodia-Koh Kong Province, interviewed in October 2010, the baht was used in 1979 along with gold to buy Thai goods. Koh Kong is indeed closer to the Thai market than to other domestic markets. The infrastructures linking Koh Kong to other provinces was very limited before 2000. The road was very bad from Koh Kong to Phnom Penh, and people had to go through several crossings by ferry, because of the lack of bridges. Before the transformation of the economic system in 1986, the use of baht was still illegal and very limited. However, from 1987 to 1988, the baht was increasingly used in the province while trade was increasing. It then became a unit of account, means of payment, and also a store of value. Gold became more and more difficult to use directly in trade both domestically and with the Thai, especially because of fraud on gold assays and the use of fake gold. The almost exclusive and increasing use of baht in the province lasted until the second half of the 2000s. The dollar slowly penetrated the monetary field in the province in the second half of the 1990s, through illegal timber exports to countries other than Thailand. But its use increased at the same time as the real estate boom around 2005 when the dollar came through land sales to Phnom Penh residents. As for the riel, much of it has been used in the second half of the 2000s, while the government has been strengthening the role of the riel in tax payment. In addition, the riel has been used in small amount transactions and replaced the role of the baht in these transactions, particularly for payments below few hundred bahts<sup>60</sup>.

### **2.3.3. Decreasing trend of baht circulation?**

It seems that there are at least three factors that cause this trend.

#### **- Declining dominance of trade with Thailand**

Since 2000, we observe that imports from Thailand have no longer occupied the most part in the Cambodia's imports. The imports from China and Vietnam have gradually increased. According to Chap (2010), the imports from China have remarkably increased since 1999, the year when Cambodia became a member of ASEAN (Association of South-East Asia Nations). Trade between Cambodia and China<sup>61</sup> are estimated to reach 2 billion dollars in 2011 and 2.5

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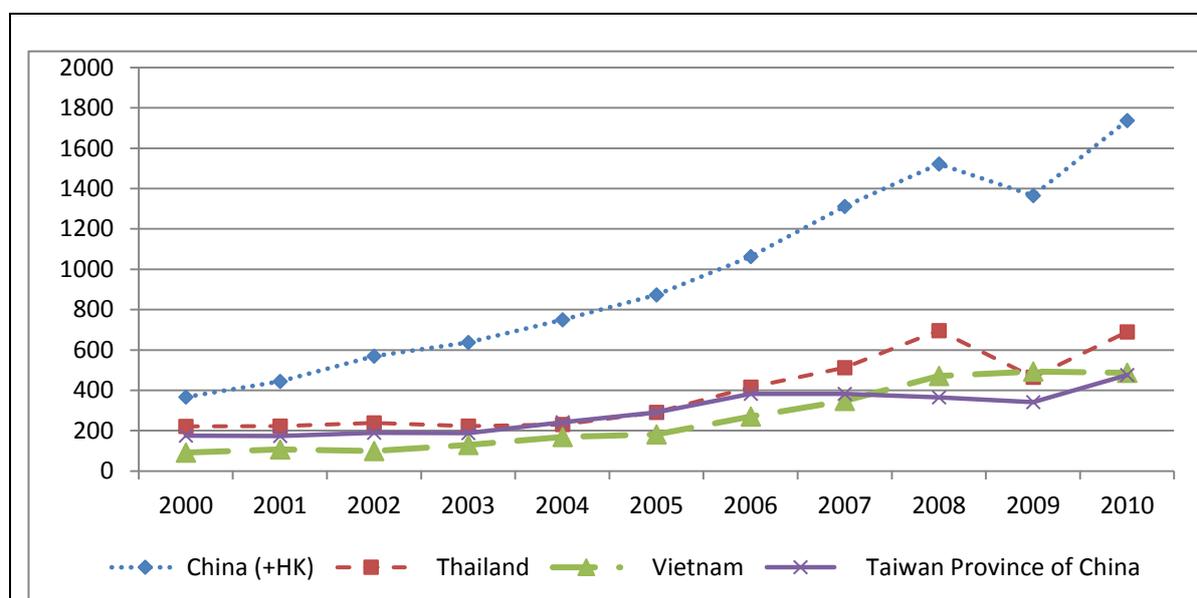
<sup>59</sup> Interview with farmers in Pailin during the period of surveys on the currency circulation in Cambodia from August to October 2010, by Khou, 2010

<sup>60</sup> The denomination of THB banknote is: 1,000 (equivalent to 31.6 USD), 500 (equivalent to 15.8 USD), 100 (equivalent to 3.1 USD), 50 (equivalent to 1.5 USD) and 20 (equivalent to 0.63 USD).

<sup>61</sup> Cambodia's exports to China are still very low. They represent, in general, less than 5 percent of imports from China.

billion dollars in 2012, against less than 400 million dollars in 2000 (Cham Prasith, 2011<sup>62</sup>). Thai imports are more in competition with those from China and Vietnam. Moreover, we observe that the gap between imports from Thailand and China has expanded over time (Figure 2-9).

**Figure 2-9: Imports of major Cambodia's trading partners of: 2000-2010 (in millions of dollars)**



Source: Cambodian Ministry of Commerce

The progressive increase of imports of products from China and Vietnam is explained by several factors. First, the prices of their products are more competitive as compared to those of Thai. These products are suitable for the standard of living of the poor and middle class Cambodians, which represents more than 90 percent of the population. Second, the influence of Thai culture on Cambodian consumption has declined significantly since the early 2000s. Because of diplomatic tensions, the government has officially banned the airing of Thai films on television since 2003. The population no longer sees on television clothes and products that Thai stars wear and use. At the same time, sporadic border closures from July 2007, the conflict around the temple Preah Vihear on the northern border contributed to the decrease of imports of Thai goods.

This slowdown is also reflected by the substitution of goods imported from other countries (China and Vietnam) to those of Thailand. Importers from the capital buy more products from China and Vietnam and are distributed throughout the country, including border areas. These transactions have largely been facilitated by the improvement of the physical infrastructure (bridges, roads) since the late 1990s. In the 1980s or 1990s, to move between the capital and most provinces more than 300-500 km from the capital, we had to leave very early in the morning to arrive at the destination at almost midnight or spend a night on the way because of bad roads. It now takes less than 5-7 hours. At the same time, the provinces near the Thai border have also expanded their domestic markets, particularly the market in the capital. They can sell the products to domestic markets that provide more dollar and riel. According to our

<sup>62</sup> Cham Prasith, Cambodian Minister of Commerce estimated trade between Cambodia and China in October 2011, cited by the Phnom Penh Post, an English writing newspaper, 28 November 2011.

interviews with traders in the border areas, traders set prices in the currency used for the purchase. More specifically, the products will be sold in dollar when purchased in dollar, except for goods whose prices are low in which the riel is involved. Domestic trade has also been strengthened, which promotes the flow of dollar and riel at the expense of baht. In addition, agricultural production, particularly rice, has a new foreign markets other than Thailand, which allows farmers and traders in the Thai border areas to sell part of their production to these new markets (Europe, the United States, and Asia)<sup>63</sup>.

However, it seems that much of the products of these border areas are still aimed at Thai markets (agriculture, fishing etc.). This is due to, on one hand, the proximity of the Thai market and, on the other hand, the commercial network established over several years in these areas between Cambodian farmers/traders and Thai traders.

### **- The mobility of the population**

Revenue growth and the increase of the Cambodian population have increased not only internal commercial activities, but also the mobility of the population within the country. This has an impact on the use of currencies, especially in border areas. The average GDP per capita increased from 280 dollars per year between 1993-2000 to 376 dollars between 2001 and 2005 and to 693 dollars between 2006 and 2010 (World Bank). At the same time, the population increased at the rate of 1.54 percent per year between 1998 and 2008<sup>64</sup>. Therefore, the number of Cambodian visitors increased rapidly during the 2000s<sup>65</sup>. In 2002, there were less than two million passengers who traveled in the country, but the number of visitors reached 7 million in 2009. This increase accompanied of course the flow of dollar and riel. The “baht areas” welcomed more and more visitors from other provinces, especially from Phnom Penh. The dollar and the riel therefore entered. At the same time, visitors in these “baht areas” also needed more dollar and riel for use in other regions, because they would feel embarrassed to bring along the baht and exchange against dollar or riel when they wished to spend in other areas that primarily used the dollar or riel. According to the Cambodian Ministry of Tourism, the areas most visited by Cambodian visitors are Phnom Penh and Siem Reap, followed by Sihanoukville. These are also the areas where the dollar dominates the monetary field.

**Table 2-9: Number of Cambodian travelers within the country**

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<sup>63</sup> The Government has encouraged farmers, especially rice farmers to export their agricultural products to European markets, the United States, and other countries in the region. The association of rice farmers for export was created and the government launched a credit program to increase the capacity of rice production in order to increase exports to these markets.

<sup>64</sup> Cambodian Ministry of Planning, National Institute of Statistics, 2009, “General Population Census of Cambodia 2008”.

<sup>65</sup> Statistics on domestic visitors are only available from 2002.

	Phnom Penh	Siem Reap	Sihonouk ville	Koh Kong	Banteay Meanchey	Battambang	Pailin	Total
2002	551417	93942	87555	3370	13118	50652	3000	1756790
2003	441134	109186	83888	4920	149249	8039	3600	1930609
2004	1330000	384201	104021	5431	176956	58465	485	4338123
2005	2500000	209524	153842	19625	162296	84794	25914	5278113
2006	3898100	782895	224872	26224	143115	121618	28676	7760508
2007	1747321	892226	286219	37112	148074	161391	82151	5827518
2008	1785442	1195264	396850	36762	97566	245137	107848	6729349
2009	1973370	1279356	395174	52209	106969	223290	98973	7021509

Source: Cambodian Ministry of Tourism: Annual Reports 2008-2009

### - The shift of forest exports

As mentioned in the previous point, the flow of baht entered Cambodia considerably through timber exports in the 1990s. Forest areas near the Thai border suffered early from deforestation by the Khmer Rouge and farmers and enterprises in the territory controlled by the government. The Khmer Rouge who controlled about 10 percent of the country began to exploit the forest since the early 1980s, while in the territory under government control began in the early 1990s.

However, since the early 2000s, measures against deforestation have been implemented. Illegal and uncontrolled logging by the “normal” population has been greatly reduced. The measures against deforestation, introduced in the 1990s, between Cambodia and Thailand, have been strengthened. Yet the deforestation rate was still high in the 2000s (UNFAO, 2010<sup>66</sup>). According to the World Bank (2008), between 1990 and 2005, the average rate of deforestation in Cambodia was 1.4 percent, or equal to 3 times the average worldwide (0.5 percent). It fell slightly in the second half of the 2000s (UNFAO, 2010). Deforested areas appear to move from the Thai border to those within and near the Vietnamese border. Most illegal exports therefore pass through Vietnam, which thus obtains the dollar. The baht is rarely entered through this channel.

**Table 2-10: Rate of deforestation in Cambodia from 1990 to 2010**

<sup>66</sup> The United Nations for Food and Agriculture Organization, 2010 main report on “Global Forest Resources”

	1990-2000	-1.4%
	2000-2005	-1.45%
	2005-2010	-1.22%

Source: United Nations for Food and Agriculture Organization, 2010, main report on “Evaluation of global forest resources”

## 2.4. Vietnamese Dong (VND)

The dong, the official currency of the People’s Republic of Vietnam has entered Cambodia since 1979. It was the first currency that circulated there, even before the onset of the national currency. It first entered the country when Vietnamese soldiers who came to help the Cambodian government liberate the country in 1979, and has since remained until 1989, and also through border trade. But the dong has not convinced Cambodians to use or keep it (Gardère, 2009). The farmers obtain the dongs by selling products to Vietnam and subsequently used them to buy Vietnamese products. It seemed that the volume of dong was not important in the 1980s because trades between Vietnam and Cambodia were not developing during these years. Vietnam was put an embargo by the United States between 1964 and 1995. According to Beresford and Phong (2000)<sup>67</sup>, exports from Cambodia to Vietnam were higher than imports in the early 1980s. It thus provided dongs to farmers. It seemed that imports of Vietnamese products increased in the mid 1990s and in 1999, the Cambodian trade balance with Vietnam was recorded with a deficit of 72 million dollars (exports to Vietnam were only 12.75 million dollars, while imports were 84.68 million dollars). Although trade with Vietnam has gradually increased, the use of the dong has never been dominant in the monetary field in border provinces as in the case of the baht. Structural trade has mostly concentrated over time on districts contiguous to Vietnam. The structural trade additionally affected specific transactions, especially those in the agricultural sector. Cambodian farmers buy fertilizer, animal food from the Vietnamese, and meanwhile sell them a part of agricultural production and livestock. The dong and the riel are used at the same time in these border trade transactions (NBC, 2010<sup>68</sup>). Vietnamese markets are not prevalent, as in the case of the Thai market at Thai border areas. Because the provinces near the Vietnamese border are not geographically far from the capital, which is a center of redistribution of national products<sup>69</sup>. For imports of large amount, the dollar is used to pay the Vietnamese. According to Mr. Sok Kolay, acting director of the branch of the National Bank of Cambodia – Svay Rieng Province, areas where the dong circulates have reduced over the years. Currently, they are strictly limited to the border areas. In the towns of Svay Rieng province, the dong does not circulate well but is accepted by all traders at the market exchange rate.

Table 2-11: Interview with Mr. Sok Kolay, Acting Director of the branch of the National Bank of Cambodia, Svay Rieng province, August 2010

<sup>67</sup> Cited by CDRI, 2005, “The cross border economies of Cambodia, Laos, Thailand and Vietnam”, pg. 31.

<sup>68</sup> Internal report of Statistics Department of the National Bank of Cambodia on cross-border trade between Cambodian farmers with the Vietnamese at Khmer-Vietnamese border ports (2010).

<sup>69</sup> Provinces of Kandal, Takeo, Svay Rieng, and Kampong Cham are near Phnom Penh. Its distance from Phnom Penh is 20 km, 87 km, 122 km, 91 km, respectively. Except Mondulkiri province (534Km), and Ratanakiri (605 km) which are far from Phnom Penh, but their economic activities are very low because these are remote areas.

Currently there are three currencies circulating in Svay Rieng: Khmer riel, U.S. dollars and Vietnamese dong. The Vietnamese dong has entered and has been used in the province since 1979. The source of dong is the border trades of the farmers of Svay Rieng. The farmers sell rice, corn, buffalo and other livestock to Vietnamese who are initially paid in dong. Over time, he noted, that the use of dong has concentrated in the border area. Regarding the evolution, he observes that the use of dong in the 1980s was higher than in the 1990s and it was in turn more important in the 2000s, because the riel has been used very little in border trade. The riel and the dong are used simultaneously in these trades. The dollar emerged in the early 1990s with the presence of UNTAC and since then has been used in the urban area of the province.

## Conclusion of Chapter

Like other developing countries, Cambodia has been affected by the dollarization phenomenon or more precisely monetary plurality because there are several currencies circulating in the territory. Four currencies have coexisted in the country: the national currency (the riel), the dollar, the baht, and the dong for more than two decades. The monetary plurality phenomenon in Cambodia cannot be fully explained by a mechanism of currency substitution (whereby the use of a currency replaces the use of another one). There is furthermore a complementarity of different currencies in circulation, although this complementarity evolves over time and substitution phenomena may occur on some of these currencies.

Indeed, since the penetration of foreign currencies in the monetary field, the amount of riels in circulation has not declined. It even had a tendency to grow in the last decade. The use of the dollar in Cambodia can be explained by the influx of dollars in the early 1990s and increasing capital flows into the country, while the use of baht is mainly due to the predominance of trade with Thailand and also the revenue transfers of Cambodian workers in Thailand. Revenues from timber exports in Thailand that increased baht circulation in the 1990s also returned to a marginal level when logging in the provinces near the Thai border was greatly reduced. The baht was concentrated in the Thai border provinces and its use appeared to be declining over time during the 2000s. This decrease was also due to the decrease of the predominance of trade with Thailand. However, the baht remains dominant in the monetary field in the provinces bordering the Thai border. It is also the only currency used in border trade between Cambodian farmers and traders and the Thais. For dong, it circulates in a very narrow niche in adjacent areas to the Vietnamese border. It is used for border trade between the farmers and the Vietnamese. Yet it is not the only one that has been used: the riel is also used in trade both on Cambodian territory and in Vietnamese territory near the border (NBC, 2010).

The evolution of the circulation of each currency in the monetary field has revealed the complementarity and competition between currencies. Given their evolution, the dollar and the riel do not appear in a competitive situation. The dollar fulfills its role of intermediary of trades and unit of account for large transactions, while the riel is used for small transactions. In contrast, regarding the function of store of value or savings, the dollar is still very dominant. We can observe this from the level of bank deposits. In addition, the dollar seems to be in competition with the baht over time as the latter has a decreasing trend in favor of the dollar. Indeed, when domestic trades enhance and the mobility of people within the country increases, the dollar extends its circulation space to the Thai border provinces. Finally, the dong and the riel are in competition in the Khmer-Vietnamese border trades, as they are the primary means of payment. We will discuss the issue of competition and complementarity in more detail in chapter 5 on surveys of the use of each currency in the monetary field.

## Chapter 3 - Monetary Plurality and Its Environment

## **Summary**

### **Introduction**

#### **I. Institutional Environment**

- 1.1. Rule of Law under Construction and Corruption
- 1.2. Exchange Regimes

#### **II. Banking System**

- 2.1. Overview on the Evolution of the Banking System
- 2.2. Currencies of Operations
- 2.3. Level of Development
- 2.4. Active Informal Exchange Markets

#### **III. Economic Environment**

- 3.1. Determination of Prices of Goods and Services
- 3.2. Determination of Wages and Revenues
- 3.3. Openness to the External Sector

#### **Conclusion of Chapter**

## Introduction

Monetary plurality cannot continue for a long time if there are no favorable conditions. Blanc (1998) reported circumstances of appearance of parallel monetary instruments and types of parallel monetary instruments between 1988 and 1996. The report showed that the use of foreign currency appeared in a situation of economic and political crisis, the domination and the interpenetration of economic networks, and the modification of the local monetary system, but also in situations that can be described as normal. Similarly, several studies of theoretical and empirical research on currency substitution or dollarization also showed the persistence of dollarization after the economy gained macroeconomic stability. This is a phenomenon that economists call “*hysteresis of dollarization*”.

Although Cambodia had experienced the monetary crisis (inflation and sharp depreciation of the national currency in late 1980s and early 1990s) and political uncertainty until 1998, it managed to maintain its macroeconomic and political stability for over a decade. However, monetary plurality persists, and dollarization, which is measured by the ratio of dollar deposits and money supply (M2), is growing.

In this chapter we will attempt to examine the enabling environment for the persistence of monetary plurality. We will initially address the institutional environment which is a key element in the use of foreign currencies in the country. Then we will discuss the state of the banking system, which plays a key role in circulating the national currency and foreign currencies through their financial intermediation function. Finally, we will analyze the economic environment that creates demand and supply of each currency in the monetary field

## Section I: Institutional Environment

### 1.1. Rule of Law under Construction and Corruption

To accelerate its economic development, Cambodia became a democracy and liberalized its economic system in the early 1990s. In this regard, many reforms were implemented. The result of the reforms is reflected in the impressive growth rate during these two decades. However, the institutional environment remained an obstacle to the private sector and rural development, which are key economic sectors that use the riel (Duma, 2011). This environment heavily favored monetary plurality. According to Zamróczy and Sa (2002), tolerance and low legal restrictions regarding the use of foreign currencies result in the coexistence of several currencies in Cambodia's monetary field. Rennhack and Nozaki (2006) argue that weak institutions undermine the credibility of policies because they raise doubts about the performance of contracts and, therefore, the residents hold foreign currencies to avoid the risks associated with holding of national currency. De Nicolò, Honohan, and Ize (2005) use variables of institutional quality, legal frameworks (*Regulatory frameworks*) and the macroeconomic environment to explain the cause and persistence of dollarization in 75 dollarized countries (including Cambodia). They found that high inflation and weak institutions greatly contributed to higher dollarization, but when institutions have been improved, the effect of high inflation which causes the increase in dollarization would also be significantly reduced. Honohan (2007) also confirmed that the weakness of government institutions would negatively affect public confidence in the national currency and thus would promote the holding of foreign currencies.

According to the World Governance Indicators (WDI) produced by the World Bank (Kaufmann, Kraay, and Zoido-Lobaton, 2010)<sup>70</sup>, although Cambodia has made a little progress in the rule of law since 2004, its score remains very low as compared to other ASEAN countries. Its rank measured in percentage is less than 15 percent on average between 1996-2010, compared to 40% in Vietnam and around 90 percent in Singapore (Figure 3-2). Shinichi (2007) studied the relationship between the rule of law index (RLI)<sup>71</sup> of Kaufmann and Mastruzzi (2006) and dollarization in three countries: Cambodia, Laos and Vietnam from 1996 to 2005 and found a negative relationship between the rule of law and the degree of dollarization (foreign currency deposits/M2). During this period, none of these three dollarized countries had a positive value of RLI. He also notes that in the late 1990s, the value of RLI of Vietnam had been constantly improved from -0.94 percent in 1998 to -0.47 percent in 2002 because of the reform efforts of the Vietnamese Government to improve the quality of governance of the country, while the value of RLI of Cambodia was around -1.1 percent with a decreasing trend. Thus according to him, the level of dollarization in Vietnam fell and for Cambodia, it is rising.

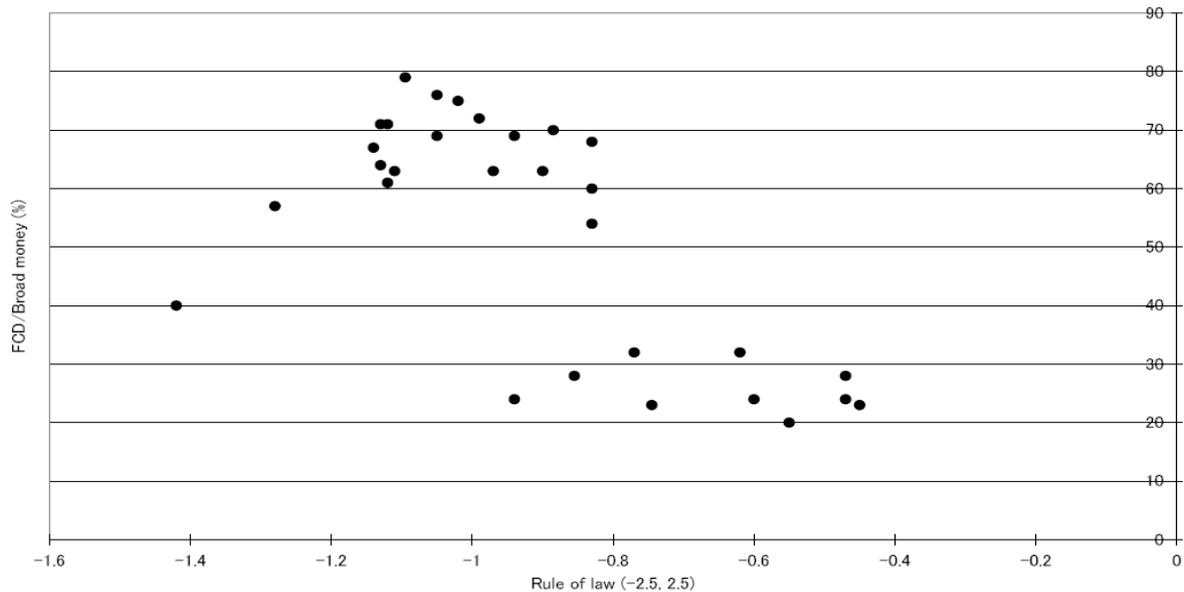
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<sup>70</sup> Kaufmann, Kraay, and Zoido-Lobaton, 2010, "*The worldwide Governance Indicators: Methodology and Analytical Issues*" Draft Research working paper), have define the elements that we use here:

- The rule of law means the quality of contract enforcement, the police and the courts, including the independence of the judiciary, and the incidence of crime
- Corruption Control refers to the abuse of public power for private gain, including small and large corruption (and misappropriation of state property by the elites)

<sup>71</sup> The value of RLI varies between -2.5 percent -2.5 percent. The more the value of RLI is positive and tends to 2.5 percent, the more the rule of law is in a good condition.

**Figure 3-1: Rule of law vs. Dollarization: Cambodia, Vietnam and Laos 1996-2005**



FCD: Bank foreign currency deposits  
 Broad money: Money supply (M2)  
 Source: Shinichi, 2007

Moreover, the corruption situation is very worrying; it deteriorated in the early 2000s<sup>72</sup> (Figure 3-2). Classifying expressed in percentage is less than 10%<sup>73</sup> in the second half of the 2000s. In 1996, this classifying was equal to 17%, it improved a bit in 2000 with a rate of 21.5% and then declined gradually to 7.6% in 2010. In comparison with other countries in the region, the classifying of Cambodia is similar to that of Laos, and much lower than that of Vietnam, Thailand, Malaysia, and Singapore. In addition, the result of the evaluation of *Transparency International (TI)* is not so different from that of the World Bank. Based on the index of perception of corruption<sup>74</sup> obtained from different evaluations and surveys in the enterprises, the 2010 TI report ranked Cambodia as 154<sup>th</sup> most corrupt country with a score of 2.1 among 178 countries. Laos has the same score and ranking as Cambodia, while Vietnam is 116<sup>th</sup> (score 2.7), Thailand 78<sup>th</sup> (3.5), Malaysia 56<sup>th</sup> (4.4) and Singapore 1 (9.3)

Because of corruption, the government is losing millions of dollars in revenues in the form of low tax collection. According to the estimate by the IMF (2011), the ratio of fiscal revenue/GDP of Cambodia is about 5-7 percent below its potential. The World Bank (2004) conducted a survey with enterprises in Cambodia on the investment climate and found that 4/5<sup>th</sup> of those surveyed have recognized the need of corruption and that 71% of large companies reported that payments of this nature are common. The private sector estimates that the charges of unofficial payments cost the companies 5.2% of turnover (WB, 2004). Corruption was estimated to be at 300-500 million dollars in 2004 (Calavan et al. (2004)). A survey on the evaluation of corruption in the private sector conducted among 1,200

<sup>72</sup> Because of the deterioration of the corruption situation, the Government has introduced the law on anti-corruption and created in 2010 the anti-corruption unit of Cambodia.

<sup>73</sup> The higher the percentage, the lower the corruption is.

<sup>74</sup> The index of perception of corruption is defined by a value of 0 to 10. The higher the index, the less corrupt the country is.

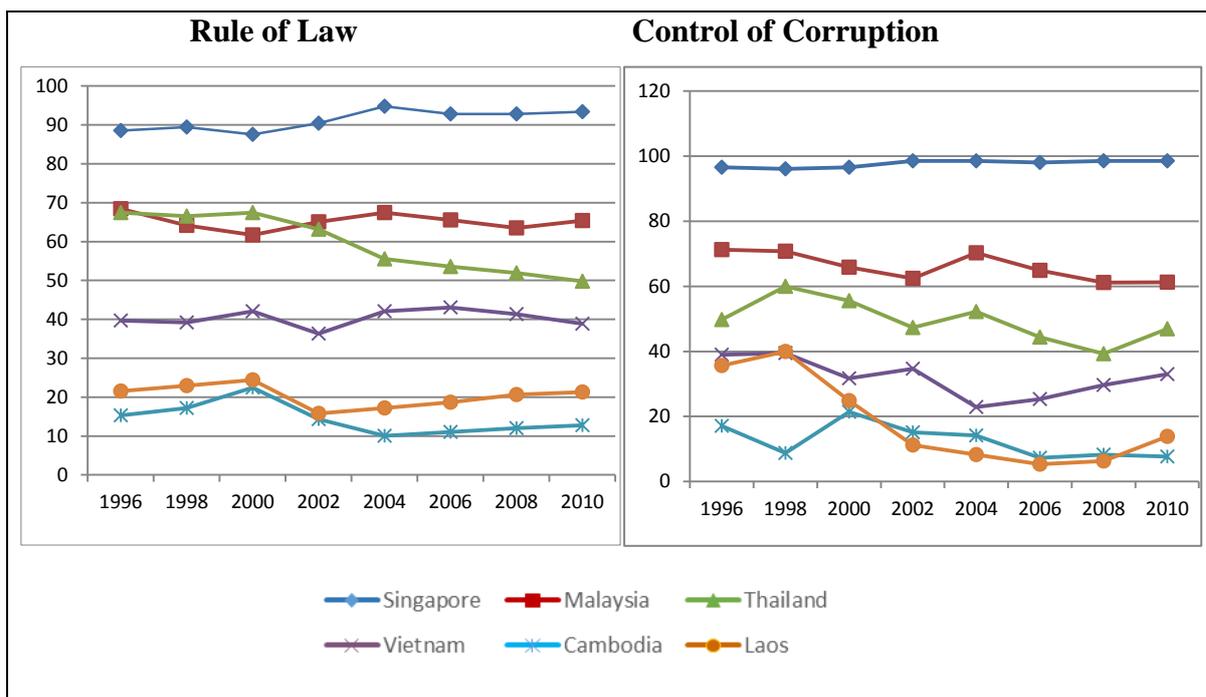
companies (micro, SME and large companies) in 9 provinces by *Economic Institute of Cambodia* (EIC) (2006) estimated that fiscal evasion was about 400 million dollars in 2005, or 6.4 percent of GDP and unofficial payments by the companies depended on their size (micro, SME or large companies). The larger the company, the more it must pay to corruption. The causes of corruption are: low salaries of civil servants, lack of anti-corruption mechanism, culture of corruption, the lack of effective judicial system, and the weak enforcement of laws. However, the main cause of corruption appears to be the low salaries of civil servants (EIC, 2006). If corruption was reduced or even eliminated, the revenues from taxes would increase by about 6.4 percent of GDP. The demand for national currency would follow as the payment of taxes contributes to this. Corruption could favor the use of foreign currencies that the private sector generates from its activities. These foreign currencies are then put directly back into the economy, without having to convert or to have recourse to the national currency. As such, the companies can engage in corrupt practices in foreign currencies (dollar or baht). Therefore, when the economy is growing and the private sector is growing, the use of foreign currencies must increase if the level of corruption remains high.

Moreover, corruption and weak rule of law strongly reinforces the informal economy which has been in Cambodia for a long time and has not decreased since its opening to the outside. The informal economy is considered a system that dynamically promotes the circulation of foreign currencies. The foreign currencies can enter through the informal system and used in the formal economy. For example, the dollar and the baht generated by workers settling abroad enter largely through informal networks and thus are directly used by their beneficiaries<sup>75</sup> inside the country. When the informal economy is important, the foreign currencies enter and circulate freely, and move from one economic agent to another. Observing the size of the informal economy of 145 countries estimated by Schneider (2004) and dollarized countries listed by Balino, Bennet and Borensztein (1999), Shinichi (2007) found that most of the highly dollarized economies with the exception of Argentina and Costa Rica have a largely informal economy. The study on dollarization in the three countries of Indochina (Cambodia, Laos, and Vietnam) then allowed him to assert that there is a positive correlation between dollarization and the size of the informal economy. The economy of Cambodia is the most dollarized because it has a long history of an informal economy in comparison to Laos and Vietnam. In 2002/2003, the size of the informal economy represented 52.4 percent, 33.4 percent, and 17.9 percent respectively in Cambodia, Laos, and Vietnam.

**Figure 3-2: Governance indicators of Cambodia and other ASEAN countries, 1996-2010 \***

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<sup>75</sup> We will discuss about this in detail in Chapter 4



\* Classifying expressed in percentage. Higher values indicate better notes of Governance

Source: World Bank, 2011, "World Governance Indicator"

In addition to the historical phenomenon which has destroyed public trust in the ability of the state and the central bank to ensure the stability of the national currency, high corruption and weak rule of law constitutes fundamental obstacles to promoting the use of the national currency. In other words, they create a favorable environment for the diversity of currencies in the monetary field.

## 1.2. Exchange Regimes

There are two types of exchange rates in Cambodia: the exchange rate determined by the market and the official rate defined by the National Bank of Cambodia (NBC). Since 1994, the NBC has set the official exchange rate with the difference of one percent as compared to the market rate (Rumbaugh, Ishi, Liang, and Masuda, 2000). As noted above, the exchange rate of USD/KHR depreciated sharply in the late 1980s and early 1990s, due to the monetization of the budgetary deficit by the central bank. Then it remained relatively stable from 1994-1996 before falling again in 1997 due to political uncertainty. According to our surveys with the money changers, and the study of the exchange market in Cambodia<sup>76</sup>, the exchange rate between THB/KHR and VND/KHR are not defined by the bilateral exchange rate but crossed using the USD as an intermediate currency. This means that the exchange rate of THB/KHR is the relationship between USD/KHR and USD/THB; it is the same for the exchange rate of VND/KHR.

During the 1990s, under a floating exchange rate regime, the central bank left the exchange rates to fluctuate according to the interplay of supply and demand in the market. The value of the riel against the dollar depreciated throughout the 1990s. The exchange rate of VND-KHR

<sup>76</sup> Surveys among money changers made by Khou (2010), the study of exchange market by the National Bank of Cambodia (2011)

followed more or less the trend of USD-KHR. In contrast, the exchange rate of THB-KHR did not follow the trend in 1997-1998 due to the Asian Financial Crisis which severely hit the Thai baht. From July 1997 to January 1998, the value of the baht depreciated significantly against the dollar and the riel. It seems that the sharp depreciation of the baht also had a negative impact on the economy of the provinces that uses the baht.

In a context where the economy is very open to the outside, studies on dollarization showed that the depreciation of the national currency favors the currency substitution and financial dollarization<sup>77</sup> (Ize and Yeyati E., 2005; Rennhack and Nozaki, 2006). Depreciation erodes public trust in the national currency and thus encouraged the holding of foreign currencies whose value is more stable. Rennhack and Nozaki (2006) studied the phenomenon of financial dollarization in Latin America and concluded that *“an exchange rate policy biased towards currency depreciation and currency mismatches tends to contribute to high financial dollarization and that financial dollarization is highly persistent ... restoring confidence in the domestic currency may take many years of sound policies”*.

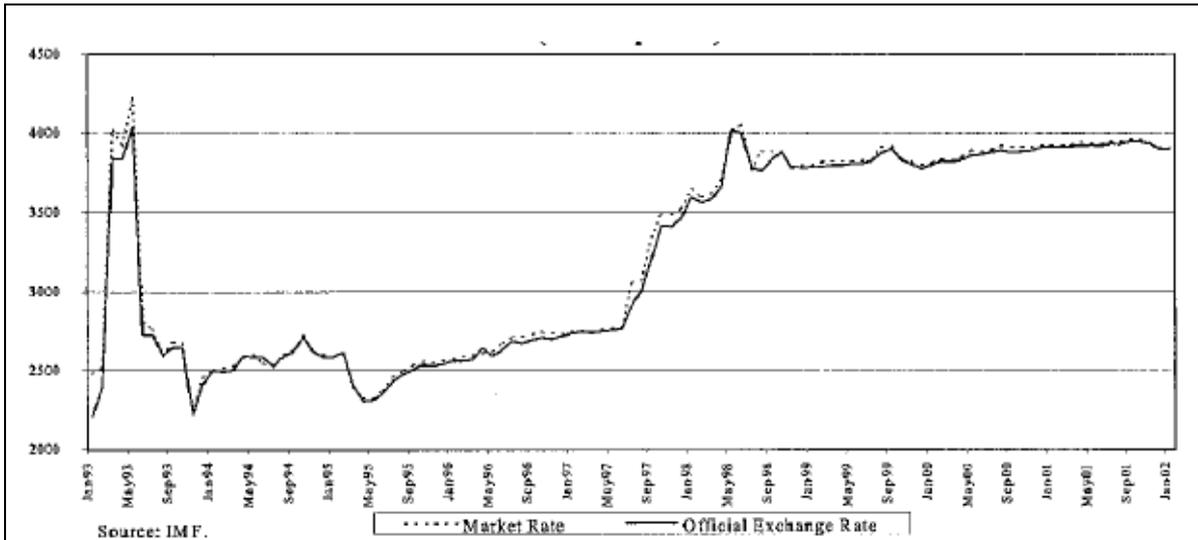
Furthermore, based on the monthly data of the exchange rate of the NBC, Kem (2005) conducted an economic study on the relationship of the exchange rate and the currency substitution in Cambodia from 1993-2001. He found that there is a significant long-term relationship between the rate of anticipated depreciation<sup>78</sup> on the exchange market and the holding of dollars. The anticipated increase in the depreciation of the exchange rate of USD-KHR causes increased substitution of dollar for riel. Similarly, Hee-Ryang Ra (2011) examined the dollarization of the three developing countries: Cambodia, Laos, and Vietnam from 1992 to 2007. He found that there is a positive correlation between the rate of anticipated depreciation on exchange markets and the holding of dollars. This correlation is significant for Cambodia.

**Figure 3-3: Evolution in exchange rates**

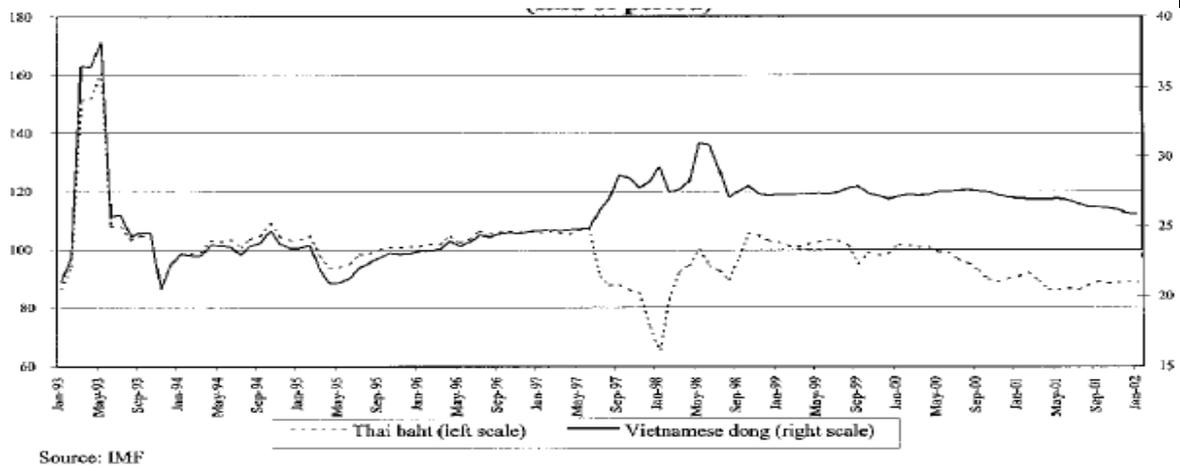
**Exchange rate of USD-KHR, 1993-2002**

<sup>77</sup> This term was used by Ize, A. and Yeyati, E., 2005, in his article, “Financial De-dollarization: It is for real?”, International Monetary Fund, Working Paper N. 187, to show the degree of dollarization in the banking system.

<sup>78</sup> The rate of anticipated depreciation (USD-KHR) of the Author (Kim) is the rate of real depreciation of the next period.

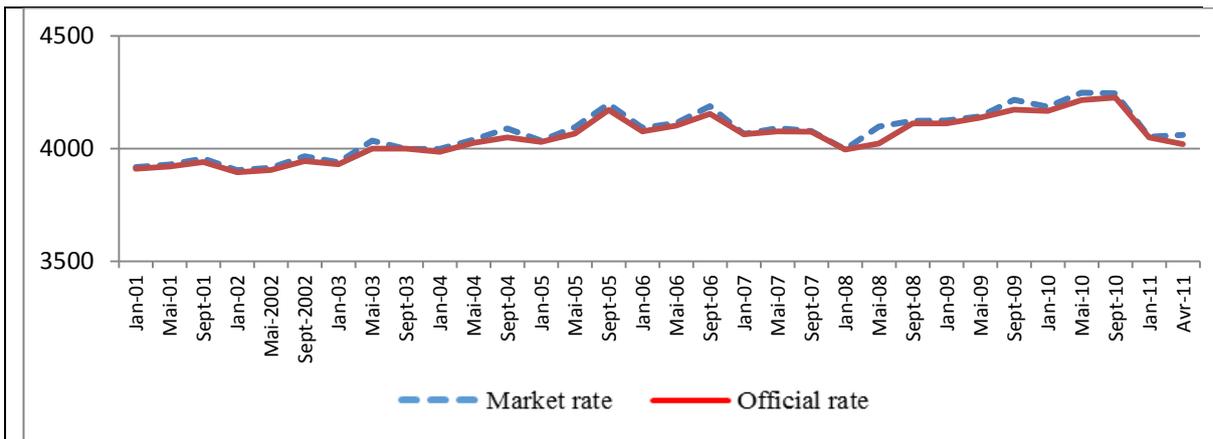


**Exchange Rates of THB-KHR and VND-KHR, 1993-2002**



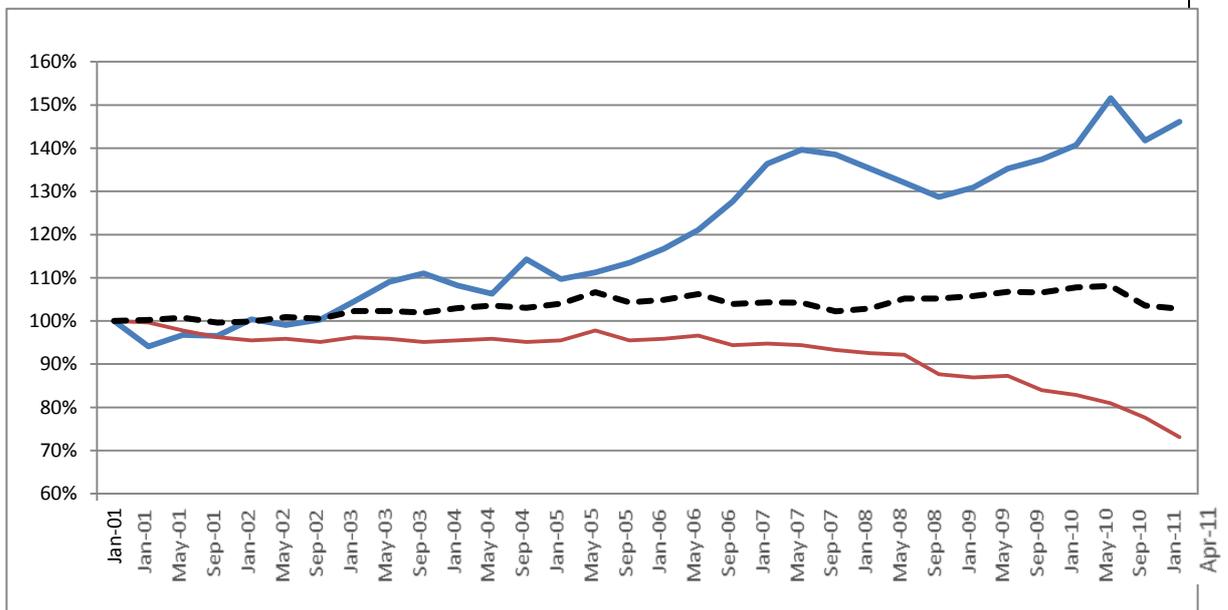
Source: Zamaróczy and Sa, 2002 Macroeconomic adjustment in highly dollarized economy: The case of Cambodia, pg. 27 and 28

**Exchange rate of USD-KHR, 2001-2011**



Source: National Bank of Cambodia

### Exchange rate of USD/KHR, THB/KHR, and VND/KHR 2001-2011



Source: National Bank of Cambodia

Since late 1990s, the NBC has adopted an administered a flexible exchange rate regime; the NBC intervenes on the exchange market when it sees that the fluctuation of the exchange rate may affect macroeconomic stability. The target exchange rate is not fixed and there is no set fluctuation band. But implicitly, the central bank has tried to maintain the exchange rate of USD-KHR by around 4000 per USD. The purpose of this is to stabilize the inflation rate since these two variables are highly correlated in the context of a small net importer and highly dollarized economy<sup>79</sup>. Therefore, the exchange rate was relatively stable during the 2000s and also the rate of inflation. It varied slightly by around 4000 KHR per USD, in a band less than 2.5 percent.

However, monetary plurality in Cambodia persisted and the use of the dollar followed a growing trend as demonstrated by several experts. Does stabilization policy favor the coexistence of the circulation of multiple currencies?

<sup>79</sup> Lee, Abdelati, Munoz, Nakamura, and Rendak (2004, pg. 43) found that the exchange rate closely affects inflation in Cambodia.

The persistence of dollarization in Cambodia, is actually what Ize and Yeyati (2005) describe as “*dollarization hysteresis*”. According to them, the “dollarization hysteresis” could result from efforts to stabilize the exchange rates. This stabilization policy would strengthen dollarization. Similarly, Kokenyne, Ley, and Veyrune (2010) also confirmed that “*maintaining trends in the exchange rate could reinforce dollarization by entrenching the expectation of a continuous appreciation or depreciation*”. To avoid the risks related to fluctuation in exchange rates, especially in the context where the central bank is not credible, the economic agents therefore prefer to hold dollars, even if the exchange rate remains stable.

Concerning the baht and the dong, the central bank does not have a policy of stabilizing the exchange rate of THB-KHR and that of VND-KHR, in 1999, both rates therefore varied. THB-KHR relationship tends to appreciate, while VND-KHR is stable since the late 1990s until 2008, before depreciating gradually from early 2009. These trends are explained by the appreciation of the baht against the dollar in 1999-2010 and the devaluation of the dong against the dollar since 2009. It seems that these variations have an impact on the usage behavior of these two currencies. According to our interviews with farmers in the Thai border areas, the appreciation of the baht encourages farmers and traders to use more riel to pay the transactions. For example, the traders who buy agricultural products for resale to Thai farmers try to pay for their purchases in riel instead of baht, which is the unit of account, to benefit from the exchange rate. At the same time, farmers also prefer to pay for their purchases in riel for transactions in small amounts. There seems to be in practice a fixed exchange rate that farmers can use to pay in riel for goods that are priced in baht. Regarding the use of the dong, the dong depreciation could lead to the decrease of its use; some farmers at the Vietnamese border prefer the payments in riel rather than in dong. Indeed, due to the proximity of the markets in the capital, some farmers and traders now have larger markets than those in Vietnam. Bargaining power with Vietnamese traders is strengthened there. According to the surveys on border trades carried out by the National Bank of Cambodia (2011), the riel and the dong are used simultaneously in the Khmer-Vietnamese border areas by farmers and traders of both countries.

## **Section II: Banking System**

### **2.1. Overview on the Evolution of the Banking System**

In the 1980s, Cambodia's banking system was characterized as a mono-bank system whereby the central bank not only assumed its traditional roles, but also commercial and development roles, which correspond to the socialist economic model. Reform of the economic system from a planned economy to a market economy separated the commercial function of the central bank in 1989 and opened the possibility for commercial banks to invest. But it took a few years for commercial banks to develop. The first bank that was established was a *joint venture* in 1991. Since then, the banking system is characterized by a two tiered system whereby the central bank no longer plays the role of commercial banks, but instead supervises those banks.

However due to low confidence, lack of knowledge of the banking system and the low income of the population, commercial banks have long served mainly to facilitate deposits and withdrawal operations of UNTAC and other international organizations. The opening of foreign currency accounts by residents was not prohibited as well. After the departure of UNTAC, banking operations were not very active; the profits of the banking system therefore remained marginal especially during the Asian Crisis of 1997-1998, and the political uncertainty of the country in 1997.

According to the report of Doi (2003), the central bank decided in 1998 to open dollar accounts for commercial banks to earn on their dollar deposits at the rate of seven eighths of SIBOR (*Singapore Interbank Overnight Rate*) to encourage banks to place the dollars in the country, in the context of absence of the interbank market and low confidence among banks. Prior to 1998, banks placed collected deposits abroad and there are banks that have made losses due to speculation on the markets of foreign financial products<sup>80</sup>. Meanwhile, this opening of accounts is a key to the privileged access of the dollar for the banking system in Cambodia. It facilitated for the banks that using the dollar in their operations in loans, deposits, and transfers. At the same time, since the end of 1998 foreign currency deposits (dollars) in the banking system began to increase, which also reflected the improvement of public confidence in the banking system (Rumbaugh, Ishi, Liang and Masuda, 2000).

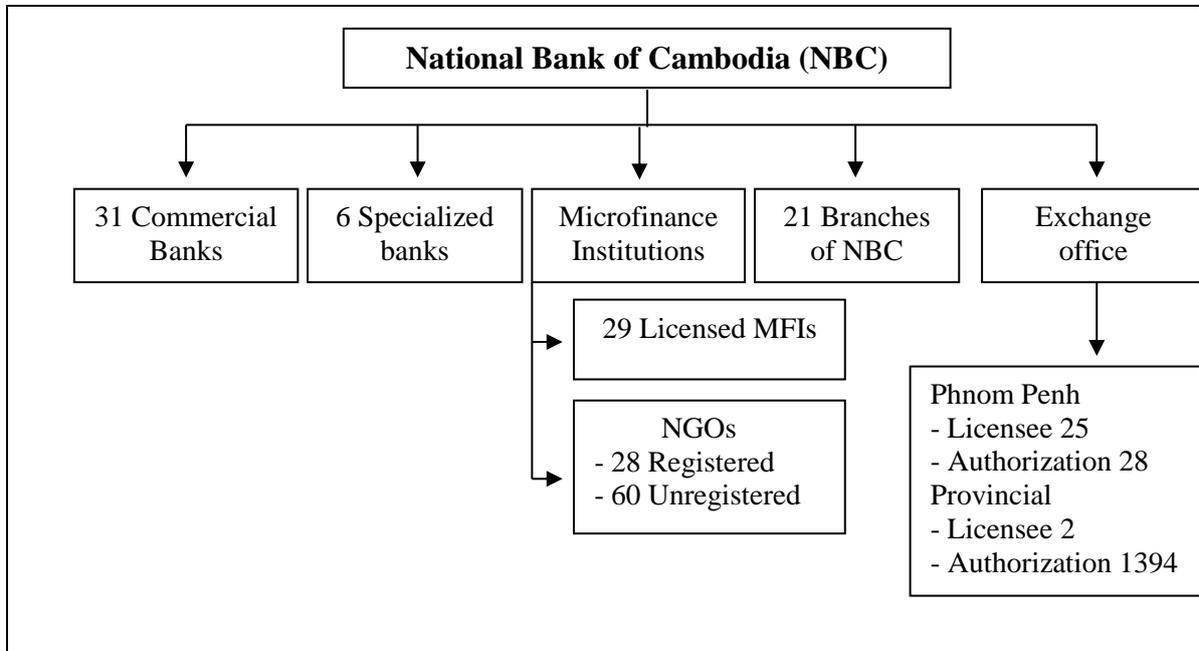
An important reform was also made between 1999 and 2002 and allowed the development and the restoration of confidence in the banking system. After establishing the law on the functioning of the central bank in 1996, a new law on banks and financial institutions was established in 1999. The latter provided a basic framework for banking operations and the functions of banking supervision of the NBC. Under this new law, all commercial banks had to renew their license from the NBC. The minimum capital was increased to 13 million dollars. At the end of 1999, the Cambodian banking system consisted of 31 banks, including two state banks, seven subsidiaries of foreign banks, and 22 private commercial banks. In April 2002, by the end of the license renewal process, the banking system accounted for only 14 commercial banks and 4 specialized banks (a specialized bank is a bank that can only exercise one of the three traditional operations of a commercial bank (make loans, receive deposits, and create the means of payments such as production of checks, credit cards, etc..). Some banks were liquidated, closed, redeemed etc.. In 2011, however, the banking system in Cambodia has 31 new commercial banks, including 9 subsidiaries of foreign banks, 6 specialized banks, 29 microfinance institutions (MFIs) and 21 branches of the National Bank of Cambodia. The reform marked a significant strengthening of the banking system to improve

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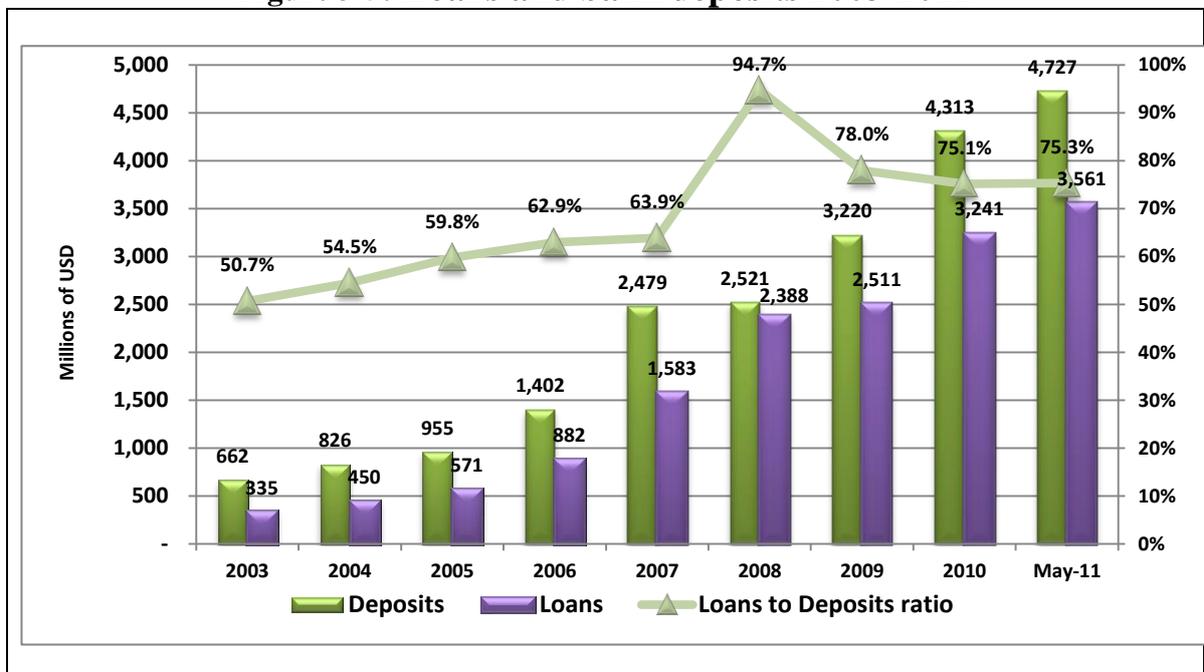
<sup>80</sup> Cambodia liberalized current accounts and capitals since the early 1990s. The capitals are free to enter and exit. Among the ASEAN countries, Cambodia was classified as the most liberal countries.

public confidence. Bank deposits increased sharply from less than one billion dollars before 2006 to nearly 5 billion dollars in 2011 (May). The loans also followed this trend. Nevertheless, they are generally less than 2/3 of the deposits, except in 2008, where they flared 95% of the total deposit, mainly due to higher borrowing of the real estate sector.

**Figure 3-4: Banking system in Cambodia (2011)**



**Figure 3-5: Loans and bank deposits 2003-2011**



Source: National Bank of Cambodia

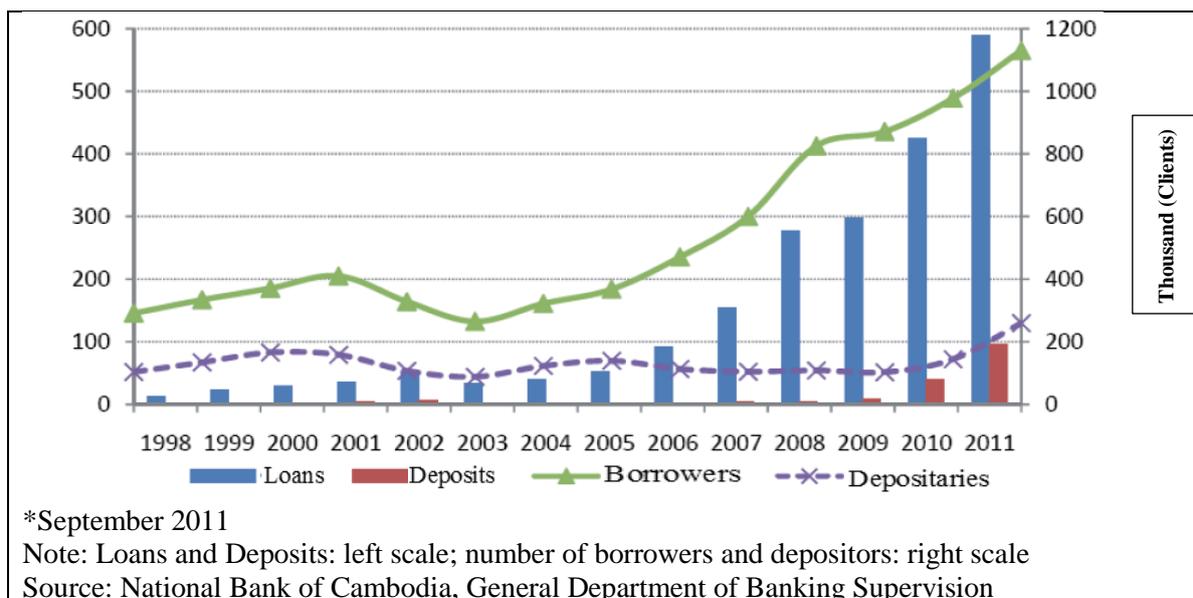
In addition, the microfinance sector could be considered as the “savior” of the national currency, the riel. The riel is present through being injected into the economy by the banking system and holders of the riel who can deposit their assets in riel. According to Flaming et al. (2005), this sector has experienced rapid expansion and has actively contributed to

improving the situation of the poor by providing loans. Emerged in the early 1990s, MFI activities are more social than commercial. They are supported by the Government and development partners in terms of technical assistance and funding. This sector was institutionalized in the second half of the 1990s to become a lucrative sector in 1999<sup>81</sup>. Microfinance institutions are moving more towards the pursuit of profit. During this period, ACLEDA (anon-governmental organization created in the early 1990s) started as a microfinance institution in 2000 and became a commercial bank in 2003. The expansion of the MFI sector is reflected by both the amount of credit and the number of agencies. In 1996, credit from the microfinance sector were only 4.1 million dollars (distributed to 82,000 clients), but they increased to 29 million dollars (37,000 clients) in 2000 and to 590 million dollars (1.1 million clients) in September 2011 (Figure 3-6). At the same time, the number of MFI agencies increased rapidly. Operational networks of MFIs meet at four levels: province, district, commune and village. In 1999, there were 347 at the district level, 1,490 at the commune level and 7,316 at the village level, while in 2011 they went to 1,642, 10,654 and 59,029, respectively. According to Kim (2010), MFI clients are generally the poor in rural areas who have no access to banking services and because the loans in this sector does not necessarily require borrowers to have real estate to be used as collateral. There are three methodologies for loans: individual loans, group solidarity loans and community loans. Individual loans are usually more expensive compared to the other two types of loans, requiring borrowers to have a guarantee in the form of collateral or guarantors. The second type of loan does not require collateral against loans, but requires borrowers to form a solidarity group. This group is responsible for repayment instead of one/several members who would not be able to repay the loan. Finally, the third type is a community loan in which the solidarity group must repay the loans of one/several other group members in case of default.

**Figure 3-6: Total loans and deposits of the microfinance sector and number of clients  
1998-2011\***

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<sup>81</sup> Seeing the importance of microfinance in rural economic development, the NBC issued a Prakas (regulation) on the establishment of a special license for microfinance institutions and registration of non-governmental organizations (NGOs) engaged in microfinance activities in 2000.



## 2.2. Currencies of Operations

Three currencies (dollar, riel and baht) are used in the operations of the banking system. According to statistics from the General Department of Banking Supervision at the NBC, dollar deposits and loans dominate banking transactions, followed by those in riel and baht. We conducted interviews with officials of commercial banks and MFIs in our field surveys to understand the importance of deposits and loans by currency in the provinces. Commercial banks have three main activities: loans, deposits and transfers. MFIs were officially authorized to receive deposits at the end of 2007<sup>82</sup> under the condition of obtaining a license receiving deposits from the National Bank of Cambodia. The amount of deposits with MFIs increased, but still remained low. Sources come from a portion of their capital and other areas (mainly loans from other national and international financial institutions). Their main activity is based on loans.

In general, bank loans are mainly in dollars, especially in urban areas. Bank loans in riel are marginal. In rural areas, where commercial banks are not very present, MFIs serve as the primary lender. Loans in riel are more prevalent in rural areas than urban due to the presence of the population (farmers in particular) whose income is denominated in riel. A commercial bank<sup>83</sup> that has a wide network is also actively involved in providing loans in riel in these areas. Moreover, in baht areas, some banks and most MFIs which are present there, have operations in dollars, riel as well as baht<sup>84</sup>. In some commercial banks, baht loans ranks second after the dollar. However, there is very little dong in the banking system, even in areas near the Vietnamese border.

Why is the banking system characterized by monetary plurality?

<sup>82</sup> Prakas N° B7-07-163, of NBC, dated 13 December 2007, on “Licensing of Microfinance Deposit Taking Institutions”. MFIs must apply for the license of NBC in order to receive deposits from the public.

<sup>83</sup> ACLEDA Bank is present in 22/24 provinces.

<sup>84</sup> We consider the baht areas are areas where the baht circulates. According to our surveys, we consider that the province Banteay Meanchey, Battambang, Koh Kong, Pailin, Sihanoukville, Poh Sat, Oudor Meanchey, Siem Reap are baht areas. This is also the definition of baht areas determined by the ACLEDA Bank (a commercial bank in Cambodia)

The use of the dollar, the baht and the riel in the banking system are explained by the factors of demand and supply.

• **Supply Side:** First, there is the availability of dollar deposits (in general) and baht (in border areas) that banks collect. According to data given to the NBC riel deposits in the banking system represents less than 5 percent of the total deposits even though the banks offer a higher rate of riel deposits than for the dollar and baht. Low riel deposits can be explained by the low income of riel holders<sup>85</sup> and also by the limited confidence in the riel. In addition, the riel is seen as a currency of circulation and not a currency of conservation of wealth. At the same time, accounts of bank deposits are minimally used for scriptural payments, but more of a reserve of money. Bank deposits are made more in dollars or even in baht more than in riel. Regarding the baht, the population, especially the traders and some companies in the “baht areas”, have a source of income in baht and have the possibility to deposit them with a commercial bank<sup>86</sup>. Interviews<sup>87</sup> with branches of ACLEDA Bank in these areas showed us they received baht deposits more or less important, regardless of the existing economic relationship between the province and Thailand. In Pailin, a branch of the ACLEDA Bank, received in baht 19 percent of its total deposits (or 0.61 million dollars)<sup>88</sup> against 65 percent in dollar and 16 percent in riel. In another ACLEDA branch in Poi Pet (District of Banteay Meanchey province), baht deposits represent 21 percent (equivalent to 2.1 million dollars), against dollar deposits 77 percent and riel deposits 2 percent. Moreover, in Koh Kong, baht deposits represent 26 percent (equivalent to 3.7 million dollars), against dollar deposits which were 74 percent and riel deposits 5 percent.

The microfinance sector meanwhile also uses several currencies as a funding source. There are three financing sources: own capitals, deposits and loans. Riel deposits of MFIs are very low. Between 1998 and 2009, the amount of deposits represents on average 5.9 percent of loans. The situation has since improved: 9.5 percent and 16.3 percent in 2010 and September 2011, respectively. Thus, MFIs rely on their own capitals which are generally in dollar, and especially loans from local and international financial institutions (Kim Vada, 2010). Among 29 microfinance institutions, 6 small MFIs are totally dependent on their own capitals, while 23 rely heavily on borrowings. Currently, there are about 80 institutions, including the NBC, which lend to MFIs. According to the reports of the NBC on the financing sources for MFIs, MFI borrowings are in three currencies: dollar, baht and riel. However, not all MFIs that have the financing sources in these three currencies, 19 small MFIs state they have only dollar financing sources, 5 MFIs (of which there are 3 large MFIs) have dollar and riel sources, and 5 large MFIs have dollar, baht, and riel sources. The lending institutions of riels to the microfinance sector, are less numerous. These include the NBC (maturity is 6 months), one commercial bank (Foreign Trade Bank-FTB) which is the bank of public enterprises (the Electricity of Cambodia, the Water Authority) whose entire income are in riel, and some international NGOs (Triodos Investment, Oxfam, Novib etc.). Local commercial banks and financial institutions and other international NGOs mostly lend in dollars<sup>89</sup>. Baht lenders are relatively few. In total, the majority of financing sources are thus in dollars. This represents

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<sup>85</sup> We will talk about this in Chapter 5

<sup>86</sup> One or two banks actually receive baht deposits, due to their location in the Thai border provinces, of which ACLEDA Bank plays the most active role.

<sup>87</sup> See interviews conducted with bank managers during our surveys on the currency circulation in Cambodia.

<sup>88</sup> Interview conducted on 13 September 2010. The amount of deposits that was shown is that as of 13 September 2010.

<sup>89</sup> According to the report of IMF (2003, Country Paper N03/59), a specialized bank of the State (Rural Development Bank: RDB) was created in 1998 to coordinate loans obtained from donors and then distribute to MFI. Unfortunately, loans of RDB are only in dollar and the total amount of loans of RDB is low.

83 percent of total financing sources by loan borrowings, followed by those in riel (15.2 percent) and baht (1.7 percent). Among the “top 8” of the microfinance sector, with 91 percent of market share in terms of loans, there are six MFIs that have a financing source in dollar, baht, and riel, while the other two only have it in dollar and riel. The dollar contributions vary from 60 percent to 95 percent of the total. Those in riel represent 5 to 37 percent of the total, followed by those in baht (0.7 to 7.2 percent). With these financing sources in different currencies and the ability to lend them, MFIs have extended credit, not only in riel and dollar, but also in baht in the provinces where baht circulates.

**Table 3-1: Financing source by currency of the top 8 MFIs: May through November 2011**

	<b>Microfinance</b>	<b>USD</b>	<b>KHR</b>	<b>THB</b>	<b>Total</b>
1	Prasac	90.3%	7.4%	2.3%	100%
2	Amret	63.2%	36.8%	0%	100%
3	Sathapana	94.9%	5.1%	0%	100%
4	HKL	84.2%	9.3%	6.5%	100%
5	AMK	82.5%	16.3%	1.2%	100%
6	Kredit	87.8%	12.2%	0%	100%
7	Vision Fund	80.1%	19.1%	0.7%	100%
8	TPC	59.6%	33.2%	7.2%	100%
<b>Microfinance Sector</b>		<b>83.1%</b>	<b>15.2%</b>	<b>1.7%</b>	<b>100%</b>

\* Estimated by the author using the average of loans by currency of the eight MFIs

Source: National Bank of Cambodia

**Table 3-2: List of lenders to MFI**

<b>Money</b>	<b>Lenders (in parenthesis is mentioned the loan duration)</b>
Riel	NBC (6 months), Foreign Trade Bank (4-12 months), Development World Market (3 years), Moringaway (1-2 years), Triodos Investment (2-4 years), Oxfam Novib (2 years), EdM-Provictimis (28 months), EdM-Baby Fund (28 months), Grameen / CAF (24-35 months), Whole Planet Foundation (17 months), Incofin (2-3 years), Oikocredit (3-5 years), Norfund (2 years)
Dollar	ACLEDA (24 months), NOVIB Fund (3-4 years), Symbiotics (24 months), Calvert (2-3 years), Maruhan Japan Bank (3-5 years), Rural Development Bank (1-4 year), Hwang DBS (3 years), LMDF (4 years), AECID (10-12 years), Kiva, Deutsche Bank-Guarantee Loan (5 years), Clann credo (3 years), ST-Concern Worldwide (3 months), MCE (3 years) , VDK (2 years), Oiko credit (3-5 years), Planet Finance (12-24 months) Symbiotics (1-2 years), ICO (12 years), Alterfin (3 years), Triple Jump (2 years) , Triple Jump B.V. (4 years)
Baht	Grameen Credit Agricole (35 months), Blue Orchard (2 years), Incofin (2 years), DWM (2-3 years), Symbiotics (1-2 years), Planet Finance (12-24 months)

• **Demand side:** As transactions of large amounts, such as sales and purchase of real estate, of goods of investment and services are settled in dollars, the demand for dollar loans is generally predominant, including in border areas. In urban areas, other than border areas with Thailand, more than 95 percent of bank loans are in dollar, the riel loans are very limited

(Davies et al., 2007). Applicants for dollars come from all categories of economic agents with the possibility of borrowing money from the banks<sup>90</sup>: investors, traders, individuals etc.

In the border areas with Thailand, the need for loans in dollars is also important, but there are also bank baht loans. A branch of the ACLEDA Bank in Battambang (interview, 2010), had 91 percent of its loans in dollar, 6.5 percent in riel and 2.5 percent in baht. In Pailin, with important trade link with Thailand, baht loans are high. They represent 45% of total loans, while loans in dollar and riel are 52 percent and 3 percent, respectively. The riel borrowings are generally made by farmers and small traders. Traders are the most important applicants for baht loans. Farmers also borrow in baht to buy agricultural materials or food for animals that are imported from Thailand. Trade with Thailand is essential for border provinces. According to a study of Manarungsan (2010) on the commercial relations of Thailand with the CLMV countries (Cambodia, Laos, Myanmar and Vietnam), border trade between Thailand and Cambodia are from 71.6 percent to 79.5 percent of total trade between 2005-2008. The dominant weight of trade with Thailand explains the demand for baht from banks and MFIs. According to the table below, the microfinance sector provides 63.3 percent of its loans in dollar, 33.6 percent in riel and 2.8 percent in baht, knowing that baht credits are not made only within a few provinces near the Thai border. The proportion of riel credits of the microfinance sector therefore exceeds that observed for banks, which represents less than 5 percent. Among the top 8 MFIs, 6 grant baht credits, representing 0.6 to 8.2 percent of total credits. The dollar credit remain very dominant for most, from 54.8 to 88.5 percent, but relatively low for others, 3.6 percent to 44.3 percent. The riel credits have become more important than those in baht, but remain generally weak against the dollar, except in the case of an MFI that issued credits up to 91.2 percent in riel, and two other MFIs with riel credits passing more than half of their total credits. Moreover, according to our interviews, baht loans of MFI are only given at border areas with Thailand. MFI at Poi Pet (district of the province Banteay Meanchey) provides 91 percent of its loans in baht and only 8.05 and 0.73 percent in dollar and riel, respectively.

**Table 3-3: Loans by currency of the top 8 of the microfinance sector: May to November 2011**

	<b>Microfinance</b>	<b>USD</b>	<b>KHR</b>	<b>THB</b>	<b>Total</b>
1	<b>Prasac</b>	73.1%	24.7%	2.2%	100%
2	<b>Amret</b>	44.3%	55.7%	0	100%

<sup>90</sup> Most small and medium enterprises (SMEs) and the poor have limited access to bank loans. To be able to borrow, the borrowers must have a land title or an equivalent certificate to enable the bank to have a guarantee against the loan.

3	<b>Sathapana</b>	88.5%	11.5%	0	100%
4	<b>HKL</b>	84.6%	10.1%	5.3%	100%
5	<b>AMK</b>	3.6%	91.2%	5.2%	100%
6	<b>Kredit</b>	75.1%	24.9%	0	100%
7	<b>Vision Fund</b>	54.8%	44.5%	0.6%	100%
8	<b>TPC</b>	34.2%	57.6%	8.2%	100%
<b>Microfinance Sector *</b>		63.6%	33.6%	2.8%	100%

\* Estimated by the author using the average of loans by currency of the eight MFIs

Source: National Bank of Cambodia

Moreover, demand for dollar loans is largely motivated by the differentiation of interest rates. The interest rate of riel is much higher than that of dollar. According to Dabadie (2006), there is a premium risk on the interest rate of riel. The risk is particularly due to the depreciation of the exchange rate, inflation, and also political uncertainty. The loan interest rate in dollars is on average 17 percent per year between 2002 and 2011, compared to 21 percent for those in riel during the same period. That encourages borrowers, including borrowers whose incomes are in other currencies, to borrow in dollars. Similarly, the interest rates of baht are also lower than that of riel, which is also a factor that creates the demand for baht loans.

**Table 3-4: Monthly interest rate of loans of microfinance sector**

<b>Currency</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Riel	3.38%	3.36%	3.23%	3.20%	2.99%
USD	2.71%	2.62%	2.34%	2.43%	2.26%
Others	3.16%	3.13%	3.13%	3.13%	3.07%

Source: Kim, 2010, Cambodia Microfinance: Development and Challenges

Note: Others represent THB

The possibility of obtaining banking services in dollar, riel, and baht provided by the banking system enables and facilitates the use and mobility of these three currencies in the economy.

**Table 3-5: Interview with Mr. Sok Chanrithy, Branch Director of ACLEDA Bank, Battambang province, September 10, 2010**

There are three main activities of the branch of ACLEDA Bank in Battambang province: loans, deposits and transfers. These three operations involve three currencies: dollar, riel, and baht.
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**Credit Activity:** In general, dollar loans represent around 70-75 percent, those in riel 20-25 percent and those in baht 5-10 percent. Up to September 10, 2010, the branch recorded the following amount of credits:

- Dollar: 15.8 million dollars: most clients are traders, especially large construction companies, and MFIs.
- Riel: 4,439 million riel (equivalent to 1.1 million dollars): most clients are the small traders.
- Baht: 1.1 million baht (equivalent to 0.35 million dollars): most of clients are the farmers.

**Deposit activity:** Deposits are also made in baht, but dollar deposits are dominant.

- Dollar deposits are generally made by NGOs, employees of NGOs, traders and also officials.
- Baht deposits are generally made by traders and people with relatives working in Thailand.
- Riel deposits are generally made by MFIs.

**Transfer activity:** Transfer operations vary depending on the season. The harvest season of agricultural products is the peak season. The total monthly transfer is about 5-6 million dollars. The amount of transfers from this branch to other provinces and transfers from other provinces to this branch are approximately equal.

Transfers from other provinces to this branch:

- Dollar: 4.37 million dollar: The destination is all provinces, but especially Phnom Penh.
- Baht: 11.85 million bahts (0.38 million dollars): come from baht areas.
- Riel: 7,557 million riels (1.84 million dollars): the destination is all provinces

Transfers from this branch to other provinces:

- Dollar: 3.8 million dollars: The destination is to all provinces and abroad, but especially Phnom Penh.
- Baht: 11.81 million bahts: The destination is the baht areas, Phnom Penh, and Thailand.
- Riel: 7 billion riels: The destination is all provinces.

**Table 3-6: Interview with Mr. Hem Vantha, Branch Director of ACLEDA bank- Pailin province, September 13, 2010**

As in the case of its branch in Battambang, the branch of ACLEDA in Pailin has operations on three currencies: dollar, baht and riel.

**Credit Activity:** Up to 13 September 2010, the branch recorded the amount of loans by currency as follows:

- Dollar: 2.5 million dollars (52% of total credits): Most clients are traders.
- Riel: 763.5 million riels (equivalent to 0.18 million dollars, or 3% of total credits): Most clients are farmers.
- Baht: 77 million bahts (equivalent to 2.5 million dollars, or 45% of total credits): Most clients are farmers (plantation of corn, soybeans, and peanuts).

**Deposit activity:** Deposits are also made in baht, but dollar deposits are dominant. Baht deposits and riel deposits are negligible.

- Dollar: 2 million dollars. The depositors are generally traders and employees of NGO.
- Riel: 2,120 million riels. The depositors are generally officials, NGOs and informal agents operating money transfers.
- Baht: 19 million bahts: The depositors are generally the traders, farmers and informal agents operating money transfers.

**Transfer activity:** This branch performs the money transfers in three currencies: Dollar, baht, and riel. But this activity is still marginal.

**Table 3-7: Interviews with banks and MFIs in Svay Rieng province on the use of currencies in their operations**

1. Interview with Mr. Eng Chandara, Branch Director of ACLEDA Bank in Bavet (near the Vietnamese border), Svay Rieng, September 2, 2010

Even if the dong is used in everyday life in Bavet, dong operations at this branch are negligible. Two currencies are mainly used in its operations: the dollar and the riel.

- Credits: 90 percent of credits are in dollars and 10 percent are in riel.
- Deposits: Approximately 95 percent are in dollars. Riel deposits represent 4 percent and less than 2 percent for the dong deposits.
- Transfers: The dollar plays a dominant role in the transfers, while the riel and dong are marginal

2. Interview with the Head of Service of Prasac (Microfinance Institution) in Bavet, Svay Rieng, September 3, 2010

This institution has no dong operations. 40 percent of credit is in dollars, while 60 percent are in riel. The dollar is used in the milieu of traders. The riel is essentially paid to farmers. There are four categories of clients: retailers (60 percent) and farmers (25 percent), crafts (2-3 percent) and individuals (12-15 percent).

### 2.3. Level of Development

As noted previously, the Cambodian financial system is in the early stages of development. It is rebuilt rather than transformed (Olaf Unterberdoerster, 2004, Menon 2008). Although the banking sector is developing very rapidly during the last decade, banks' activities are based only on the more traditional activities (loans, deposits and transfers of money). The

Cambodian banking system is further characterized by a high level of geographical and sector concentration and excess liquidity. In addition, loans are generally secured by real estate. Finally, there is no monetary market or interbank, which helps to mobilize the riel.

• **Geographical Concentration**

The banks focus mainly on the capital and in three urban provinces: Siem Reap, Sihanoukville and Battambang (EIC, 2005, NBC, 2010). Banking services in rural areas remain underdeveloped, although 80% of the population live there (Hang, 2010). According to the quarterly report of the NBC (2<sup>nd</sup> quarter, 2011), only 4 commercial and specialized banks of 37 (ACLEDA Bank, Cambodian Public Bank, Canadia Bank and ANZ Bank) have provincial branches beyond the three economic provinces above.

**Table 3-8: Number of branches of commercial banks in Phnom Penh, Siem Reap, Sihanoukville and other areas (rural), 2011**

Commercial Bank	Branches in Phnom Penh, Siem Reap and Sihanoukville	Branches in other provinces	Total
ACLEDA Bank	11	25	36
Cambodian Public Bank	12	8	20
Canadia Bank	12	16	28
ANZ Bank	11	6	17

Source: Report of 2<sup>nd</sup> quarter 2011 of NBC

31 other banks have less than 5 provincial branches, and 13 of them have no branches. In addition, in 2004, only eight out of eighteen commercial and specialized banks, or 45 percent of the total offered the opportunity for riel deposit and five out of eighteen, or 27 percent, provided riel loans (Beresford et al., 2004). The situation has somewhat improved with regards to the number of banks with riel operations, but in relative terms, it deteriorated. In June 2011, there were thirteen out of thirty five banks, or 37 percent, who were willing to receive riel deposits and six out thirty-five banks, or 17 percent, which granted riel loans. This limits the ability of the banking system to offer its banking services in riel in areas where the riel is most present.

• **Sector and Client Concentration**

In addition, each bank tends to concentrate its loans on specific sectors and reserved for clients with a possibility of collateral to guarantee their loans (Davies, 2007, Hang, 2010). Sectors covered by bank loans are therefore highly dollarized. Over 50 percent of credit in the banking sector is granted to service sectors (tourism and hospitality) and trade. The agricultural sector benefits less than 5 percent of bank loans. The banks have more risks than the sectors to which they lend and depend on outside (tourism, hotel, and trade) are in crisis. At the same time, bank loans are concentrated on a small number of clients. Almost half of total credit to individual clients exceeded 10% of own capital (*lendingbank's net worth*) in 2006. According to EIC (2005), three factors limit bank loans to clients: i. low assessment capacity of the commercial banks ii. information of the borrowers is not available, and if this is the case, it is in some cases unreliable and iii. lack of financial contract enforceability. In addition, approximately 90 percent of loans are secured against the real estate and the amount of loans

is equal to less than 50 percent of the market value of the real estate used as collateral (Davies, 2007). It is also worth noting that in 2005, less than 10 percent of real estate has been certified with a land title issued by the Government (Peter Baily, 2007). Because of these constraints, commercial banks are highly dollarized, the loan amounts are generally large and are in U.S. dollars.

• **Limit of Riel Financing Sources for Microfinance Institutions**

Taking advantage of this situation MFIs extend their network to serve rural areas where the riel circulates well in the monetary field. Yet they face another constraint, the limited riel financing sources enabling them to offer credit. According to statistics from the General Department of Banking Supervision at the NBC, the riel financing source is usually insufficient and in addition it is usually in the form of short-term loans (6 months for loans from the NBC, longer or equal to one year for the FTB bank). It is relatively rare that MFIs can resort to loans with maturities between 1 and 5 years with acceptable interest rates. According to the table below, the microfinance sector has granted riel credits in the amount 2 times of that of its riel sources. Among the eight major MFIs, we observe that the ratio of riel loans/riel financing source ranges from 133 percent to 431 percent (table below). This shows that MFIs must pass a dollar financing source to the riel loans. The exchange can be done in two ways: firstly by the exchange market, on the other hand by a SWAP operation with some commercial banks, especially Foreign Trade Bank (FTB) and ANZ Royal. MFIs face double the risk of changes in the first case, because they must first exchange dollars into riel to provide credit, then riel to dollars to repay their loans. To avoid these losses, they usually make a SWAP operation to obtain the riel. This increases the cost of credit for the microfinance sector. Furthermore, there is currently few institutions that can provide the riel to MFIs. There are only one or two banks that do so. We also observe that MFIs that offer baht credit tend to use their financing sources in baht. There are two or three small MFIs that have no baht source and grant baht loans (Seilanithih, and CBIBD and IPR). This conversion is usually done on the exchange market or with the bank (ACLEDA Bank Plc.)<sup>91</sup>.

The lack of riel sources also causes MFIs to require borrowers to borrow in dollars or baht to avoid exchange risks. Dollar credits represent 70% of the financing sources (by borrowings) in dollar and those in baht 149%. At the same time, according to our interviews with managers of MFIs, when the loan amount of the borrower is high, they are encouraged to borrow in dollars. An MFI in Bavet (district of Svay Rieng Province) revealed that its riel loans vary between 50,000 KHR to 10 million KHR (equivalent to 10.25 to 2,500 USD). In Banteay Meanchey, the amount of riel loans is from 50,000 to 40 million riel (equivalent to 10.25 to 10,000 USD). Beyond these limits, borrowers are discouraged to borrow in dollars.

**Table 3-9: Ratio of loans / financing source \* by currency: May through November 2011**

	<b>MFIs</b>	<b>USD</b>	<b>KHR</b>	<b>THB</b>
1	<b>Prasac</b>	103%	421%	120%
2	<b>Amret</b>	106%	229%	0
3	<b>Sathapana</b>	126%	305%	0
4	<b>HKL</b>	123%	134%	99%

<sup>91</sup> According to our interviews with MFIs, money changers and banks, MFIs go to money changers or banks when they need baht.

5	<b>AMK</b>	1%	133%	105%
6	<b>Kredit</b>	83%	198%	0
7	<b>Vision Fund</b>	61%	206%	76%
8	<b>TPC</b>	51%	153%	101%
<b>Microfinance Sector</b>		70%	203%	149%

\* The financing source by borrowing from banks and local and international financial institutions, the NBC estimated that three-quarters of the capital of the microfinance sector come from abroad especially in the form of foreign aid and private borrowings.

\* Estimated by the author using the average of loans by currency of the eight MFIs

Source: National Bank of Cambodia

### • The Absence of Banking and Money Market

Finally, another underdevelopment of the banking system promotes monetary plurality. There is low confidence between banks. Confidence is a key factor in the development of an interbank market that does not yet exist in Cambodia. This market allows banks to exchange among them the financial assets in national currency (borrowing and lending) for short term, and the central bank to intervene to provide or resume liquidity. A large Cambodian bank (Foreign Trade Bank: FTB), which is a major collector of riel deposits, cannot give riel credit because of weak demand, while other banks that are interested in providing riel credits do not have the riel source. This phenomenon grows the increasing dollarization of the banking system (Dabadie, 2007).

According to a study by *Nomura Research Institute* (NRI) (2011) for a project of ASEAN on the development of monetary and interbank market in the countries of ASEAN+3 (China, South Korea and Japan) and the development of bond markets in Cambodia<sup>92</sup>, a formal interbank market does not exist in Cambodia. However, the study found that there is an informal interbank market. This market, however, is very narrow because banks only perform interbank transactions (borrowing and lending) with a small number of banks deemed credible and having a good relationship. Interviews with commercial banks show they carry out transactions with 3-5 among 35 banks and the dollar is the dominant currency in these transactions. One interview with an MFI revealed that its financing source comes from commercial banks and the National Bank of Cambodia. One in three banks finds it difficult to place the riel on the informal interbank market. In addition, one bank reports that its riel deposits are very low and it borrows from the central Bank when its clients need.

These interviews also highlighted the lack of a monetary market in Cambodia, which makes available riel debt instruments in order to enhance riel savings and provide a supply source to banks and MFIs in need for riel for their activities. According to the interviews there is a demand of the bill of the NBC. A bank expresses its strong demand for bills of the NBC and of Government in riel, while the other two banks and one MFI preferred bills not only in riel but also in dollar.

**Table 3-10: Interview between NRI and banks and MFIs in Cambodia, 2011**

<b>Interviewee</b>	<b>Interbank transaction</b>	<b>Needs for National Bank of Cambodia securities</b>
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<sup>92</sup> The mission reports (1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup>) of Nomura Research Institute in the project “The ASEAN Secretariat’s Technical Assistance” for “Developing Bond Market in Cambodia”, 2011

Commercial bank A	Have transactions with 3-5 banks which are familiar (credible) to us. <u>Place USD deposit to other banks.</u> <u>Difficult to place riel funds in the market.</u>	Would like to buy NBC bills. <u>Hope to have both USD and riel denominated bills.</u> Challenges might be to look for active participants. Would like to have a broker function.
Commercial bank B	Most banks place idle funds at NBC so far, <u>but need to activate borrowing and lending.</u> In presence, rely on relationship to assess credit risk, and not have knowhow to access each other. We transact about 3 banks, for demand/saving deposits. <u>Need to promote participating players.</u>	<u>We need NBC bills up to 1 year maturity for funding retail demands in end of March.</u> <u>Exchange from USD to KHR requires advance application, otherwise it takes too much time for NBC to approve</u>
Commercial bank C	<u>Borrows KHR from NBC when customers demand KHR. Usually liquidate KHR deposits to meet the customer demands.</u> <u>Place short term deposit (USD).</u>	<u>Strong demands for KHR bills.</u> Demand using NBC bills as collateral. We also demand government bond markets as well.
Deposit-taking Microfinance Institution	Borrow from 3 banks and from NBC for <u>up to 6 months term. Borrow from FTB for 1 year</u>	Welcome development of money markets. <u>We demand both KHR and USD bills, with preference for short term.</u>

Source: Nomura Research Institute, 2011

## 2.4. Very Active Informal Exchange Market

The exchange market in Cambodia is very informal. The law on exchange was adopted in 1997 by the National Assembly to organize this market, but until now the actors in these markets are not supervised by the authorities, the National Bank of Cambodia. This market is dominated by money changers. Until now, there are 27 money changers who are licensed to perform exchange transactions and 1422 that obtained the certificate of authorization from the NBC. The difference between the license and authorization is based on the cost of obtaining, and on the fact that the licensed changers can open a bank account with the NBC. There are also thousands of money changers who are not registered. Among them, there are also very large changers that can influence exchange markets<sup>93</sup>. They are therefore completely outside the scope of knowledge of the supervisory authority. In addition, there are thousands of traders who also perform exchange operations. This commercial sub-activity brings them profits, and gives them the currency used to pay their suppliers. Exchange markets are very informal, ubiquitous and greatly facilitate exchange transactions for holders of domestic currency and foreign currencies in particular. They encourage people to hold multiple currencies to pay for their purchases by currency of price set or to avoid exchange loss. Thus, in Phnom Penh, the dollar and riel are currencies that Phnom Penh people hold simultaneously in pocket. At border areas with Thailand, it will be the baht, the dollar, and the riel. Near Vietnam, it will be the dollar, riel and dong. According to the IMF report (Rumbaugh, Ishi, Liang and Masuda, 2000, pg 32), the use of various foreign currencies in Cambodia is facilitated by the existence of very active exchange markets and the money changers account for three-quarters of total exchange transactions.

<sup>93</sup> The observation from surveys on the foreign exchange market by NBC, June, 2011.

Money changers play a role not only as facilitators of use of various foreign currencies but they also circulate currencies within the country with their money transfer services. It is very likely that money transfer transactions are mainly carried out by the money changers. Indeed, the transaction costs of money transfers (time and price differences) are lower among money changers than banks<sup>94</sup>. Transferred currencies are the dollar and riel in general and the baht in areas near the Thai border. The IMF report (Matt Davies, 2007) noted that “*Money changers appear to play an important role in the financial sector, primarily in foreign exchange trading but also acting as intermediaries for private sector tax payments and for transferring money within the country.*” Another essential role of the money changers as noted by the report is the payment of taxes on behalf of the private sector. The money changers have a direct link with public employees who are responsible for collecting the tax payment<sup>95</sup>. With this service, the private sector, however, is not encouraged to have revenue in national currency for its fiscal operations. It can pay their taxes in dollars to money changers at market exchange rates.

Shinichi (2007) examined the factors triggering high dollarization in the three countries of Indochina (Cambodia, Laos and Vietnam) and found that one of the essential elements that promotes this is the existence of efficient informal exchange markets which are not under the control of the government. Indeed these markets have originated from the desire of individuals and traders to avoid paying taxes and various regulations of the government.

In total, the omnipresence of the money changers whether large, medium or small, micro or even simple traders, strongly facilitates the use of foreign currencies and the circulation of the latter in an economic system dominated by large informal activities. It reduces transaction costs related to the use of foreign currencies.

## **Section III: Economic Environment**

### **3.1. Fixation of the Price of Goods and Services**

As noted by several experts, the fixation of prices in Cambodia is mainly done in dollar and riel depending on the value and type (*tradable or non-tradable*) of goods and services, and geographical areas:

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<sup>94</sup> According to surveys of the money changers by Khou, 2010, most money changers perform transfer operations. The clients do not have to provide documents or wait for long time to be served and are not required to complete any documents. Simple information like phone number of the recipient is already full. The recipient could obtain immediately after sending. The cost of money transfer is much lower than that of the banks. We will talk about this in more detail in Chapter 4.

<sup>95</sup> Currently, the National Bank of Cambodia, the Treasury Department of the Ministry of Economy and Finance and also some commercial banks designated by the Government, are in charge of collecting taxes. In the future, the Government will delegate the task of collecting taxes to commercial banks.

*Prices for goods and services are routinely quoted in U.S. dollars, and most transactions in the main cities are settled in dollars. The riel is used for small cash transactions only ... (Rumbaugh, Ishi, Liang and Masuda, 2000, p.31).*

*Most prices, except for some prices of non-tradable goods and services in rural areas are denominated in U.S. dollars ... (Lee, 2004).*

*Cambodia has two parallel worlds: i- the urban economy that is mostly dollar based ... ii- the rural economy that is largely agricultural and riel based. (Duma, 2011, p.6)*

However, these observations do not cover the use of the baht in the fixation of prices of goods sold on Cambodian land. In reality, the baht is also frequently used as the unit of account of goods in the border provinces with Thailand especially Battambang, Banteay Meanchey, and Koh Kong. There are three currencies - dollar, baht, and riel that are used to define the prices of goods and services. In addition, the dong is also partly used to determine the price in Vietnamese border areas, especially in commercial areas of both countries.

It seems that there are three main reasons leading to the diversity of the unit of account<sup>96</sup>, the need for a unit of account complies with means of payment of the transactions, avoiding of risk of depreciation of the national currency and the value of goods and services. Firstly as most goods are imported (domestic equipment, durable goods, petroleum, means of transportation etc.), to facilitate the calculation and avoid exchange losses, the companies / traders need currencies that they use to import, so usually it is dollars and baht in “baht areas”. In addition, foreign companies also prefer to use the dollar in their transactions. They can use the dollar they bring and expatriate their profits or withdraw their capital when they want to stop their activities in Cambodia. Moreover, the value of goods is also another factor which causes the use of several units of account. For goods whose value is significant (more than 5 dollars in general), the dollar is generally used. This is because the 1 dollar bill is relatively rare; NBC tries to withdraw it from circulation when it comes to the NBC and in these networks by the deposits of its clients or by sales of dollars by money changers. For smaller transactions (less than 5 dollars), prices are set in riel. In the “baht areas”, prices of products imported from Thailand (household goods, clothing, agricultural equipment, animal food etc.) and also goods mainly destined for the Thai market (agricultural products especially rice, corn) are fixed in baht.

The diversity of the unit of account was then led to the monetary plurality of payment, in particular to avoid the foreign exchange loss by buyers which may be high for the amount of significant transactions. We observe here the dependence between the functions of the unit of account and the functions of payment of money. The use of money as a unit of account results in the use of this currency as a means for payment and vice versa. The two processes are mutually reinforcing. The existence of different units of account and the tolerance of the

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<sup>96</sup> The use of currency of unit of account is quite complex in Cambodia. We distinguish here two business areas: wholesale traders vs. retailers and traders vs. end consumers (we will talk about this in Chapter 4). We are only interested in this sub-section in the use of currencies of unit of account between traders and end consumers.

authority in this matter<sup>97</sup> may create a favorable environment for monetary plurality. With the general observation, we see that:

-All major transactions on real estate, durable goods, construction contracts, household appliances goods, electronic products etc. are quoted in dollars, both in urban, rural and border areas.

- Telephone services: This market exclusively uses the dollar. The price usually ranges from 5 to 100 dollars. This market has grown very rapidly over the past decade. According to UN data, only 0.045 percent of the population subscribed to a mobile phone service in 1993. This rate increased to 1.04 percent, 7.9 percent and then 57.6 percent in 2000, 2005 and 2010, respectively. Following the development of the industry of manufacturing the mobile phone, the price thereof has dropped dramatically. The price of mobile phones fell by more than a thousand dollars in the early 1990s to less than 100 dollars in the 2000s. This, combined with the reduction in price of telephone service in an increasingly competitive market, increased the number of consumers.

-Supermarket/stores/shops: Developed in the 1990s largely due to the entry of foreign expatriates. These modern stores display their prices in dollars. The exchange rate is displayed at the checkout, but it is adverse to the holders of riel because the rate is neither the market nor official, but determined by supermarkets/stores/shops themselves. It therefore discourages the use of riel in these trades. With this display, the dollar is the currency used mainly in these markets.

-Traditional Markets: The industrial sector in Cambodia is dominated by the garment sector. This industry employs about 85-90 percent of employees in the industrial sector. Cambodia is an exporter of garments, but a good share of textile products sold in Cambodia are imported because the production of the garment sector is largely destined for external markets (USA and Europe). Other industrial products such as cosmetics, household appliances, and electronics are imported. Prices of imported products sold in traditional markets other than food, are fixed in dollars in the urban areas. In areas near the Thai border, the prices of imported products are in baht. In contrast, products purchased on the domestic market mainly in Phnom Penh, are displayed in dollars. The riel is widely used for the settlement of purchases of handicrafts made in Cambodia and also purchases of products whose prices are small, usually less than 5 dollars.

-Agriculture Market: The market for agricultural equipment, fertilizers, and food for animals is an important sector for about 80 percent of the population who lives on agriculture.

Based on our observation<sup>98</sup>, the fixation of prices of these materials and products are made in dollars in the capital and in the provinces far from the Thai border. In the areas near Thailand, however, most agricultural materials, fertilizers, and animal food are imported from Thailand, and are sold in baht. When purchased in the capital, their prices are in dollars. The dong is also used to fix the price of fertilizers and animal foods imported from Vietnam in the border

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<sup>97</sup> In 2000, the Cambodian Ministry of Commerce issued a circular on the use of the national currency for all fixation of prices in Cambodia. However this circular is not effective. The fixation of prices in foreign currency remains as it was.

<sup>98</sup> In investigations on currency circulation, August-October 2010, by Khou.

areas between the two countries, but it is not unique. The riel and the dollar are also used to set the price.

-Markets for agricultural products: It seems that domestic markets for agricultural products, especially rice, are divided into two main areas: near the border with Thailand and rural areas far from those borders. In the first areas that have the greatest agricultural potential of the countries (Battambang, Banteay Meanchey, and Pailin), prices of agricultural products are in baht, whereas in the latter areas, they are in riel. The main reason that farmers sell their products in baht are: the habit of using baht since the mid-1980s when border trade between Cambodia and Thailand developed and the Thai market became the largest market for farmers' products; also value stability of the baht that had a tendency to appreciate in the past decade. So even if the sales are within the country, farmers in these areas prefer to sell their products in baht. In regards to rural areas far from the borders with Thailand, the price is only riel. Target markets for the producers of these areas are domestic, and in general the size of production unit is family. The riel is therefore the currency most sought after for the settlement of purchases and sales of agricultural products in these areas.

- Traditional Food Market: Food prices outside the supermarkets are only in riel. They are generally low (less than 5 dollars in general) and have more domestic products. There are also imports of food goods - vegetables, fruits etc. from Vietnam and Thailand - but selling prices are in riel, except for some imported products whose price is also high, such as fruits as they are sold in dollars and are usually in supermarkets or stores.

-Fuels: The price of gasoline is displayed in dollars and riels. It is also observed that there are two segments to the gasoline market: the car and the motorcycle. The division of these market segments is due to the volume of consumption between the two types of transportation. In general, the first one allows petroleum stations to obtain dollars while the second pay them in riels. In the provinces near the Thai border, many petroleum stations illegally import oil from Thailand and sell in baht.

-Other services: Most service prices are set in dollars. Charging of tuition fees in universities and institutes, hospital services, public and private, are in dollars. Similarly, the price of leisure services, bus, plane, boat tickets, access tickets to tourist attractions etc. are displayed in dollars.

### **3.2. Fixation of Wages and Revenues**

The currency of payment of employee salaries in the private sector is not defined by law. There is no general law on the minimum wage, except in the garment sector which grew considerably since the mid-1990s due to foreign investors and where there were frequent strikes to demand salary increases. It is very interesting that the legal text concerning the definition of the minimum wage in this sector uses the dollar<sup>99</sup>. Employers are therefore free to choose the currency that suits them to pay salaries to their employees, and in some cases encouraged to adjust the salary in dollars through the text cited above. We observe that almost

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<sup>99</sup> In the announcement of the Cambodian Ministry of Employment and Training, dated 23 October 2006, 17 April 2008 and 1 October 2010, the dollar is the currency used to set the minimum wage.

all private companies, domestic or foreign, pay their employees in dollars. Moreover, NGOs, international organizations, donor agencies, and foreign embassies based in Cambodia settle all of their wages to employees, Cambodians and foreigners, in dollars<sup>100</sup>. In the border areas with Thailand (such as Koh Kong, Banteay Meanchey, and Pailin), some companies such as casinos, hotels, electricity and water suppliers, pay their employees in baht<sup>101</sup>.

The riel is used to pay the salaries of civil servants, employees of the public sector (central bank and public enterprises). At the same time, some officials and public employees can also benefit from dollar revenues as compensation or bonuses when they participate in the implementation of projects financed by development partners (Beresford et al., 2004)<sup>102</sup>. For example, a project to develop the financial sector (Financial Sector Development Strategy 2001-2010, and 2006-2015 and now 2011-2020) supported by the Asian Development Bank (ADB), provides for the granting to some officials of monthly supplements (about 150 dollars) until the end of the project. Other projects operate in much the same way. According to statistics of the Ministry of Economy and Finance, foreign aid to investment projects represents an average of about 100 million dollars between 2002 and 2010, with a clear growth trend during the second half of the 2000s. In addition, some public institutions engaged in commercial activities, such as universities, hospitals, also pay the salaries of their officers in dollars. Dollar wages are also their main source of revenue.

The low-income workers, except employees of the garment sector are paid in riel. It is observed that the level of revenue is normally less than 100 USD per month. Recall that if in 2007, 30.1% of the population lives below the poverty line (1.25 USD<sup>103</sup> per day), this rate was 47% in 1994 and 34.8% in 2004 (World Bank, 2009). The number of workers with revenues of less than 100 USD per month, is important.

According to surveys of CDRI (2002), the most vulnerable workers are those who receive revenue in riel: cyclo drivers, the porters, small vegetable sellers, scavengers, servers, workers in rice cultivation, the motorcycle taxi drivers, and skilled and unskilled construction workers. The average income of these workers was 8,099 riels (1.95 USD) per day in 2007 and even decreased in 7,862 riels (1.89 USD) in 2009 (CDRI, 2010).

### **3.3. Opening Doors to the Exterior**

Because of the benefits of international trade that are becoming clearer for Cambodia's economy, the country is gradually integrated into the regional and world trade after the economic and political liberalization of 1993. Cambodia successively joined ASEAN (Association of South East Asia Nations) in 1999 and then the WTO (World Trade Organization) in 2004. With the entry of more foreign direct investment, the opening rate has increased rapidly over the past two decades. Compared to the opening rate of ASEAN member

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<sup>100</sup> In general, these institutions are obliged to pay a proportion (30%) of the salary of their international employees in currency of the country where they are located (Menon, 2008).

<sup>101</sup> In Koh Kong, electricity and water are imported from Thailand, a private company (Lyonpat Group) which provides these services uses the baht as an invoicing currency. It also pays its employees in baht.

<sup>102</sup> Malanie Berestford, Nguon Sokha, Rathin Roy, Sausisovanna and Ceema Namazie, 2004, "Macroeconomics of poverty reduction in Cambodia", UNDP.

<sup>103</sup> Expressed in PPP.

countries, Cambodia is the fifth country to have the most open economy in the region (after Singapore, Malaysia, Vietnam and Thailand) (Kaid and Swindi, 2009).

The opening rate, which is calculated by the ratio of the sum of exports and imports of goods and services to GDP increased from 37 percent in 1993 to 112 percent in 2000. It reached its peak record rates to 145 percent in 2006, before returning to 118 percent in 2010 due to the effect of the global financial crisis of 2007-2008. Destination countries of Cambodia's exports are the United States and Europe. At the same time, Cambodia imports mainly from other countries in the region, especially China, Thailand and Vietnam. Although the country is a net importer, it's a net exporter of services through the tourism sector.

The increase in opening rates and tolerance of the Government in the use of currency within the country, strongly favored the increase in demand and supply of foreign currencies, especially the dollar and to a lesser extent the baht. According to Balino, Bennett and Borensztein (1999), substitutions of assets are a natural consequence of the opening of the economy and market liberalization. In addition, Alberto Trejos (2003) developed a theoretical model on the positive relationship between opening and dollarization in small countries. According to Trejos, in small and open economies, the presence and use of an international currency is inevitable because when international trade in goods and services grow, these countries absorb an amount of more important of international currency and economic agents who receive it are encouraged to keep and use it in the country, while assuming that their compatriots do the same. He also showed that the use of dollars in small Latin American countries spread when they gradually opened their international trade. Moreover, Duchêne and Goujon (2006) studied the favorable conditions of dollarization in three countries: Vietnam, Ukraine and Romania, and found that the use of dollars started from when they opened their economies to foreign trade. Finally, Zoryan (2005) considered that an open economy is one of the factors contributing to the demand for foreign currency and thus the persistence of dollarization in Armenia.

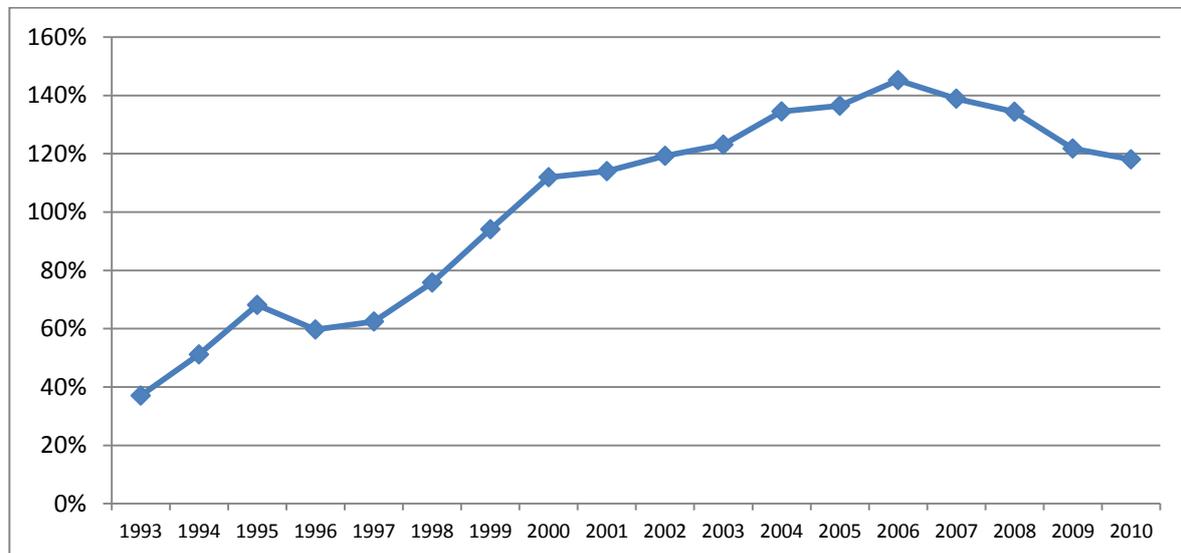
Cambodia recorded a deficit of the trade balance in goods since its opening. This deficit increased by 10.4% between 1993-1999 to 14.6 percent of GDP between 2000-2010. On average, exports account for nearly a third of GDP over the period of 1993-2010, while imports amounted to almost half of GDP. This has the potential to create a strong demand for foreign currency within the economy. In developing economies in particular, almost all international trade transactions are settled in dollars (Menon 2008, pg.4). At the same time, border trade with Thailand, which represents a significant share in the total trade between the two countries (Sompop Manarungsan, 2010), use only the Thai baht as a means of payment. Therefore, the baht is widely used in these border regions. Moreover, due to the rapid growth of imports from China and the growing cooperation between Cambodia and China during the last decade, the Chinese Renminbi is considered by some officers of financial institutions in Cambodia as a future currency that Cambodia will use in the long-term with trade with Chinese business partners and internal banking transaction (Reuters, 2011<sup>104</sup>). Yet the dollar remains the preferred currency for traders of both countries at least in the medium term

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<sup>104</sup> In an article published by the Phnom Penh Post, 28 November 2011

(Ngoun Sokha, Menon<sup>105</sup>, 2011). According to Menon (2008), the growth of opening rate since the release of foreign trade contributed to the increase of dollarization of Cambodia.

**Figure 3-7: Opening Rate \* from 1993 to 2010**



Source: World Bank, 2011

\* Ratio of the sum of exports and imports of goods and services, and GDP

## Conclusion of Chapter

The persistence of monetary plurality leads us to examine its environment. First, the institutional environment seems to be a contributing factor to monetary plurality. Another

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<sup>105</sup> Ngoun Sokha is General Director of the National Bank of Cambodia. Jayant Menon is a senior economist of Asian Development Bank, cited in an article in the Phnom Penh Post, 28 November 2011

factor is the weak rule of law and high corruption which undermines the Government's ability to instill citizens' confidence to ensure macroeconomic stability and the stability of the national currency. In addition, this environment could limit the ability of the State to conduct fiscal and budgetary policy for the circulation of the national currency.

Second, while the banking system is rapidly developing, it remains in the preliminary stage of development; some reforms are yet to begin (Menon, 2008). The banking system has created an environment where foreign currencies can circulate throughout the country through a financial intermediary. Moreover, very informal and active markets of money changers reduce the transaction costs of holding foreign currencies. There is also a high concentration of banks in terms of geography, sector, and clients.

The third environment that creates monetary plurality, either directly or indirectly, is the supply and demand for foreign currencies. An open economy provides foreign currencies in Cambodia and also creates demand for them. If export revenues (in dollars) are injected directly without converting into national currency, and at the same time if these foreign currencies are required to pay for imports, these foreign currencies could easily be used by economic agents, not only among external traders but also with internal traders. In addition, the fact that prices and wages are largely fixed in foreign currencies increases the number of holders of foreign currencies and therefore develops the network of foreign currencies by network externalities. This makes the cost of the use of foreign currencies lower. In other words, the cost of return for the use of the national currency becomes higher.

After having analyzed these environments of monetary plurality, we will discuss the supply channels for each foreign currency in the Cambodian economy. This is the goal of our next chapter.

## **Chapter 4: Supply Channels of Foreign Currencies and Their Geographic Distribution**

## Summary

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Transfers

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#### Conclusion of Chapter

## Introduction

With the Paris Peace Agreements in 1991, Cambodia opened up to the world. In mid-1992, UNTAC launched its peacekeeping operations and helped Cambodia to restore political and social order. Then there was a massive inflow of international aid to rebuild the economic foundations of the country. In 1992, the U.S. lifted the economic blockade that choked Cambodia's economy for nearly twenty years. In 1993 the political regime was officially democratized, the economy was transformed from a centralized economy to a market economy and as a result property rights gradually strengthened. Various bilateral and multilateral co-operations were initiated to promote economic growth in Cambodia. Consequently, the country began to attract Foreign Direct Investment (FDI) and international trade grew rapidly.

FDI concentrated quickly in the garment and tourism sectors and caused an increase in exports. As the country became more open and stable, this attracted tourists who in turn primarily used foreign currencies, mainly the dollar. The literature emphasizes the role of these dollar inflows, capital inflows and exports in the progressive dollarization of the Cambodian economy (Zamrócy and Sa, 2002, 2003, Menon, 2008, Ishi, 2009 and Duma, 2010). In a report, the International Monetary Fund (2011, article IV on Cambodia) attempts to identify the vectors of dollarization:

*“The usual motive, currency substitution, does not appear to have been a factor ... Dollarization resulted from a strong inward flow of dollars. Growth in Cambodia's dollar economy, that is largely urban, has far surpassed growth in the riel economy, which remains largely agriculture and rural. The dollar economy has benefited from the buoyant garments sector, tourism, foreign direct investment, and aid, contributing to robust growth in related sectors and a wide use of the dollar. The rural economy, however, has lagged behind.” (IMF, Article IV, 2010, pg.14)*

In this chapter, we will address each supply channel of foreign currencies that promotes and strengthens the existence of monetary plurality in Cambodia. We will address initially the supply of foreign currencies by capital flows. Next, we will examine the inflows of foreign currencies through commercial activities. Finally, consideration will also be on the question of the trend towards concentration of foreign currency flows in different regions of the country.

## Section I: Capital Flows

### 1.1. Foreign Aid

The war raged for thirty years and destroyed the social fabric of the country, in addition to the well-being and mentality of Cambodians. The climax was reached with the Pol Pot regime, which devastated the foundations of Cambodia's economic and social system. After the liberation in 1979, the government had the difficult task of rebuilding the Cambodian economy and society with empty hands and then famine hit the country. Virtually all infrastructures were destroyed: bridges, roads, industrial installations, housing, etc. Under the Khmer Rouge regime, the majority of intellectuals were executed, or they left the country. Very few remained and survived<sup>106</sup>.

In this very difficult context, foreign aid played a crucial role in the reconstruction of economic infrastructure, and as a first step to help the State operate the country (IMF, 2004, p. 63). As a result, Cambodia became one of the most dependent on foreign aid to finance its development in Asia (Chanboreth et Sok, 2008). According to the World Bank's *World Development Indicators Report* (2007), foreign aid in Cambodia was 538 million dollars in 2005, representing 9.1 percent of GDP, far higher than the average for developing countries of 2.9 percent. Since 2005, about 50 percent of total public spending was financed by aid (CDC, 2008).

#### 1.1.1. Evolution of Foreign Aid Flows

Since 1992, hundreds of millions of dollars of aid in the form of grants and loans at preferential rates (average 1 percent per year) flow every year into the country. According to the annual report *Cambodian Rehabilitation and Development Board* (CRDB) (2010)<sup>107</sup>, the total foreign aid between 1992 and 2010 reached almost 11 billion dollars, or roughly the amount of GDP in 2010. During the past 18 years, the share of aid from the United Nations and various multilateral financial organizations<sup>108</sup> represents 28 percent of total aid, that of the European countries and the European Commission 25 percent, that of Japan 18.7 percent and that of the international Non-Governmental Organizations 8.8 percent. This inflow of aid is distributed according to the priorities of donors, aligned to the national development strategy of the Royal Government of Cambodia (RGC). Sectors covered by the aid are governance and administration (16.4 percent), health (13.4 percent), transport (12.7 percent), education (10.7 percent), rural development (10.3 percent) and agriculture (7.9 percent).

Foreign aid has evolved erratically. It gradually increased in the early 1990s and then declined between 1997 and 2001 as a result of political instability due to armed clashes in 1997, the general election of 1998 and the impact of the Asian crisis between 1997 and 1998. These conflicts rendered it difficult to define a vision and long-term goals of donors (Teramoto et Ezaki, JICA, 2005). International aid stabilized in the early 2000s before increasing again in

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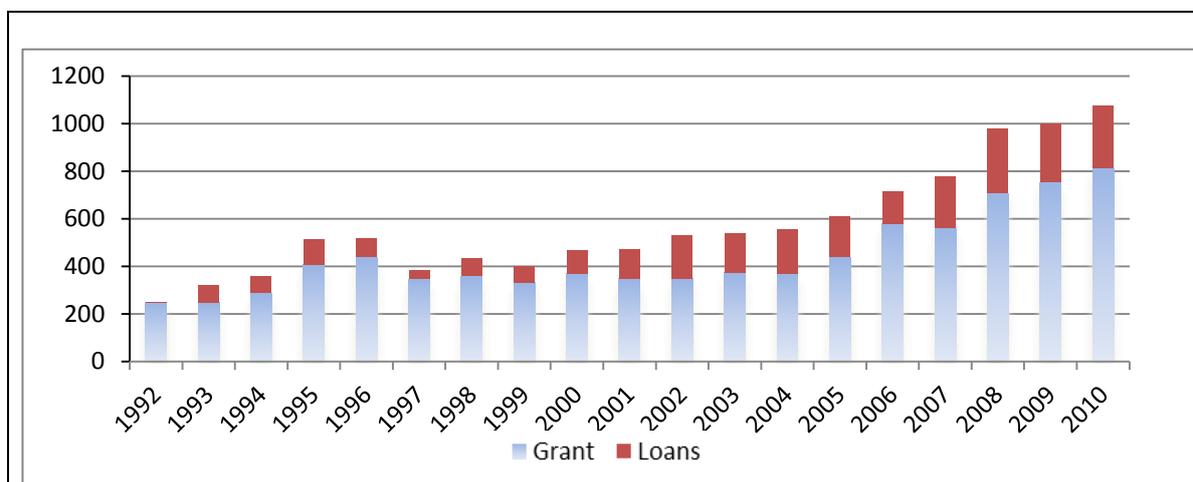
<sup>106</sup> There were only a few hundred people, the baccalaureate, which were then invested with high responsibilities (from the discussion between Mr. CHAM Prasith currently Cambodian Minister of Commerce and Mr. Jean MOREL, former economic adviser to the Prime Minister, cited by Mr. GARDÈRE, 2009, p. 53).

<sup>107</sup> CRDB is a branch of *Council for the Development of Cambodia* (CDC), in charge of coordination of foreign aid

<sup>108</sup> In particular, the World Bank (WB), International Monetary Fund (IMF) and the Asian Development Bank (ADB).

2007. Its annual average (grants and loans) is 573 million dollars and represented 8.6 percent of GDP between 1992 and 2010. During this period, grants represented 78 percent of total aid, while official loans represent only 22 percent. We also observed that the annual average aid in the form of grants almost doubled in the second half of the 2000s compared to the previous period. Official lending increased about 46 percent.

**Figure 4-1: Foreign aid between 1992 and 2010, in millions of dollars**



Source: Cambodian Rehabilitation and Development Board / Council for the Development of Cambodia, 2011

### 1.1.2. Types of Foreign Aid

According to the CRDB/CDC (2007), foreign aid to Cambodia is divided into four main categories: i. Technical Cooperation, ii. Investment Projects, iii. Budget Support or assistance in the Balance of Payments, and iv. Food and Emergency Aid. The first two types of aid represent more than eighty percent of total aid over the last decade. Other categories of aid gradually declined over the years in terms of proportion of total aid and in terms of value.

#### • Technical Cooperation (TC)

According to Land and Morgan (2008)<sup>109</sup>, Technical Cooperation (TC) or Technical Assistance (TA) is defined as the transfer, adaptation or facilitation of ideas, knowledge, technology or skills to promote development. TC is given in the form of provision of staff for short or long term projects, education and training projects, advice, research and material support. In the context of Cambodia, TC also includes providing monetary incentives to officials related to the implementation of a project or a program that aims to strengthen and increase the capacity of the Government.

This type of aid was the most consistent and represented almost half of total aid between 1992 and 2005. However, it gradually decreased to 33 percent in the second half of the 2000s in favor of so-called “investment project” aid. This relative decline does not mean that the monetary supply was reduced; indeed, aid of the investment project increased significantly over the same period.

<sup>109</sup> Anthony Land and Peter Morgan, 2008, “Technical Cooperation for Capacity Development in Cambodia”, CRDB/CDC

Technical cooperation includes the free-standing autonomous technical cooperation and investment-related technical cooperation.

- **Free-Standing Technical Cooperation (FTC):** Provision resources for the transfer of technical and managerial skills and know-how or technologies in order to strengthen national capacity to undertake development activities, without reference to the implementation of any specific investment projects. FTC includes pre-investment activities, such as feasibility studies of the project, when the investment itself was not yet approved or that the funding is not yet secured.

- **Investment related technical cooperation (ITC):** Provision of resources aimed directly at strengthening the implementation capacity of specific investment projects (i.e., those that are associated with some material/tangible results). ITC are included under the pre-investment activities directly related to the implementation of approved investment projects.

In the 1990s, aid for technical cooperation was criticized for its effectiveness. It seemed uncoordinated among donors and we often noted rather a capacity substitution instead of assistance for capacity building (Land and Morgan, 2008 and Ek and Sok, 2008). Acknowledging these problems, the Royal Government of Cambodia (RGC) engaged in a process of strengthening the coordination of aid in order to increase its effectiveness. Nevertheless, this type of aid has increased only slightly in terms of value in the second half of the 2000s compared to the previous period and the 1990s.

#### • **Investment Project**

These are funds in cash or in kind for projects aimed at creating productive capital generating new goods or services. They are also known as “capital assistance”. It is through this type of assistance that the country could build its public infrastructure, directly improve conditions of the poor through various programs such as the Support Program of water sector around Tonle Sap Lake (since 2005), Support Program of health development etc., The proportion of this aid gradually increased, from 31 percent of total aid between 1992-1999 to 41 and then 58 percent during the first and second part of the 2000s. In terms of average annual volume, aid of the investment project passes 121 million dollars between 1992 and 1999 to 218 between 2000 and 2005 and then 529 between 2006 and 2010. This type of assistance was the most important of all aid in the second half of the 2000s.

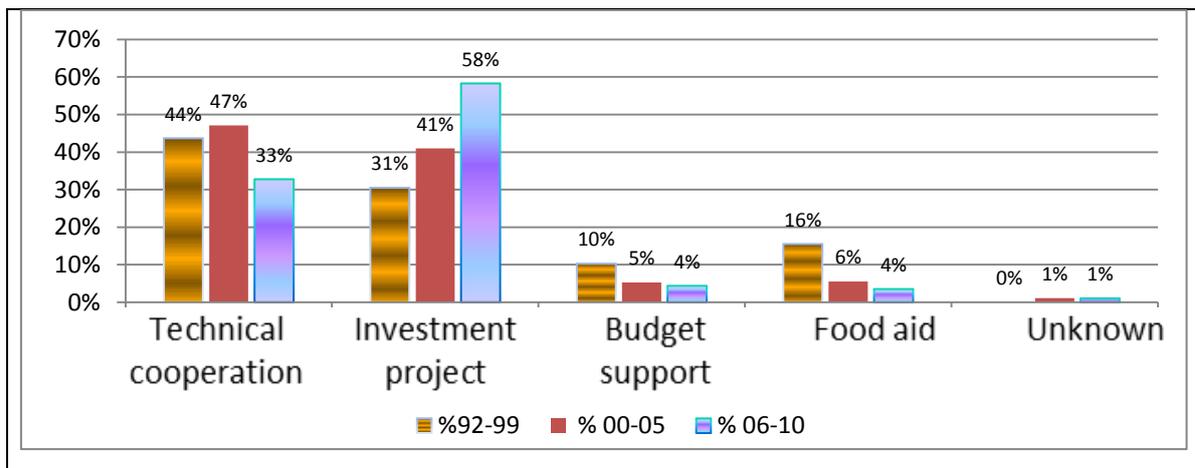
#### • **The Budget Support or the Balance of Payment Support**

This is the provision of assistance that is not directed towards a specific investment plan, but provided in the state budget, the broad development program and macro-economic objectives and/or which is intended for a specific purpose of supporting the balance of payments. This aid also includes the resources allocated to debt relief. The proportion of this aid gradually declined from 16 percent in 1990 to 5, then 4 percent in the first and second half of the 2000s. One reason for this decrease is the country’s economic development during the last decade.

#### • **The Food and Emergency Aid**

This type of aid also underwent a gradual decline due to a substantial reduction in the poverty rate of nearly fifty percent in 1993/1994, the rate dropped to 35 percent in 2004 and less than 30 percent in 2010. Food and emergency aid therefore decreased by 16 percent in 1990 to 4 percent in the second half of the 2000s. Food aid is the provision of food for household consumption, including subsidies and loans for food purchases. Associated costs such as transport, storage, distribution, etc., are also included in this category of aid. In addition, emergency aid is the provision of resources to immediately relieve the distress and improving the well-being of people affected by natural or artificial disasters. Food aid for humanitarian and emergency is included in this category.

**Figure 4-2: Evolution in components of foreign aid between 1992 and 2010 (as percentage of total foreign aid)**



Source: Cambodian Rehabilitation and Development Board/Council for the Development of Cambodia (2011)

Although foreign aid is given in different currencies (dollar, euro, yen, yuan etc.,) according to the nationality of the donor, it is systematically converted into dollars when it comes into Cambodia. Part of aid flows that are spent in the country therefore fuels the dollar economy. Koken, Ley, and Veyrune (2000), finds that when foreign aid is used in foreign currency in the recipient country, it contributes to the dollarization: “Foreign aid if used in foreign currency in the recipient country, but increases dollarization. In small or post-conflict countries, which often have a high degree of dollarization, foreign aid can play a wide role in the economy. (Koken, Ley and Veyrune, 2000, IMF, WP/10/188 pg. 13).

### 1.1.3. Foreign Aid and Its Actors

Four main actors can be identified: The Royal Government of Cambodia, the UN system and international financial institutions, bilateral donor agencies, and international and local non-governmental organizations.

- **The Government**

As beneficiary and aid coordinator, the government plays a key role in the management of aid. It gets aid in the form of grants and official loans at preferential rates. More than half of the state budget is financed by foreign aid. When this type of aid is paid to the State, the corresponding amounts are allocated in the accounts of the National Treasury of the Ministry

of Economy and Finance, the National Bank of Cambodia, and a commercial bank<sup>110</sup>. These transfers are held in dollars. It is only a small portion of these amounts, corresponding to local staff costs or minor purchases, which is changed in riel, generally as and when required (interview of Gardère with Chou Kimleng, Secretary of State of Cambodian Ministry of Economy and Finance, 2011). It can be explained that the Government maintains aid in dollars without converting into national currency due to two reasons. First, purchases of major public services and facilities made by the Government are denominated in dollars, even when contracts are concluded in Cambodia (in the case of roads in many cases). The major contracts of supply and services with foreign countries occur naturally enough, but for most successful or withheld local bidders firms are little by little generally established in dollars. The state uses aid to finance investment projects or projects financed with development partners such as the Asian Development Bank, World Bank, etc. According to Huot (2007, p.236), two thirds of investment expenses are in dollars and 71% of these expenses are paid abroad. 19% of dollars denominated investment expenses are thus made directly in Cambodia.

• **The Multilateral Institutions: The United Nations and International Financial Institutions (IFIs)**

Generally, the United Nations and the IFIs work closely with the Government in the implementation of projects. Their assistance is classified as multilateral assistance type. Let's quickly examine the procedures for a co-financed project by the State and an IFI. When a co-financed project is agreed, one or more ministries concerned with the implementation of the project are appointed by the Ministry of Economy and Finance who represents the government in coordinating the project execution. The relevant ministries are in charge of project fund management under the supervision of donors and Ministry of Economy and Finance. In order to finance the project, the government authorizes the beneficiary ministries to open dollar accounts in commercial banks (to receive a portion of the amount of aid financed by development partners) and the National Bank of Cambodia or branches (for the part financed by the budget of the State). Thus, the agreed dollar aid feeds the banking system by remaining available for withdrawal for project expenses. All these processes are in dollars. This is another channel of dollarization; the State uses its dollar incomes inside the country without converting them.

**Table 4-1: Case of project N.2376/0092-CAM (SF) of the ADB “Rural Tonle Sap lowlands development project”, 2008**

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<sup>110</sup> Generally, the FTB Bank (Foreign Trade Bank) which initially had the mission of managing the currency for the state and was subsequently privatized in the late 1990s, following the repeated request of the IMF.

This project was funded by the State in cooperation with the ADB. The financing of ADB is made in two forms: grants and loans. This project was implemented in three provinces: Kampong Chhnang, Pursat, and Kampong Thom. The Cambodian Ministry of Water Resources and Meteorology (MREM) was delegated by the Ministry of Economy and Finance (MEF) to cooperate with the ADB in this project. Two other ministries, the Ministry of Rural Development and the Ministry of Agriculture, Forestry and Fisheries and the local government were also involved.

To obtain financing for this project, the Ministry of Economy and Finance authorized the ministries concerned to open accounts (on behalf of their provincial departments), and for local governments.

There were three sources of financing: the 1-State, 2 - ADB in grant form and 3 - by aid of ADB in loan form. Beneficiary departments and local governments therefore opened three accounts, one for each financing source.

In total, MEF allowed the opening of a total of 30 accounts for four institutions in three provinces: 6 accounts receivable financing of ADB as a loan, 12 accounts for financing in grant form and 12 accounts to obtain government financing.

What are the banks in which the MEF authorized the opening of these accounts?

- 6 accounts for the financing of ADB were opened at ACLEDA commercial bank.
- 12 Accounts for ADB financing in grant form were opened at ACLEDA commercial bank.
- 12 accounts for government financing were opened at the provincial branches of the National Bank of Cambodia in the provinces concerned: Kampong Chhnang, Pursat, and Kampong Thom.

All project expenses were made in dollars. Beneficiary institutions of aid could withdraw money at ACLEDA commercial bank (for ADB financing) in the logic of program. It was the same in the provincial branches of the National Bank of Cambodia to financethe government.

When this project was completed, the accounts were closed. They will reopen for new projects.

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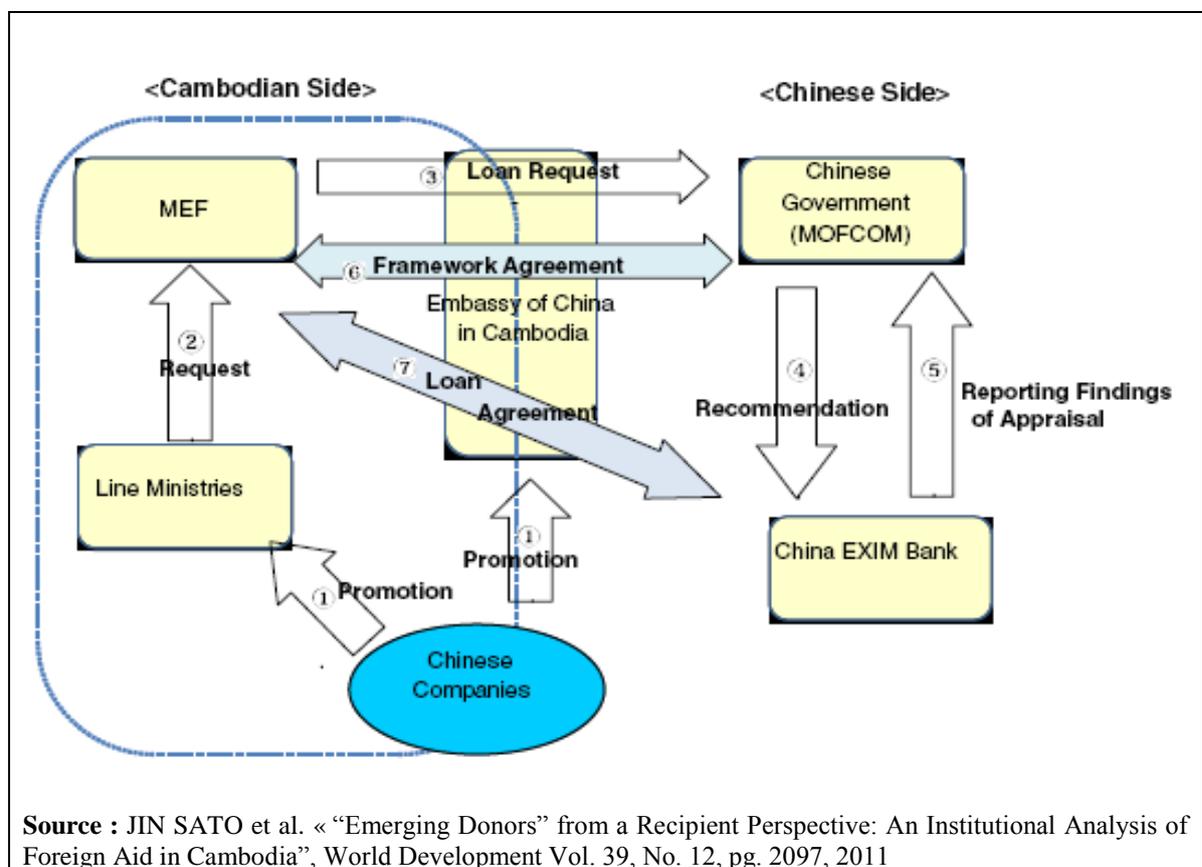
**Source:**

- Letter of Request for authorization to open accounts Cambodian Minister of Water Resources and Meteorology (MREM) dated 21 April 2009, addressed to the Minister of Economy and Finance (MEF).
- Letter of MEF addressed to MREM dated June 19, 2009.
- These two letters were used as references for the application to open an account with provincial branches of National Bank of Cambodia in Kampong Thom, Pursat, and Kampong Chhnang.

• **Donor Countries**

Aid directly from donor countries is called bilateral aid. The most important donor countries for Cambodia are Japan, China, Australia, the United States and South Korea. Aid from these countries accounted for respectively 13.6%, 12.9%, 6.3%, 5.6% and 3.2% in 2010 (CRDB/CDC 2011). Some countries, usually the most important donors in Cambodia, install agencies locally. They operate on behalf of their country of origin. They are primarily responsible for managing aid and to cooperate with the government through the ministries to which the aid is intended for projects. Japan has its own agency that administers grants and loans to Cambodia, JICA (*Japanese International Cooperation Agency*). South Korea installed in Phnom Penh an agency of KOICA (*Korean International Cooperation Agency*). For most projects, donor agencies employ expert groups or companies that normally come from the country of origin of the donor to manage projects in Cambodia. Some donor countries channel their funds through the UN, IFI and/or local and international NGOs.

**Figure 4-3: Mapping a road construction project funded by Chinese aid to Cambodia**



**• The International and Local Non-Governmental Organizations (NGOs)**

According to the report by the CRDB (2010), International Non-Governmental Organizations (INGO) hold their own funds (“core funds”), or an average of nearly 48 million dollars per year between 1992-2009 representing 8.7 percent of total aid (CRDB, 2010, p. 37). These increased to 12% in 2010 (CRDB/CDC, 2011). Between 2007 and 2010, international NGOs received funding from other development partners at about the height of their own funds. The CRDB/CDC (2011) estimates that NGO aid represents 20% of total aid to Cambodia. Regarding financing of local NGOs, they come mainly from other donors and international NGOs. In addition, international and local NGOs have other financing sources

that are not officially recognized as compatible. These funds consist of direct contributions by private donors (Ek and Sok, 2008).

The World Bank (2006) estimates that more than 200 international NGOs and 800 local NGOs in Cambodia are engaged in economic development. According to Ek and Sok (2008), there are approximately 1,500 local NGOs registered with the Cambodian Ministry of Interior and around 340 international NGOs registered with the Cambodian Ministry of Foreign Affairs.

The inflows of foreign aid thus inflate the money supply in dollars and contribute to increasing the degree of dollarization in Cambodia. Only a small part of the aid is transformed into riel by the State and therefore has little influence on the demand for riel.

#### **1.1.4. Distribution of Foreign Aid**

The study of the impact of foreign aid on the circulation of foreign currencies in Cambodia is not yet a subject favored by the research community. Studies on foreign aid are traditionally rather on the effectiveness of foreign aid, the link between aid and corruption, governance and economic growth. (CDCF, 2007). We note for example that even a very detailed study on technical cooperation of Land and Morgan (2008), unfortunately does not address the potential impact of the use of aid on increasing dollarization. *“We do not look at the broader concept of technical cooperation due to the lack of time to analyze the complete range of issues such as training, research, salary supplements and equipment supply<sup>111</sup> ...”* (Land and Morgan (2008))

Nakamura (IMF, 2004, p. 63-64) noted that foreign aid in Cambodia has a positive impact on governance, the prospect of long-term growth of the country and is not sensitive to the phenomenon called *“Dutch Disease”*. Similarly, Hirohata (JICA, 2005, p. 46) believes that the installations of agencies of development partners (donors) in Cambodia helped to increase domestic demand, which in turn contributes to economic growth via expenses of these agencies, their local and foreign employees and their families: *“International aid agencies had a great impact on Cambodia’s economy, not only by implementing assistance programs but also taking up residence in the country. Staff and family of these agencies contribute greatly to the increasing demand for Cambodia’s everyday commodities”* (Hirohata, p. 46). Such increased use of the dollar to pay for these expenses therefore promotes circulation of the dollar.

However, it would be simplistic to say that the official volume of foreign aid corresponds to the inflow of foreign currencies. Indeed, some categories of aid are mainly in kind, such as food and emergency aid. Some aid is used for the payment of salaries of international staff (which is not completely consumed in Cambodia) or for purchases outside (technical cooperation/technical support and aid to investment related projects). A part of the aid is therefore not in monetary form or not distributed in the country.

#### **• Estimation of Inflow of Foreign Currencies Linked to Foreign Aid in Cambodia**

We assume that food and emergency aid is in-kind and that budget support or assistance in the balance of payments does not cause inflow of foreign currencies, considering their nature

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<sup>111</sup> Wage supplements for officials and equipment purchases are made in dollar.

and weight. These two types of aid represent less than 10 percent of the total during the period of 2006-2010. Two types of aid could be, therefore, the inflow of foreign currencies: technical cooperation and investment projects.

**-Technical Cooperation (TC):** Two studies aimed to estimate the amount of expense for TC. According to a study by the Royal Government of Cambodia (RGC) (2011)<sup>112</sup> on the disbursement of foreign aid, 25 percent of the aid (TC), between 1992-2001<sup>113</sup>, was used to pay national staffs, or about 55 million dollars. Moreover, a study of donor-Government (2004)<sup>114</sup> distinguish expense on TC<sup>115</sup> in five categories: international staffs, training, operations/ equipment, national staffs, monetary incentives. This study estimated that the costs of international staff represent 12.7% of total aid, training 11.8%, operations/equipment 8.2% national staff 8.1% and monetary incentives 2.5%. If these data are converted into percentage of aid of TC type, we see that expenses on international staff represented 29.6% of the aid of TC, training 27.1%, operations/equipment 18.8%, national staff 18.7% and monetary incentives 5.8%. We can thus estimate the volume of foreign currencies entering through the help of such technical cooperation.

**Table 4-2: Estimated amount of currencies inflow by using aid channel in technical cooperation type**

Expenses of TC aid	In % of total aid	In % of TC* aid	Estimation of foreign currencies inflows of TC* aid
International staffs	12.8%	29.6%	10%
Training	11.8%	27.1%	15%
Operation/equipment	8.2%	18.8%	8.8%
National staffs	8.1%	18.7%	18.7%
Monetary incentives	2.5%	5.8%	5.8%
Total	43.3% /total aid	100%/TC aid	58.2%/TC aid

Source: Land and Morgan (2008)

\* estimated by the author

The estimated proportion of expenses for national staff in relation to the total aid of TC type (24.5% = 18.7% +5.8%) from the second study corresponds to that of the first study (25% of TC aid). We estimate that 58.2 percent of the amount of TC aid builds up foreign currencies inflows into the Cambodian economy. Aid of technical cooperation therefore resulted in inflow of foreign currencies of an amount equal to 173 million dollars (58.2% \* 298) during the period of 2006-2010.

**-The investment projects** are mainly carried out by foreigners (foreign companies, foreign expert groups, imported materials etc...). Much of foreign currencies from this aid seem, therefore, to go abroad again. These projects involve the construction of infrastructure (roads, bridges, irrigation system etc...). However, a small portion of these expenses are also onsite. These are related to expenses of staff of foreign companies to make investment projects; expenses for some materials, the national workers compensation and consumption of foreign staff during their stay in Cambodia. We believe that a third volume of this aid constitutes

<sup>112</sup> Cited by Boresford et al. 2004 pg. iii

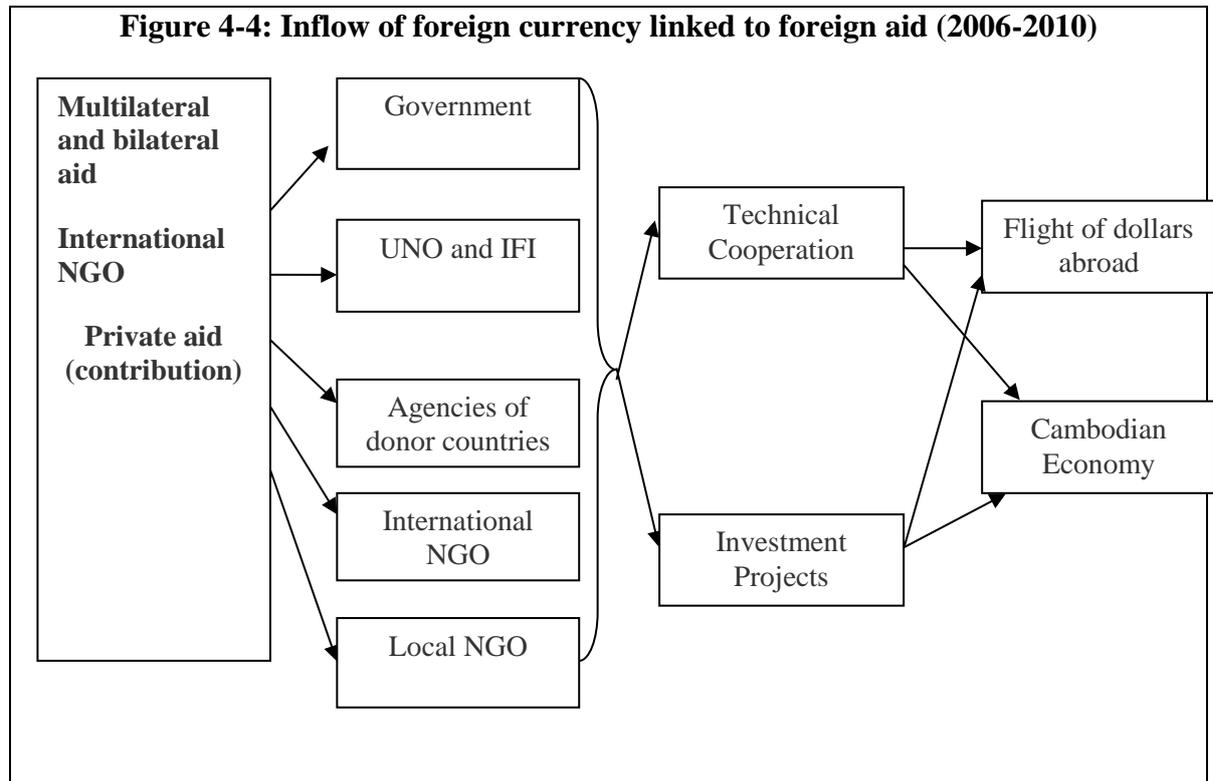
<sup>113</sup> During this period, the amount of technical cooperation represents 45 percent of the total amount of aid.

<sup>114</sup> Cited by Land and Morgan (2008)

<sup>115</sup> In 2004, aid of technical cooperation represents 50% of total aid.

inflow of foreign currencies into the country. This represents 175 million dollars (33% \* 530) during the period of 2006-2010.

In total, it is estimated that over the period of 2006-2010, the inflow of foreign currencies from international aid is equal to 350 million dollars, or 40% of total foreign aid during the same period.

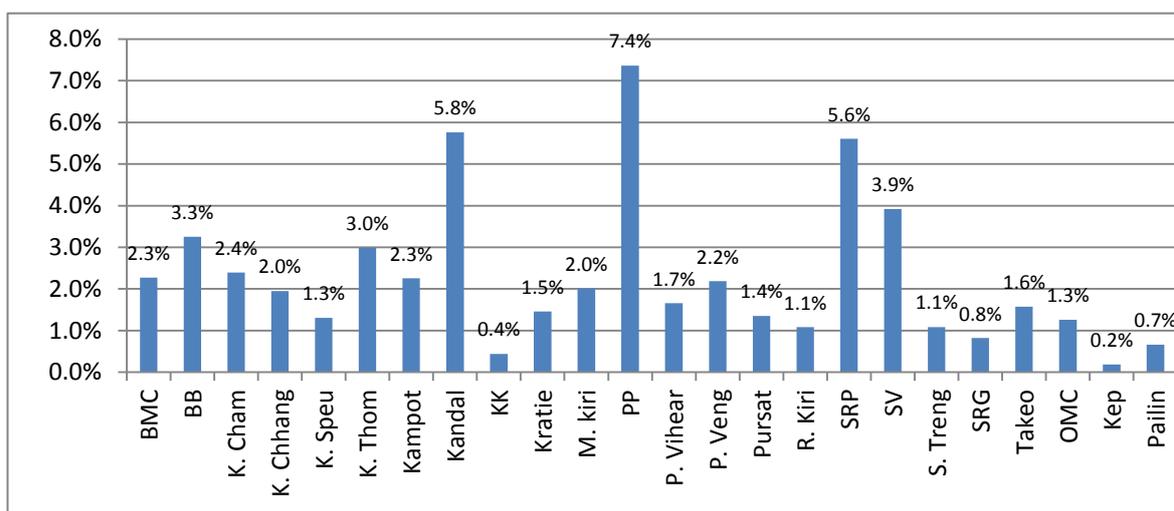


According to the *Cambodian Rehabilitation and Development Board (CRDB)*, foreign aid is distributed within the country according to the objectives of grants and projects (Cambodia Aid Effectiveness Report, 2010 (p. 13)). Between 2007 and 2010 it was observed that 40 to 45 percent of foreign aid is reserved for use at the national level when 55 to 60 percent is dedicated to the provincial level. Ten provinces share the bulk of aid, of which, Phnom Penh (which receives the highest level of aid), followed by Siem Reap and Battambang. However, Koh Kong and Kep received the lowest level of aid. From statistics of this distribution, we can roughly follow the directions taken by the flow of dollars. However, it is not possible to determine the exact dollar amounts awarded to each region. Indeed, first aid for a province may arrive via another province or abroad, the flow of dollars therefore does not necessarily come to all in the beneficiary provinces. Second, the aid granted may very well be used to purchase goods and services in other provinces. Finally, the amounts distributed vary progressively as donors and the evolution of the development strategy of the government.

Based on the statistical distribution of international aid between 2007 and 2010 the *Cambodian Aid Effectiveness Report 2010* (p. 40-41), will estimate the average distribution of aid by Cambodian provinces.

The purpose of this step is to identify the direction taken by the aid at the provincial level. It is observed that the areas that benefit most from foreign aid are: Phnom Penh (7.4%), Kandal (5.8%), Siem Reap (5.6%), Sihanoukville (3.9%), Battambang (3.3%) and Kampong Thom (3.0%). The provinces that are benefiting the least are Kep (0.2%), Koh Kong (0.4%), Pailin (0.7%), and SvayRieng (0.8%).

**Figure 4-5: Provincial distribution (60%) of foreign aid between 2007-2010**



Source:

- Cambodia Aid Effectiveness Report, 2010 (p. 40-41)
- Calculated by the average of aid distribution between 2007-2010

## 1.2. Foreign Direct Investment (FDI)

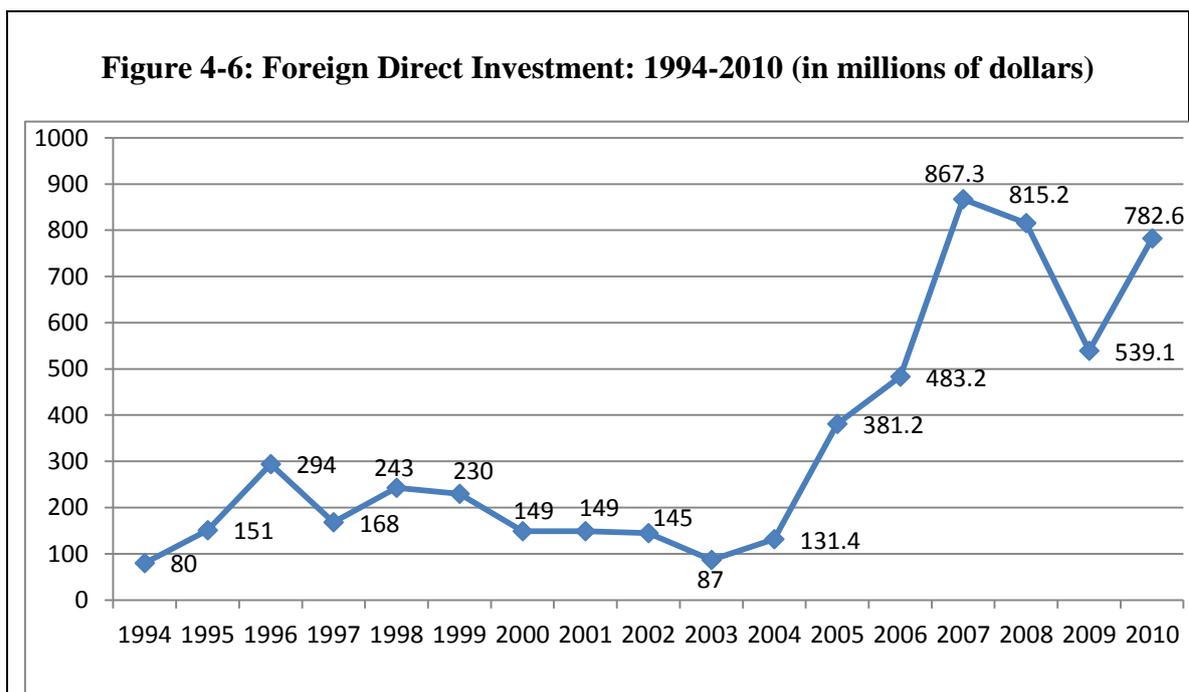
### 1.2.1. FDI and Foreign Currency Inflow

Cambodia has always experienced a wide current account deficit, which reflects an imbalance between savings and domestic investments. In addition, poverty and under-banking contributes to this imbalance. Savings are far from sufficient to finance domestic investment. In this context, foreign private capitals play a crucial role in supporting sustainable economic growth.

Political stability, economic liberalization, economic reform and climate (both internal and external) are conducive to investment<sup>116</sup> and make Cambodia more attractive for foreign investors, especially for countries in the region. Between 1994 and 2004, more than half of FDI are Chinese, Taiwanese, and Malaysian (Cuyvers et al., 2006, 2008). According to the IMF (2004), the evolution of FDI between 1994 and 2003 can be divided into three phases. The first phase (1994-1995), marked by a sharp initial increase, is characterized by the domination of the tourism sector. Most FDI is carried out in the hospitality and tourism industry, especially in 1995 (IMF, 2000). The second phase (1996-1998) was a period when

<sup>116</sup> The new law on foreign direct investment was enacted by the National Assembly in August 1994. It was ratified in 2005. Cambodia benefited from the *Generalized System of Preference* (GSP) of Europe and the United States (1995-1999). In 2007, Prime Minister Hun Sen insisted that foreign investors can settle in Cambodia more easily with the ability to create companies with 100% foreign capital and land rental for long leases. The same year, Cambodia created free zones in the capital and major cities and border towns with Vietnam and Thailand.

FDI focused in the garment and forestry industry<sup>117</sup>. For the period of 1994-1998, the average annual flow of FDI is 187.2 million dollars, or 6% of GDP on average during this period. The third wave (1999-2003), marked the decline of FDI in almost all sectors<sup>118</sup>. During this period, the level of FDI then fell again, and then became relatively stable. It represented 152 million dollars, or 4 percent of GDP. FDI was rising again since 2004. It tripled in 2005 and passed half a billion dollars in 2007. This upward trend is due to the increased investment in the garment sector, accompanied by a gradual increase in the banking sector. The latter began to occupy an important place in the total volume of FDI from 2007. The average annual amount of FDI between 2004 and 2010 is equal to 517.4 million dollars, or 6.4 percent of GDP during this period.



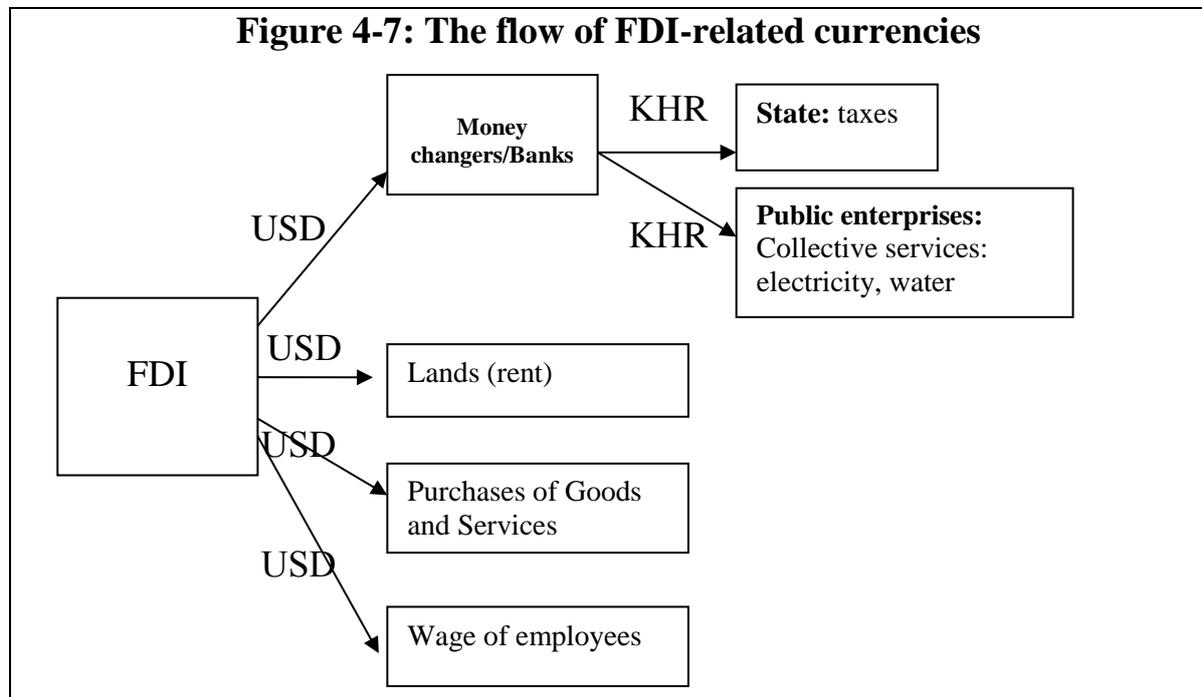
Source: National Bank of Cambodia

Foreign investors import significant dollars to finance their projects under the control of the Council for the Development of Cambodia (CDC). These dollar funds are directly injected in the small Cambodian economy without performing significant conversion. Indeed, almost all expenses are made in dollars: rent, salaries, purchases of goods and services etc. A very small part of expenses is made in riel (for example tax payments and services offered by public enterprises). Companies then exchange their dollars into riel to make such expenses from their banks or money changers. FDI flows thus have a direct influence on the money supply in dollars and accelerates the use of dollars in the economy through such expenses generate dollar revenue. According to a study on the amount of dollars in circulation, Zamaróczy and Sa (2003 pg. 10-11) find that the evolution in the amount of dollars in circulation (fiduciary money) followed that of FDI between 1995 and 2000. The phenomenon of the increase in dollarization driven by the FDI flows is a classic phenomenon which is not unique to Cambodia and is

<sup>117</sup> Forestry due to FDI between 1996 and 1999 is exclusively geared towards export. The *Generalized System of Preference* offered by the United States and European countries since 1995 is the main attracting factor for investors in the garment sector (Hirohata, 2000).

<sup>118</sup> This decline is due to several reasons: 1- high informal costs, 2- weak status of law, 3- high cost of electricity, 4- political instability and 5- small size of the domestic market (IMF, 2004, p. 67-68)

found in most dollarized countries. An econometric study of the causes of dollarization in Tanzania has showed that increased FDI strongly contributes to the increase of dollarization in the country. (Kessy, 2011, pg. 23).

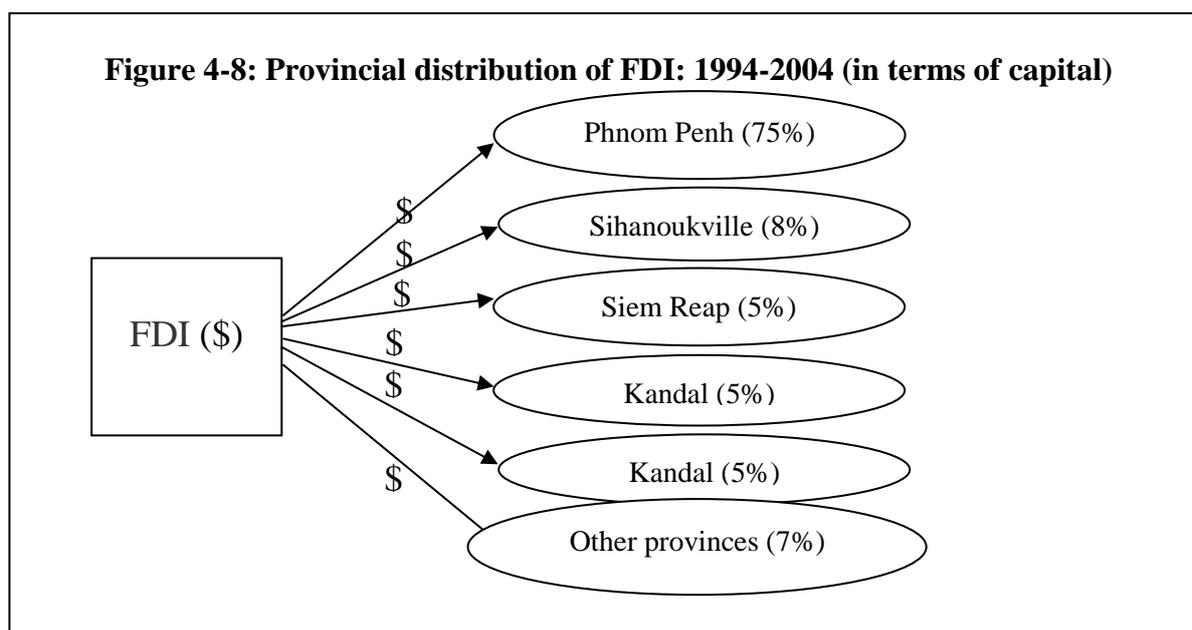


### 1.2.2. FDI Concentration

According to Cuyvers, Soeng, Bulcke, (2006), FDI in Cambodia between 1994 and 2004 concentrated mainly in three sectors: tourism and hospitality sector, the garment sector and the banking sector. These three sectors regularly represent more than half of the total inflow of FDI and 75% in 2010. The first two sectors are generating sectors of foreign currencies (dollars in general), while the third is not only an inflow vector of dollars in the country but also boosts the circulation of dollars within the country. Moreover, FDI in Cambodia is characterized by not only its sector but also geographical concentration. Among the 24 provinces of Cambodia, only 16 were able to attract foreign investment projects between 1994 and 2004.

According to the *Cambodian Investment Board*, FDI made in terms of capital is geographically concentrated in three areas: Phnom Penh, Sihanoukville, Kandal and Siem Reap. Phnom Penh, the most attractive city, accounts for three-quarters of total FDI, followed distantly by the coastal province of Sihanoukville 8%, Kandal 5% and Siem Reap 4%, and then SvayRieng which attracts 1% of total FDI. Although the government conceded many benefits to foreign-invested enterprises such as the possibility of leasing land or the creation of free zones in several cities, this does not translate into strong investment in other areas. The tourism province of Siem Reap essentially attracts only FDI in tourism and hospitality sectors. This type of investment increased from 1995 then decreased before remaining at a very low level. This geographical concentration of the majority of dollars inflows through FDI channel is explained in part by the privileged position of the four provinces in relation to others. The “other provinces” received only 7 percent of FDI between 1994 and

2004. Unfortunately, we do not have data between 2005 and 2010<sup>119</sup>. We assume that the distribution of FDI for the period of 1994-2004 is the same as 2006-2010.



### 1.3. Transfers of Foreign Funds

Civil war, especially in the 1970s and 1980s, led to a massive exodus of Cambodians who left their country to settle abroad in order to avoid war and seek a better life. The main host countries of the Cambodian expatriates are: the United States, France, Australia and Canada. According to the *U.S. Census Bureau American Community Survey*, there were 275,379 Cambodians in the United States in 2009<sup>120</sup>. The French Ministry of Foreign and European Affairs<sup>121</sup> (2011) estimated that there were about 80,000 Cambodian expatriates living in France. They are 20,505 in Canada (Office of Statistics of Canada, 2006)<sup>122</sup> and 24,530 in Australia (Census, 2006)<sup>123</sup>. These expatriates send remittances to the family still living in the country. These fund transfers operate both by the banking system and informal networks. These Cambodian expatriates also provide foreign currencies in Cambodia when traveling there occasionally to visit their families.

These transfers therefore feed the money supply in foreign currencies (mainly in dollars), thus favoring dollarization. The experiences of other countries also showed this phenomenon. Nguyen Thi Hong (2002) and Nguyen Quang Vinh (2002) found that transfers from abroad, regardless of their channels (formal or informal) are the de facto main source of dollarization in Vietnam.

In addition, currency transfers by Cambodian migrant workers working abroad is also an important source of foreign currencies. Globalization and regionalization was to liberalize the

<sup>119</sup> As Cuyvers, Soeung, and Bulcke (2006) mentioned, the statistics of the provincial distribution of FDI are not published.

<sup>120</sup> <http://www.census.gov/>

<sup>121</sup> <http://www.diplomatie.gouv.fr>

<sup>122</sup> <http://www12.statcan.gc.ca>

<sup>123</sup> Department of Foreign Affairs and Trade of Australia:  
[http://www.dfat.gov.au/geo/cambodia\\_brief.html](http://www.dfat.gov.au/geo/cambodia_brief.html)

flow of goods, services and financial products. At the same time, these dynamics also encouraged the mobility of migrant workers, and in particular, low-income countries to developed countries. The report of the *International Organization for Migrants* (2008) showed that the number of migrants working outside of their country of origin passed 200 million people. These flows related to temporary labor migration become increasingly important vectors for economic development in less developed countries where wages are very low. These currency transfers therefore have a significant impact on reducing poverty (World Bank, 2007) by improving the living conditions of the families of migrant workers, especially since they often move to rural areas. These are sources of revenue to cover especially basic consumption, but are also used for investment and thus generate future revenues. In Cambodia, 40 percent of migrant workers reported that the transfers of these foreign currencies are important sources of family revenues (MLVT-ILO, 2010).

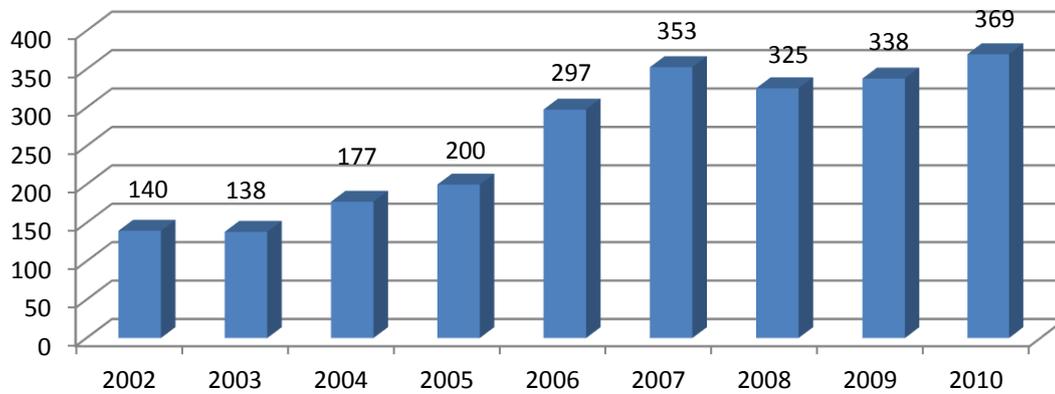
### **1.3.1. Evolution of Foreign Currency Inflows Related to Fund Transfers**

Cambodia began “officially” sending workers abroad to Malaysia in 1998, to South Korea in 2003, to Thailand in 2006 and to Japan in 2007. According to the Cambodian Ministry of Labour and Vocational Training (2009), between 1998 and 2008, the total number of officially recognized Cambodian migrant workers is 13,324 in Malaysia, 3,983 in South Korea, 8,231 in Thailand and 42 in Japan.

Similarly, CDRI (2009, p.15) notes that the number of Cambodian migrant workers in Thailand is much higher than the official data. Indeed, Cambodians have illegally entered Thailand since 1994 in search of work. The International Organization for Migrants (IOM) and the Asian Development Bank (ADB) (2009) estimated that the number of Cambodian migrant workers in Thailand is 248,000 in 2008, 30 times the official figure. The large and growing number of these workers (all nationalities) is explained partly by *pull* factors such as the proximity between the two countries and the important need for unskilled workers in Thailand due to its economic growth and secondly by *push* factors such as chronic poverty, landlessness, lack of jobs, debt and natural disasters (IOM, 2006 and Biddulph, 2004).

The UNDP (2007) estimated that foreign currency transfers of expatriates and migrant workers would be approximately 353 million dollars in Cambodia. French Development Agency (FDA) (2010) is more generous, and estimated they represented 559 million dollars in 2006. Yet the World Bank (2011) estimated that in 2006, fund transfers in Cambodia were only 298 million dollars, and increased to 369 million dollars in 2010. Between 2006 and 2010, the transfers are, on average, 336 million dollars per year.

**Figure 4-9: Transfers of fund from abroad by expatriates and Cambodian workers to overseas (in millions of dollars)**



Source: www.worldbank.org, database on Cambodia

### 1.3.2. Foreign Currency Flow and its Destinations

There is no study on the destinations of fund transfers by expatriates and migrant workers abroad, so it is difficult to know the distribution of these flows by the provincial level. We have at our disposal studies on the flow of transfers of Cambodian workers from Thailand.

Transfers of baht in Cambodia directly supply the Cambodian economy in baht. The inflow of baht does not have the same effect as the inflow of other foreign currencies (MYR, JPY, KRW, CHR, AUD etc...), the latter being converted into dollars or riel before use.

How does the baht come to Cambodia? What is the amount of these transfers? Will they represent an important source of revenue for families of migrant workers in Cambodia? How are they used?

The FDA (2010) conducted a survey on a sample of 302 households in two provinces: Kampong Cham and Prey Veng, where, according to FDA, many families with their members were working in Thailand. The survey also questioned 210 Cambodian workers in Thailand in two Thai provinces: Trad and RakYorng where Cambodian migrant workers are most represented. FDA notices that the majority of Cambodian migrants in Thailand (71.8 percent) sends in baht the monthly amount equivalent to less than 100 dollars to their families in Cambodia. According to them 24.2% of them manage to send between 100 and 200 dollars. But if migrant workers are interviewed, they are 42 percent who declare sending less than 100 dollars per month to their families (always in baht) and 31.4% between 100 and 200 dollars (FDA, 2010, p.49).

In addition, CDRI (2009)<sup>124</sup> also devoted a study on this subject. With a sample of 526 households in five communes in three provinces (Battambang, BanteayMeanchey and Kampong Thom), this investigation showed that the income of Cambodian migrant workers in Thailand vary widely by geographic area (border between Thailand and Cambodia to inside Thailand), sector of employment and the legal nature of the work. Agriculture is less profitable

<sup>124</sup> The purpose of the survey is to study the costs and benefits of working in cross-border migrant in *Great Mekong Subregion* (Cambodia, Laos and Myanmar)

than other sectors. The migrant workers near the Cambodian border earn less compared to those further inside the country. It is the work in the fishing sector which allows migrant workers the highest level of pay. According to this survey, Cambodian workers in Thailand earn between 70 and 169 dollars<sup>125</sup> per month. The CDRI believes that undocumented migrant workers<sup>126</sup> are in the majority, but can earn up to 300 dollars per month and they are able to send their families up to 30 dollars a month or 300 dollars per year (p.43).

**Table 4-3: Extract of survey results on daily and monthly wages of Cambodian workers in Thailand**

Destination	Type of work	N	Daily wage rate		Monthly earnings	
			Mean	Std. Deviation	Mean	Std. Deviation
Inside Thailand	Construction	115	<b>4.59</b>	1.12	<b>116</b>	38
	Agriculture	27	<b>3.88</b>	1.47	<b>101</b>	42
	Fishing	24	<b>3.80</b>	1.69	<b>114</b>	51
	Housework	22	<b>3.73</b>	1.51	<b>109</b>	44
	Factory	14	<b>4.25</b>	1.47	<b>120</b>	38
	Others	21	<b>4.90</b>	3.73	<b>131</b>	110
	Along Thai border	Agriculture	183	<b>2.79</b>	0.83	<b>70</b>
	Fishing	8	<b>2.89</b>	0.67	<b>169</b>	89

Source: CDRI, 2009, p.43

Finally, a study by the ILO (2010), provides a more comprehensive estimate of transfers of Cambodian migrant workers in Thailand. It estimates that they send cash about 833 bahts (about 27 dollars) per month or a total transfer of about 1.5 billion bahts in 2008 (45 million dollars)<sup>127</sup>. This estimation is similar to the CDRI (30 dollars) and in the range of the estimation of the FDA, which is less than 100 dollars.

### 1.3.3. The Geographical Distribution of Baht Transfers

In the late 1980s and early 1990s, Cambodian migrant workers in Thailand came exclusively from that Khmer-Thai border provinces such as Koh Kong, Pailin, especially BanteayMeanchey and Battambang. Gradually, workers in other provinces, mainly rural, also immigrated to Thailand to look for work. The main reason for these migrations are the result of poverty, lack of employment, deprivation of land, debt and natural disasters (Biddulph, 2004).

The destination of these baht transfers is potentially multiple. It is noted that the baht inflow is mainly concentrated in areas with high presence of baht: Banteay Meanchey, Battambang, Pailin, and Koh Kong. These bahts that enter these provinces are in fiduciary form. This is due to transfers that pass through informal systems directly made by migrant workers.

According to the ILO (2009), only 8 percent of Cambodian migrants in Thailand have a bank account. Studies and surveys found that the majority of fund transfers by these migrants were

<sup>125</sup> The revenues of workers in Thailand are in baht. But to facilitate understanding of the amounts of revenues, CDRI converted them into dollars.

<sup>126</sup> We distinguish two types of immigrant workers: *legal migrants* (legal worker) and *irregular migrants* (undocumented workers).

<sup>127</sup> Cited by the report of MLVT-ILO, 2010, p. 13)

made through informal systems, especially the telephone system<sup>128</sup> (CDRI (2007), FDA (2010) and MLVT-ILO (2010)).

The survey of CDRI (2007) distinguishes two types of Cambodian migrant workers in Thailand: those located within Thailand and those established near the Cambodian border: 85 percent of the first type of workers send their funds through the telephone system, whereas only 7 percent who use the banking system. Regarding the second type of migrant workers located near the Cambodian border, 84 percent of them send the funds through intermediaries of other migrant workers who return to Cambodia and 14 percent use the telephone system (CDRI, 2009, p. 35-36).

Similarly, the survey by the FDA (2010) showed that Cambodian migrant workers in Thailand tend to use the informal system to transfer money to their families; most of them transfer funds through the telephone system (FDA, 2010 p.52). This survey shows that 92.7 percent of these workers indicated that they send money through telephone system and 4.3 percent through the intermediary of Cambodian workers who return home. Similarly, 58.8 percent of the surveyed families of migrant workers in Thailand state that they receive transfers through *broker* (broker is regarded as the same type of telephone system by FDA), 13 percent through the banking system, 10.2 percent through the informal agency in the village and 4 percent through the telephone system. In total, informal transfers represents 87 percent. Transfers through the banking system that the FDA identified imply that migrant workers cross the border between Thailand and Cambodia to make transfers at the Cambodian Commercial Bank (ACLEDA) next to the Thai border. The baht therefore enter Cambodia through this bank. The latter will then transfer these funds in cash (baht) to recipients.

The results of the study of Maltomi (2006) are comparable to those of CDRI (2007) and FDA (2010): transfers of money of Cambodian migrants in Thailand are made up to 61 percent through telephone systems, against 32 percent through intermediaries of private agencies in the villages.

These fund transfers circulating through informal systems thus generate the inflows of baht into Cambodia in cash. In the event that Cambodian workers in Thailand transfer money to families located near the Thai border areas (BanteayMeanchey, Koh Kong, and Pailin), they have the ability to withdraw money in baht, in dollars, or in riel. Generally, it is the baht and the riel, which are the most requested. When baht are sent to remote areas from the border or other provinces, families generally derive from informal transfers agencies of their areas, mainly in dollars or riel even if the baht is the currency of origin. These baht transfers are thus converted before enter into the Cambodian economy. This is due to the unavailability of baht in these areas and the preference of beneficiary families for the dollar or riel, which are the most commonly, used currencies.

In this case, these transactions first passed through transfer agencies in the Thai border areas to be transferred to their counterparts in the areas where the beneficiary family is installed. These transfers are therefore a generally higher cost than other options. The weak structure of the network of informal agencies explains these multiple transfers; the transfer agencies that are not located in the border areas of Thailand have no direct contact with the transfer agencies in Thailand.

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<sup>128</sup> The telephone system is a form of informal transfer (see Table 4-3)

How do Cambodian transfer agencies get the baht transferred by their Thai counterparts? Do they use the banking system?

The cost of fund transfers by international networks of banking systems are high, especially since it is mostly in small amounts. Informal transfer agencies in Thailand and Cambodia are not able to support these prices<sup>129</sup>. Moreover, these transfer agencies do not opt either for the physical transport; the cost of transport and especially insecurity prevent this solution. The chosen solution to minimize intermediary costs by the agencies is as follows:

The Cambodian informal transfer agencies open a bank account in a Thai commercial bank which is located near the Cambodian border<sup>130</sup>. A typical operation of fund transfers of baht from Thailand to Cambodia (in the border areas with Thailand) then implies that the funds are transferred from the Thai bank account of Thai transfer agencies to the bank account in Thailand of Cambodian informal transfer agencies. The latter physically cross the border, usually in late morning to retrieve bahts from their bank.

Moreover, it is interesting to note that to reduce the cost of transfers, migrant workers who want to send money to their families, usually collect their funds together to send in a single operation. Thus the Thai agencies play a role both funds collectors and transfers to the Cambodian agencies for the same operation.

**Table 4-4: Operation of fund transfers by the telephone system**

When Cambodian migrant workers in Thailand choose the type of Thai informal agencies to send money to their families in Cambodia, these agencies contact via phone or fax, their Cambodian counterparts to carry out transfer operations of bahts. Once Cambodian transfer agencies received these commands of transfers, they telephone to destined beneficiaries to alert recipients to get the transferred money. Beneficiaries may well get the money the same day (even within a few hours). For some large transactions, Cambodian transfer agencies expect the money to be transferred into their account (in a Thai bank) before pouring to the destined beneficiaries. In these cases, clients should wait until tomorrow to pick their money. Similarly, in cases where beneficiaries live far from the Cambodian transfer agencies, the transfer time can be extended from one to two days depending on the areas where the beneficiaries live.

According to our interviews with transfer agencies (Khou, 2011), these agencies may possibly borrow in the banking system to transfer these funds. However, this is not common because those agencies also have their transfer network in Cambodia.

<sup>129</sup> The cost of international transfer per operation represents at least 30-50 dollars in commercial banks in Cambodia.

<sup>130</sup> Based on interviews with transfer agencies in Poi Pet (Banteay Meanchey), a Cambodian could in his absolute presence open a bank account in a commercial bank in Thailand. But they need to be able to declare a commercial activity in Thailand. In practice, there is therefore the Cambodian who established, for example the sellers in the Thai market Rong Kluea market in Thailand who can open a Thai bank account.



**Table 4-5: Interview with a transfer agency in Poi Pet, BanteayMeanchey province, in September 2010**

The managers of a money transfer agency also operates the money exchange for nearly 10 years in Poi Pet district of BanteayMeanchey province.

Her husband is a seller in RongKluea (RK) market in Thailand, near the border.

With this status, he opened a bank account in a Thai commercial bank near the RK market so that his wife could perform transfer operations of bahts with Thai transfer agencies. She has had contacts with some transfer agencies in Thailand for several years.

The transfer operation begins with a call of the transfer agencies in Thailand. When receiving a phone call to transfer money, she noted the identity of the recipient (name, ID number, phone number etc.) and the amount of transfer. She has connections with several transfer agencies in the areas of BanteayMeanchey, Battambang, and Siem Reap.

When the clients live near Poi Pet, she phones them so they can get the transferred money. When clients live away from Poi Pet, but in an area where she has a contact, it can re-transfer the money to the nearest agency of the recipient.

If the beneficiary family lives in an area where she has no connection, she pays money to the transfer agencies with which she maintains a business relationship in Phnom Penh; these agencies have networks across the country. In general, she does not send baht, but dollars or riels to Phnom Penh to compensate for transfer operations. The exchange rate she uses is the rate of Bloomberg.

Regarding the use of funds, families of migrant workers mainly use the additional revenue to pay for purchases of basic goods such as food expenses, health expenses and debt repayment. A small proportion of the transfers are devoted to investment expenses such as the purchase of agricultural machinery and equipment or the creation of small business (FDA, 2010, p.13). Indeed, these funds often constitute the principal source of their revenues (MLVT-ILO, 2010, p.13).

Therefore, the baht will continue to flow into the Khmer-Thai border provinces by this channel as the number of Cambodian migrant workers in Thailand will continue to grow.

## Section II: Commercial Activities

### 2.1. Revenues of Garment Sector

Because of exclusively export-oriented production, the garment sector is also a sector generating revenues in foreign currencies (dollars) for the population. This sector has grown rapidly since the mid-1990s. Its development can be explained by both internal and external factors. With regard to internal factors, the abundance of cheap labor and the investment climate created by the State have attracted investors. The main external factor that promotes the garment industry is the exemption of custom taxes granted by the United States and Europe which are the two main export destinations of Cambodian garment<sup>131</sup>. In 1992, a year after the Paris Peace Agreements, the U.S. lifted the economic blockade in Cambodia to help the country rebuild and redevelop its economic base by opening up to the outside (Report of the Ministry of Commerce, 2002). In 1996, Cambodia was granted the status of *Most Favored Nation (MFN)* by the United States, which attracted a lot of FDI in the garment industry (Hatsukano, 2005)<sup>132</sup>. This industry slowed in the early 2000s due to the expiration of its *GSP* status offered by the United States and Europe. With accession to the World Trade Organization in 2004, increased exports in the garment industry fell. But under the *Multi-Fibre Arrangement on Textile and Clothing (MFA/ATC)* of the WTO, exports to the U.S. and European markets are limited by quotas and controlled by product and by country, which ultimately favored Cambodian exports<sup>133</sup> (Natsuda, Gota, and Thoburn, 2009, p.2).

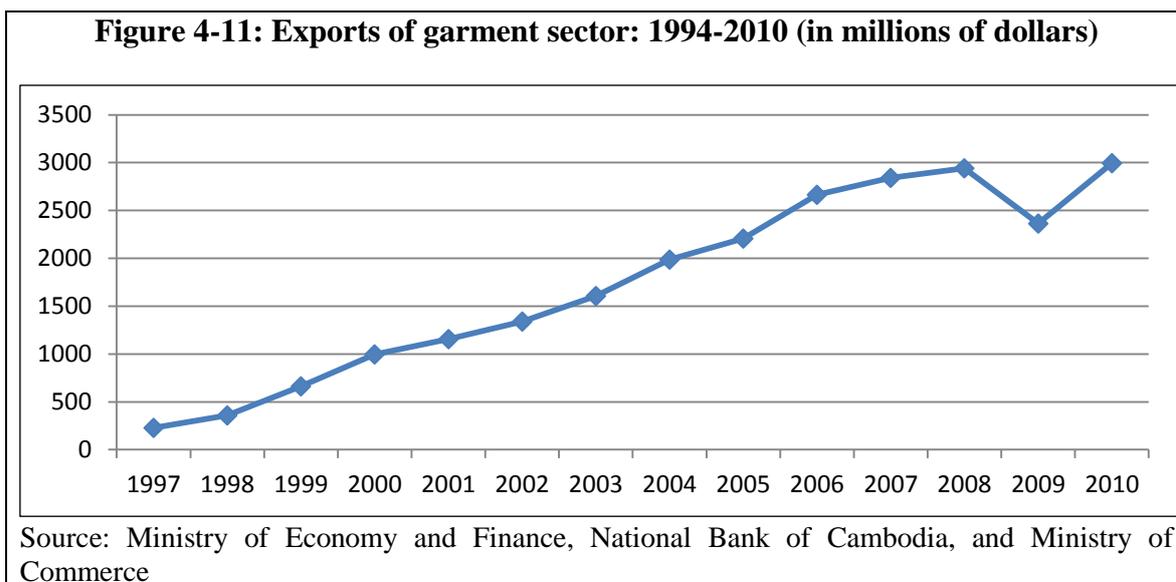
Between 2006 and 2010, export revenues from the garment sector represented about 29 percent of GDP. This sector, which had only 20 factories in 1995, was composed in the late 2000s to nearly 300 factories. Most factory owners are foreign investors, 70 percent from Taiwan, Hong Kong, mainland China or Korea (USAID, 2006, p. 15). Prior to 2000, the annual export of the garment sector was less than 1 billion dollars but reached 3 billion dollars in 2010.

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<sup>131</sup> 2/3 of garment exports are to the United States and the rest are to Europe (ADB, 2004 p.iv)

<sup>132</sup> Hatsukano Naomi 2005, "The current status of Cambodia Industry"

<sup>133</sup> Before 2004, the Cambodian garment exports consisted not only of finished products manufactured in Cambodia, but also finished products that the factories in this sector imports from abroad. This therefore limits the actual exports of products manufactured in Cambodia. The consequence of the introduction of *Multi-Fibre Arrangement on Textile and Clothing (MFA/ATC)* by the WTO is the end of imports of finished products manufactured outside of Cambodia and the incentive for FDI to enter Cambodia to make and export finished Cambodian products.



### 2.1.1. Foreign Currency Inflow in Garment Sector

In parallel to these revenues, companies must also pay expenses that are set in dollars. Almost all materials are imported; they represent a significant proportion of expense. So this is not the entire sector activity that benefits the Cambodian economy, beyond the payment of wages, payment of taxes and other current operating expenses (electricity, water etc.). In this intensive sector of work, remuneration payroll is predominant. Thus, the amount of wages paid by this sector can therefore allow us to measure the importance of this inflow of dollars on the circulation of foreign currencies in Cambodia.

The development of the garment sector has been accompanied by an increase in the number of employees in this sector. In 1995, the garment industry employed 18,700 people; in 2010, 320,000 people were paid by the sector, which represents 5 percent of the labor force (World Bank, 2011). Garment factories are mainly concentrated in Phnom Penh and its periphery. The majority of employees come from rural areas, particularly the provinces of Prey Veng, Kampong Cham, Kandal, Svay Rieng, and Takeo who migrated to Phnom Penh (*Cambodian Research for Development*, 2004; Bargawato, 2005; Kang, Liv, 2009<sup>134</sup>). The minimum monthly wage in the garment sector has been recently upgraded as a result of demands from workers, from 50 dollars per month in 2000 to 65 dollars in 2010<sup>135</sup>. Various income surveys of employees in the garment sector show that the average salary<sup>136</sup> per month varies between 70 and 120 dollars per month.

**Table 4-6: Estimated average monthly wage in the garment sector by various sources**

<sup>134</sup> - The survey of *Cambodian Research for Development* showed that most employees in the clothing sector come from Prey Veng, Kampong Cham, Kandal, and Takeo.

- The vast majority of employees in the garment sector are girls leaving their poor villages to work in Phnom Pehn, Bargawi, 2005, p. 9.

- According to the survey conducted by Kang and Liv, 2009, in 47 factories in Phnom Penh and surrounding areas, 96 percent of employees come from Kampong Cham, Prey Veng, SvayRieng, and Takeo.

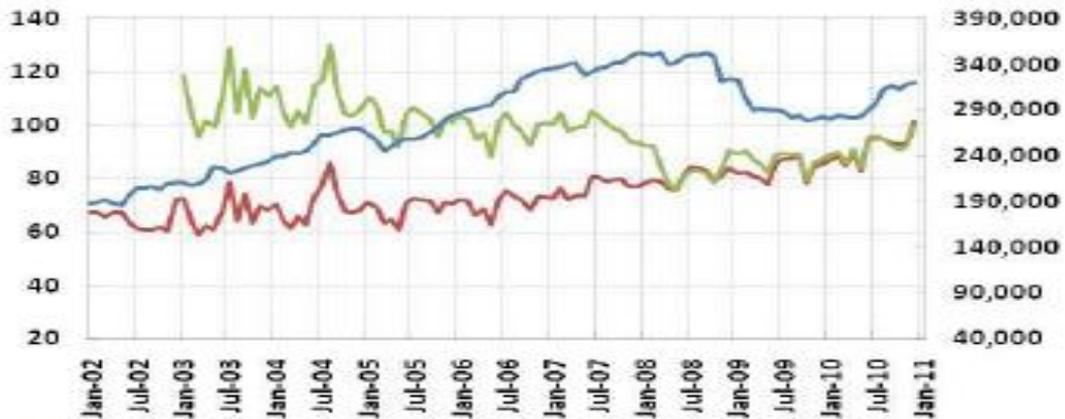
<sup>135</sup> Circulars of the Ministry of Labor and Training, dated 18 July 2000 and 9 July 2010 on the minimum wage in the garment sector.

<sup>136</sup> This salary includes base salary and any kind of remuneration (seniority premium, specialization premium, various bonuses, overtime, etc.).

Average monthly wage	Sources
91 dollars	Survey of World Bank, 2011, p. 12
70-100 dollars	Natsuda, Goto, and Thoburn, 2009, p. 19
80-120 dollars	Survey of USAID, 2006, p. 16
79 dollars	Survey of Kang and Liv, 2009, p. 6

In 2010, the World Bank (Annual Report 2011, p. 12) estimates that the wages paid to 320,000 employees in the garment sector represents a total of 328 million dollars, or 11 percent of total export revenues from this sector. According to the IMF, 55 to 65 percent of export revenues from the garment sector are used for the purchase of production equipment. We estimate that the Cambodian economy also benefits from this sector in the form of taxes, expenses on electricity and water and various expenses (foreign staffs, corruption etc.), or about 5 percent of incomes (138 million dollars). The average annual amount of wages paid by the garment factories was 328.2 million dollars between 2006 and 2010.

**Figure 4-12: Number of jobs offered by the garment sector (right) and paid wages (left, in USD)**



- the red curve represents the minimum monthly wage of the workers (scale on the left side)
- the blue curve represents the number of job in the sector (scale on the right side)
- the green curve represents the actual wage of the workers (index 2006 = 100) (scale on the left side)

Source: World Bank, Cambodia: Recent Economic Development, Seventh edition, 2011, p. 12

### 2.1.2. Distribution of Garment Sector Incomes

Much of the workers' revenues are absorbed by expenses on site in Phnom Penh, and the rest is sent to families in the province. The survey conducted by the Asian Development Bank (ADB) shows that about 90 percent of workers send part of their wages to their families (ADB, 2004, p. 60). Interviewing 353 employees of 47 garment factories in Phnom Penh and its periphery, Kang and Liv (2009) found that workers usually divide their revenue into two types of expenses: onsite expenses which represents about 80 percent of their revenue (57 dollars by taking an average basic salary of 79 dollars per month) and shipments to the family, which represent approximately 20 percent (15 dollars). This estimate corresponds to the range

estimated by the BAB (2004)<sup>137</sup>, but is smaller than the *Business Issue Bulletin* (2009), which is between 20 and 30 dollars per month<sup>138</sup>.

According to the survey of Kang and Liv (2009), employees from Phnom Penh represent only 4.2 percent of the total employment in the sector, while those of Kampong Cham represent 21.2% of staffs and those of Prey Veng, 21%, SvayRieng 13.9%, Takeo 9.9%, Kandal 9.6%, Kampong Thom 5.7%, Kampong Speu 4.5% and those of other provinces 10% (Kang and Liv, 2009, p.13). Assuming that this distribution represents the entire garment industry and it remained the same for the period of 2006-2010, we can estimate the average amount of wages paid by the industry and therefore deduce the inflow of dollars that feeds in this way the different provinces of Cambodia. If the proportion of fund transfer by the workers to their families represent 20 percent of their revenues, the amount of this shipment is 20% of 328.4 million dollars (average amount of wages paid by the garment factories between 2002 and 2010), or 65.7 million dollars. These 65.7 million dollars is allocated to each province of origin of employees.

**Table 4-7: Estimated redistribution of wage obtained from the garment sector**

	In percentage	Estimation* (in million \$)
Average wages of the workers (2006-2010)	100%	328.4
Expenses on site (in Phnom Penh)	80% of revenue	262.7
Shipment to the family	20% of revenue	65.7
Phnom Penh	4.2% (of 65.7 millions)	2.7
Kampong Cham	21.2% (of 65.7 millions)	13.9
Prey Veng	21% (of 65.7 millions)	13.8
SvayRieng	13.9% (of 65.7 millions)	9.1
Takeo	9.9% (of 65.7 millions)	6.5
Kandal	9.6% (of 65.7 millions)	6.3
Kampong Thom	5.7% (of 65.7 millions)	3.7
Kampong Speu	4.5% (of 65.7 millions)	3.0
Other provinces	10% (of 65.7 millions)	6.6

Source: Survey of Kang and Liv, 2009, p. 13 and \* estimated by the author

We can therefore estimate that the flow of dollars from the garment industry to employees remains in Phnom Penh 80%, share to the province of Kampong Cham 4.2%, Prey Veng 4.1%, SvayRieng 2.8%, Takeo 2%, and Kandal 1.9%. Other provinces represent only 4% of the total. The inflow of dollarsthroughthe garment industry is therefore concentrating in Phnom Penh. Among the poor provinces, Prey Veng, SvayRieng, and Takeo pull out, but each represents less than 5%.

The on-site expense of employees of the textile sector is divided into housing, food, clothing and other expenses. Housing expenses are paid almost entirely in dollars, while expenses of food (as they are generally valued less than a dollar per meal) are paid in riel. Expenses of clothing and other expenses are paid more in dollars than in riels.

<sup>137</sup> In terms of amount, the estimate of Kang and Liv (2009) is equivalent to the estimate of the ADB which is between 10 and 30 dollars per month (ADB, p. 60).

<sup>138</sup> *Business Issue Bulletin* N. 17, June 2009, p. 2. The money is sent by the workers to their families in various ways: through commercial banks (especially AcledaBank which has many rural branches in rural areas), through the micro-finance institutions, through *money sender* or through intermediary of parents or friends.

## 2.2. Income from the Tourism Sector

### 2.2.1. Inflow of Foreign Currencies from Tourism

Benefiting from the international fame of AngkorWat, political and macroeconomic stability and promotion policies of the Government<sup>139</sup>, the tourism sector has been significantly developed, especially during the mid-1990s. The number of international tourists in Cambodia has been increasing since then (MFIs, Selected Issues, 2000, p.8). Tourism incomes increased gradually since 1992. This sector generated only 100 million dollars in 1995, but tripled in 2003 to 347 million dollars. Since 2004, tourism incomes rose sharply and exceeded one billion dollars in 2006 before reaching 1.786 billion dollars in 2010, or 15.7% of GDP. Tourism is one of the four pillars of economic growth followed by the construction sector, FDI and the garment industry.

Between 2000 and 2010, the average annual income from tourism was 1,058 million dollars, or 13 percent of GDP. Despite this development, according to the study conducted by FIAS (2005)<sup>140</sup> “the effect of tourism on the economy, the population has not really benefited the majority of tourism incomes. Indeed, products and services in Cambodia have not yet met the needs and standards of the tourism industry” (FIAS, 2005, p.10). In large hotels, 95% of food products are then imported from Vietnam and Thailand. In addition, the country does not have airline companies that can operate in this sector. An airline company created in 2009 by a joint-venture with Vietnam currently only serves flights between Phnom Penh, Siem Reap and two destinations in Vietnam.

In addition, most of the expenses related to the tourism sector are linked to the hotel (35%) which then pays its staff in dollars. Due to the low quality of human resources in Cambodia in hotel management, most managers are foreigners; the Cambodian staff occupies less important positions, generally low-skilled workers.

According to the World Bank (2011), Cambodia has not yet been able to diversify its tourist flows. Most of the visitors are regional. 72 percent of international arrivals come from East Asia and the Pacific: Vietnam, South Korea, China, Japan; 19% and 8% of tourists are European and American (WB, 2011, p. 8).

The upward trend in tourism income has not been accompanied by an evolution of the average expense of tourists. The latter has even declined gradually. In 2001, the average tourist spending was 630 dollars for the duration of their stay; it decreased to 566 dollars in 2006 due to the development of the tourist offer from Cambodia to mass tourism with lower value-added and a growing inflow of regional and Asian visitors (Letter of Cambodia, 2007, p. 11). In 2010, the average expense per tourist was 425 dollars.

The IMF (2003) estimated that up to 75 percent of every dollar spent by tourists return to Thailand and Vietnam by imports of vegetables, fruits, handicrafts, stationery, furniture etc. However, the situation between 2006 and 2010 improved; therefore we estimate that half

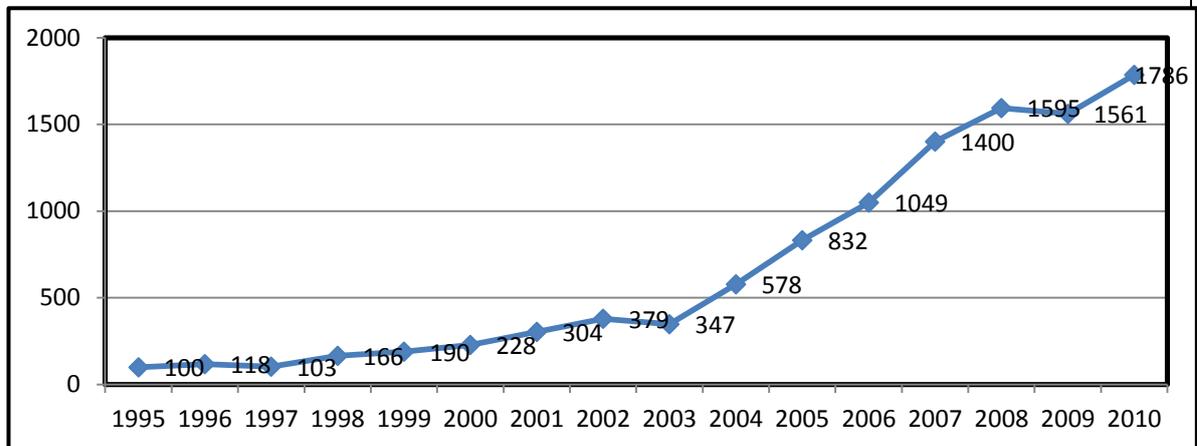
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<sup>139</sup> The Government took steps to develop the tourism sector in the mid-1990s. The Ministry of Tourism was established by Royal Decree of 24 January 1996. In 1997, the Government liberalized flights operated by foreign companies, allowing direct flights from China, Singapore, Thailand, Vietnam and Korea to Siem Reap (the “*Open Sky*” policy) to attract tourists in Cambodia.

<sup>140</sup> FIAS: Foreign Investment Advisory Services is a branch of the World Bank Group. Report “*Corporate responsibility and the tourism sector in Cambodia*”, 2005.

of the revenues of the tourism industry remains in the country. The amount of foreign currencies from this industry is therefore estimated at an annual average of 739 million dollars between 2006 and 2010.

**Figure 4-13: Incomes from the tourism sector**



Source: Ministry of Economy and Finance, National Bank of Cambodia, and Ministry of Tourism

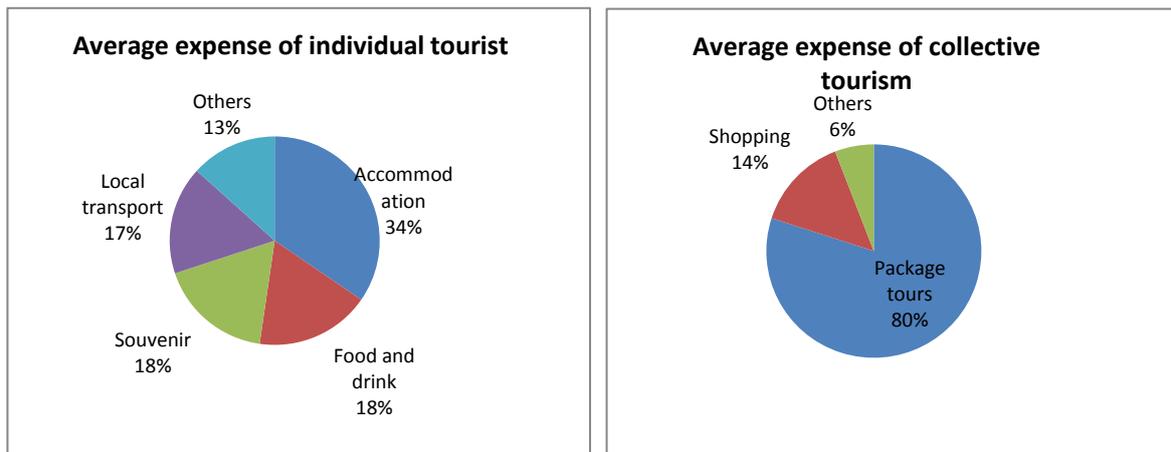
### 2.2.2. Distribution of Incomes from Tourism

The growth of tourism incomes results in a high inflow of foreign currencies into Cambodia, mainly in dollars.

We can distinguish two types of international tourists coming to Cambodia: individual tourism and collective tourism (in group). According to the report by the Ministry of Tourism (2009), an individual tourist spends an average of 425.67 dollars per visit. They spend 35% (148.28 dollars) of these expenses for accommodation, 17.8% (75.88 dollars) for food and drink, 17.8% (75.59 dollars) for souvenirs, 16.8% (71.90 dollars) to local transport, and 13.4% (57.03 dollars) for various expenses such as guides, site access costs, etc.

Collective tourism benefits the Cambodian population less firstly, because the length of stay is much shorter, and secondly local spending on goods, hospitality, services and leisure are low. A typical Korean or Chinese tourist, who spends one or two nights in Siem Reap, in an environment organized by operators in their own country, usually spends much less than a tourist who takes the time to visit the monuments in 4 or 5 days (Gardère and Schwerer, 2006). The average expense of these group visits is around 1,135.93 dollars. Expenses related to the remuneration package (“package tours”) represents up to 80 percent of total spending, or 908.65 dollars, followed by expenses on souvenirs 14 percent (160.64 dollars) and other expenses 5.6 percent (66.64 dollars).

**Figure 4-14: Distribution of tourists' expense in 2009**



Source: Ministry of Tourism, Annual statistic report 2009

Economic actors who benefit directly from tourism are:

- Hospitality, which absorbs 35% of turnover related to tourism. Hotel payments are generally made in dollar. The turnover of the sector is divided into paying employee wages and other expenses in dollars.
- Restaurants welcoming foreigners and restaurants where Cambodians receive 18% of tourism spending. Prices are mainly displayed in dollars for tourists.
- The local transport companies (airlines, buses, taxis, boats) and individuals providing local transport services destined to tourists (taxis, tuk-tuk and moto-dop), or 17% of expenses. Their prices are usually denominated in dollars.
- Traders of souvenirs, or 18% of expenses. Prices of souvenirs are denominated in dollars, but actual payments are made in different currencies (THB, VND, EUR, JPY, CHR etc.)
- Other actors who receive only 13% of tourism are:
  - The State, which receives mainly tourism income in dollars, by payment of entrance visas and airport taxes, or 45 dollars per tourist. It also receives a portion of the income in the form of site access<sup>141</sup>. The costs of site access is defined and paid in dollars.
  - Travel agencies and tour operators<sup>142</sup> receive their revenues mainly in dollars. The number of the agencies and operators were close 500 in 2009.
  - Tourist guides: There are about 352 tourist guides who have a license in Phnom Penh and nearly 3,000 in Siem Reap. Their revenues are largely in dollars. The payment of a tourist guide per day varies from 20 to 50 dollars per day, depending on the language.

### 2.2.3. Geographic Concentration of Tourism

The geographical concentration of the tourism sector is high, due to infrastructure and especially the concentration of tourist sites. Siem Reap, Phnom Penh, and Sihanoukville represents more than 90 percent of the areas that attract tourists visiting Cambodia (Ministry of Tourism, 2011)<sup>143</sup>. Foreign currency flows of tourism therefore primarily enter in these three

<sup>141</sup> The Government granted to a private company, Sokimex, to collect the rights to enter of site access of the temples of Angkor. The prices are in dollar, or 20 dollars per day and per tourist.

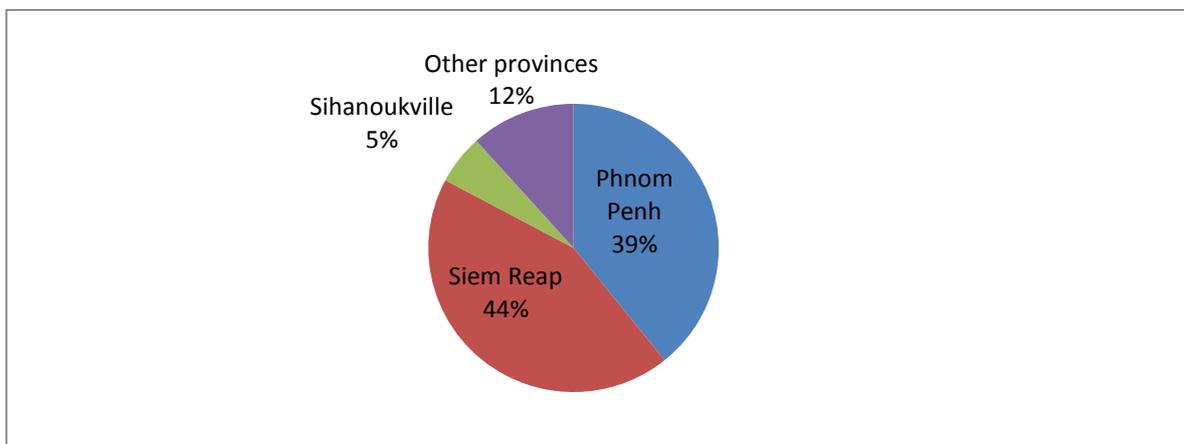
<sup>142</sup> In 1996, there were 116 travel agencies and tour operators in Cambodia. This figure rose to 485 in 2009. (Ministry of Tourism, 2010)

<sup>143</sup> Statistical Report on Tourism, May 2011.

provinces, especially Siem Reap and Phnom Penh which represents 83 percent of tourist destinations.

Siem Reap, the ancient capital of the Khmer Empire between the 9<sup>th</sup> and 14<sup>th</sup> century, has hundreds of archaeological temples which are among the largest in the world. Recognized as a world heritage site by UNESCO, it is the first tourist attraction stop in Cambodia. Siem Reap hosted 44 percent of tourists visiting Cambodia between 2008 and 2009 (Ministry of Tourism, 2010). Phnom Penh has become the second tourist destination and no longer a brief stop for visitors coming to Cambodia. Between 2008 and 2009, 39 percent of tourists visited there. After Siem Reap and Phnom Penh, the third province with the highest number of tourists is Sihanoukville, but it represents only 5 percent of tourists visiting Cambodia between 2008 and 2009.

**Figure 4-15: Average provincial distribution of tourist stays between 2008 et 2009**



Source: Ministry of Tourism, annual report 2008 and 2009

**Table 4-8: How tourists pay for souvenirs in Siem Reap**

During our survey on the use of currencies in Cambodia (Khou, 2010), we detected an interesting behavior of foreign currency use by tourists of different nationalities.

Vietnamese, Korean, Japanese, Chinese and European tourists tend to use their own currencies and dollars in Siem Reap.

- Vietnamese tourists who represent the largest nationality of tourists in Cambodia between 2008 and 2010 settle their shopping in dollars 70% and then Vietnamese dong 30%.
- Japanese tourists, was second in terms of volume of arrival between 2004 and 2007 and third in 2008 and 2010. They pay in dollars (60%) and Japanese yen (40%).
- Korean tourists who were the first between 2004-2008 and second in 2010 use dollars 50% and Korean won 50%.
- Chinese tourists who are regularly the fifth nationality to come to Cambodia 40% use dollars to settle their payments, riel 30% and Chinese renminbi 30%.
- Thai tourists who are ranked 7<sup>th</sup> and 8<sup>th</sup> pay nearly 100% in baht.
- And finally the Europeans pay 40% of their shopping in dollars and 60% in euro.

Siem Reap is a province whose monetary field was dominated by the baht from the early 1980s until the mid-1990s. It also got a small portion of tourism income in baht by payments of Thai

tourists. Now, a northern part of the province, *Kralanh* district, which has a border with the province of Banteay Meanchey, still uses baht in trade transactions of agricultural products, especially rice.

### **2.3. Border Trade**

Cambodia and Thailand shares a border of 800 kilometers. There are 5 points of permanent entries lying in the provinces of Banteay Meanchey, Oudor Mean Chey, Koh Kong, Pailin, and Battambang. Border trade represents more than half of the total trade between the two countries (Sompop Manarungsan, 2010). These trading activities are an important source of baht for farmers along border areas. Moreover, in the Vietnamese border areas, the Vietnamese dong also circulates, although to a lesser extent by the activities of border trade, particularly in agricultural products.

There are no studies so far that estimates the volume of baht and dong entering through these border trades. This further limits our estimates of volumes entering of each currency.

#### **2.3.1. Khmer-Thai Border Trades**

The history of trade between Cambodia and Thailand started since the early 1960s. Before that date, Cambodia being under the French Protectorate (1863-1953), relied mainly on trade with the countries of French Indochina and metropolitan France. The governments of Cambodia and Thailand opened their doors, initiated their trade in the early 1960s (French, 2002). These trades started informally by the inhabitants of border areas of both countries (CDRI, 2005, p. 31). They then reduced it following the policy of strengthening border control by the Thai government in the late 1960s. The people of these two countries resumed trade in the early 1980s following the liberation of Cambodia and following the end of the genocidal regime of Pol Pot. Trading gradually intensified from the mid-1980s, the starting date of Cambodian economic reforms. Yet they remained largely informal. Formal trade only began in the early 1990s.

Sales of agricultural products and fishery products by Cambodian farmers or traders are an important source of baht along the Thai border provinces. According to interviews with farmers and traders in the coastal provinces (Koh Kong and Sihanoukville), where the fishing industry is an important source of revenues for the population, the majority of fishermen and traders say that most fishery products are sold to Thailand, especially in Koh Kong. In this province, which has not yet become a major tourist province, about 90 percent of the catch is sold to Thailand<sup>144</sup>. In Sihanoukville, which is a tourist town and therefore has a larger domestic market, 50 to 60 percent of fishing, especially shrimp and crabs are sold to Thailand; the rest is sold locally or transported to the capital. The baht is the only payment currency for these transactions. There are at least three reasons that lead fishermen and traders in this sector to sell their products to Thailand. On one hand, there is a significant demand for Thailand of fishery products in these coastal areas; Thai traders offer higher prices than Cambodians. On the other hand, Thai markets where fishery products are traded are closer to the fishing grounds of Cambodian communities than Cambodian markets. Fishermen and traders find Thai buyers easier to deal with than Cambodians. In addition, Thai buyers themselves come there to buy the fishery products and pay in baht. Finally, some Cambodian fishermen are indebted to Thailand for their financial investments and operating expenses such as purchases

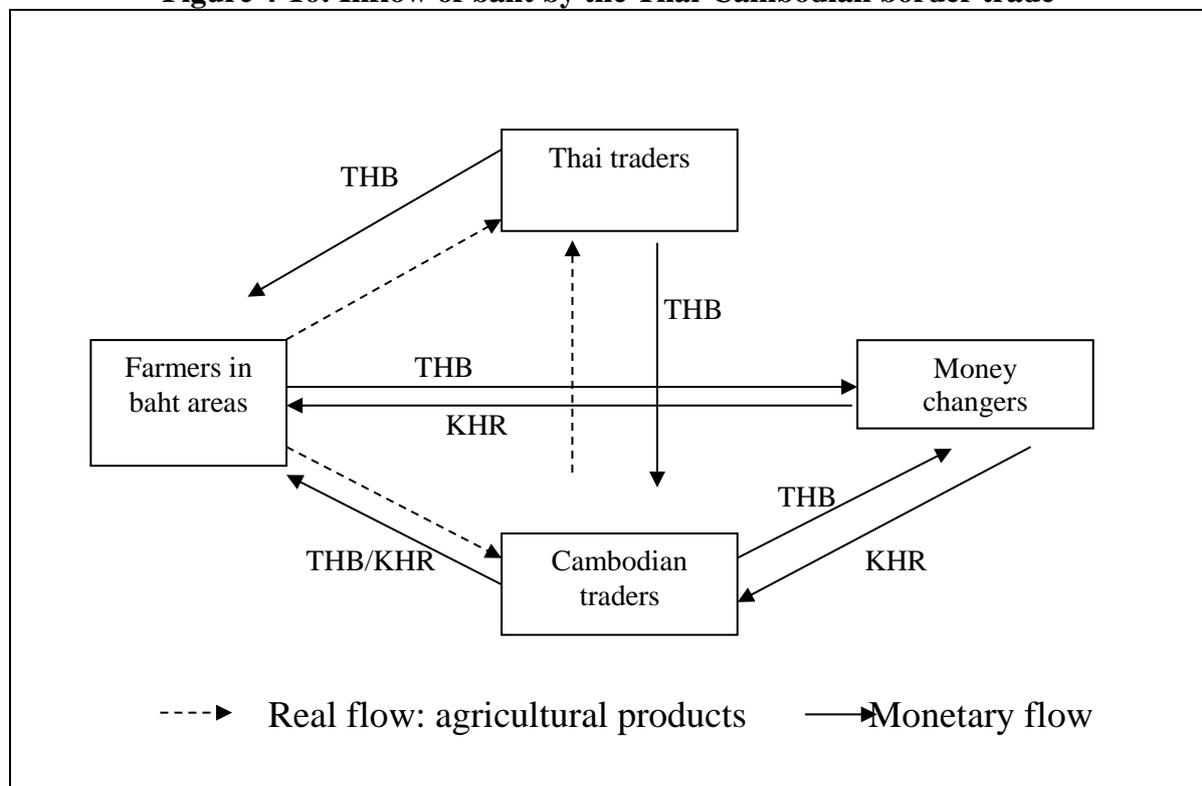
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<sup>144</sup> Khou, 2010, interviews with fishermen of fishing communes in Koh Kong.

of fishing equipment or gasoline. They may resort to borrowing more easily from these Thai traders. They are therefore forced to sell their catch directly to their lenders to repay their debts.

The inhabitants of the provinces (Battambang, Pailin, and BanteayMeanchey) lying near the land border between Cambodia and Thailand (and where roads exist), also indicate that the circulation of baht can be generated by sales of agricultural products (mainly rice and corn) to Thai or Cambodian intermediaries who negotiate with the Thai<sup>145</sup>. In the 1980s and 1990s, the economies of these provinces maintained strong ties with Thailand, by default, the infrastructure connecting these provinces to the Cambodian capital and other provinces are underdeveloped. Thai markets are closer and offer relatively high prices. But we also observe that from the 2000s through the improvement of infrastructure, border provinces of Thailand are becoming increasingly connected to Phnom Penh and trade with the capital is increasing gradually, especially from the mid-2000s when Cambodia and Thailand had border disputes<sup>146</sup>.

**Figure 4-16: Inflow of baht by the Thai-Cambodian border trade**



Beyond baht income obtained by the trade of agricultural products, farmers near the Thai border can also generate baht revenues from various activities. In Poi Pet (a district of Banteay Meanchey province), the manufacture of garments for the Thai market provides jobs and baht revenues for Cambodian farmers and traders. These activities started since the early 1980s. Cambodian intermediaries or producers buy fabrics at Rong Klear market in Thailand and import to Poi Pet for the manufacturing of clothing.

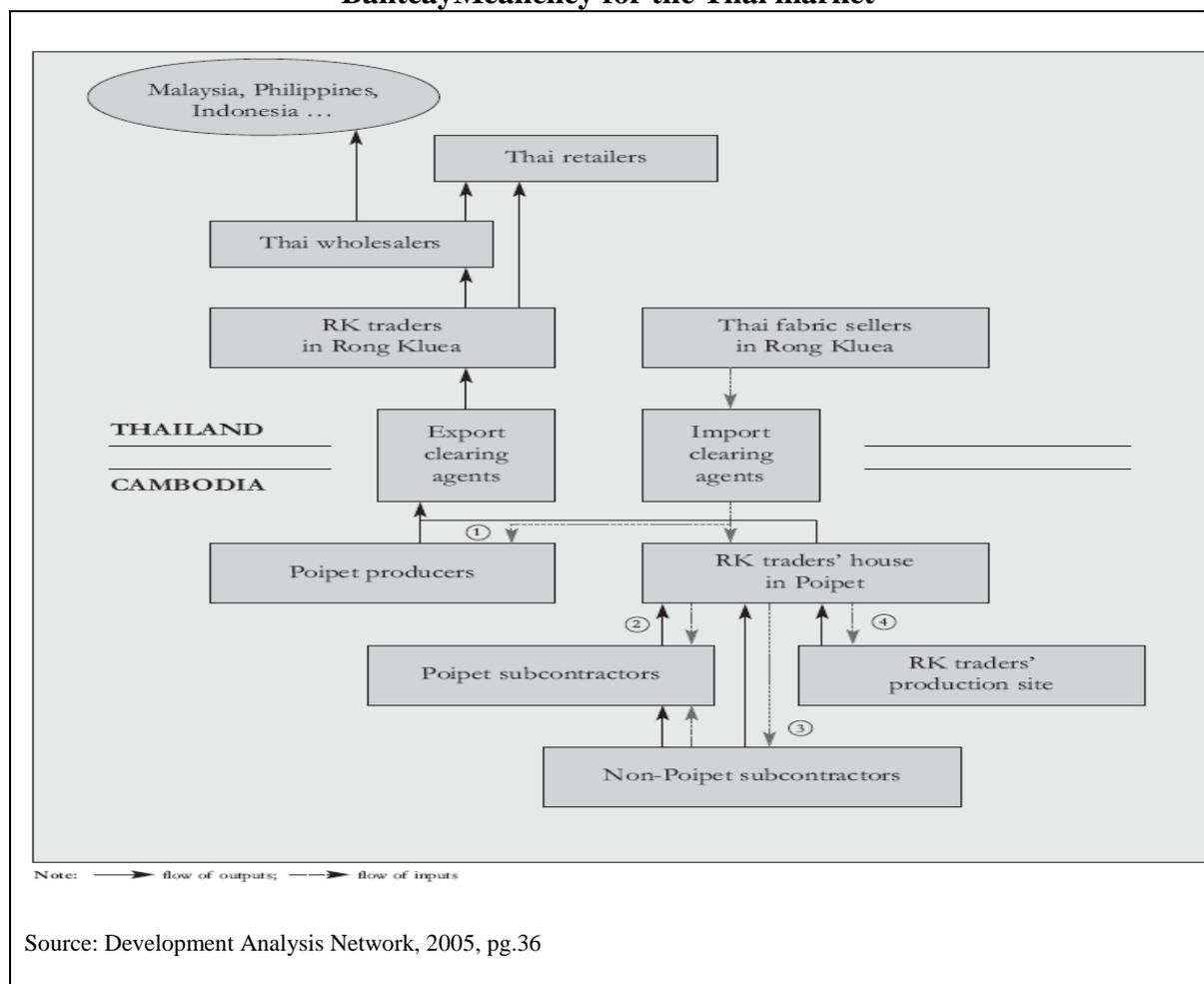
<sup>145</sup> Khou, 2010, interviews with farmers in the province of Battambang, Pailin, and Banteay Meanchey

<sup>146</sup> These border disputes are not resolved yet. Between 2005 and 2010, some ports border between the two countries had been closed several times. Since the end of 2011, they are all active again.

According to the Development Analysis Network survey (2005)<sup>147</sup>, Cambodian traders at RK use their own site of production to make clothing. They play the role of distributors of fabric to subcontractors of Poi Pet or elsewhere and collect the finished products for sale in RK. There are also small businesses, employing 10 to 20 employees, who buy fabrics at RK and sell finished products. Thai traders buy finished products at RK settling in baht.

Clothing production for the Thai market provides Cambodian wholesale traders at RK an estimated revenue of between 63,700 and 207,300 baht per month, or between 2,082 and 6,778 dollars, and Cambodian retail traders at RK between 29,800 and 101,600 baht per month, or between 974 and 2,855 dollars<sup>148</sup>.

**Figure 4-17: Activities circuit of clothing production by the inhabitants of BanteayMeanchey for the Thai market**



According to Sompop Manurungsan (2011), border trade between Cambodia and Thailand represent three-quarters of total trade from 2005 to 2008 and exports from Cambodia to Thailand represent 3.5% of total trade during this period. We can deduce the volume and value of border exports (see table below). We estimate that the volume of baht entering through border exports at 24.5 million dollars in 2005 and goes to 65.5 million dollars in

<sup>147</sup> The authors interviewed traders at RK, transport agencies and customs agencies in Poi Pet border to investigate the activities of cross-border trade between Cambodians and Thais.

<sup>148</sup> Exchange rate of the *Bank of Thailand*, 26 October 2011, 1 USD = 30.5827 THB, <http://www.bot.or.th/english/Pages/BOTDefault.aspx>

2008. Keeping the growth rate of border exports between 2005 and 2008, we believe that the average inflow of baht from border exports during the period of 2006-2010 is equal to 68.8 million dollars.

**Table 4-9: The flow of baht of border trades from 2005 to 2008**

In millionbahts	2005	2006	2007	2008	Average
Exports	1,269.7	1,322.6	1,688.6	2,999.2	1,820.0
Imports	36,801.7	47,003	46,709.1	67,025.6	49,384.9
Total trades	38,071	48,326	48,389	70,033	51,204.8
Border trades	29,474	34,597	34,930	50,299	37,325.0
Border trades and total trade ratio	79.50%	71.60%	72.20%	71.80%	73.8%
Exports and total trades ratio	3.3%	2.7%	3.5%	4.3%	3.5%
Bahts entering from border exports *	983.0	946.9	1,218.9	2,154.1	1,291.8
Bahts entering from border exports (in million dollars)*	24.5	24.6	36.8	65.5	37.9

Source: Sompop Manrungsa (2011)

\* Calculated and estimation by the author

	2005	2006	2007	2008	2009** (A)	2010** (B)	Average 2006-2010
Bahtsentering from border exports (in million dollars)	24.5	24.6	36.8	65.5	91	12.2	68.8

\*\* estimation based on the formulas below:

$$A = [(65.5/24.5)^{1/(4-1)}]-1 \quad \text{and} \quad B = [(A/24.5)^{1/(5-1)}]-1$$

### 2.3.2. Khmer-Vietnamese border trades

Cambodia shares its longest border with Vietnam. Seven provinces have a borderland, “road” with Vietnam: Kandal, Kampot, Takeo, Prey Veng and Svay Rieng, Ratanakiri, and Mondulkiri. Yet the Vietnamese dong does not circulate within these provinces with the same intensity as the baht in the west of the country. There are only in some areas, very close to the border, that the dong is relatively dominant. On one hand some border provinces with Vietnam are not geographically very distant from the capital, so they can supply products in Phnom Penh where products are offered from all provinces of the country and abroad. On the other hand, only a minority of Cambodian farmers get dong revenues. There are virtually no Cambodian migrant workers in Vietnam who transfer funds in dong to their families, as is the case in Thailand.

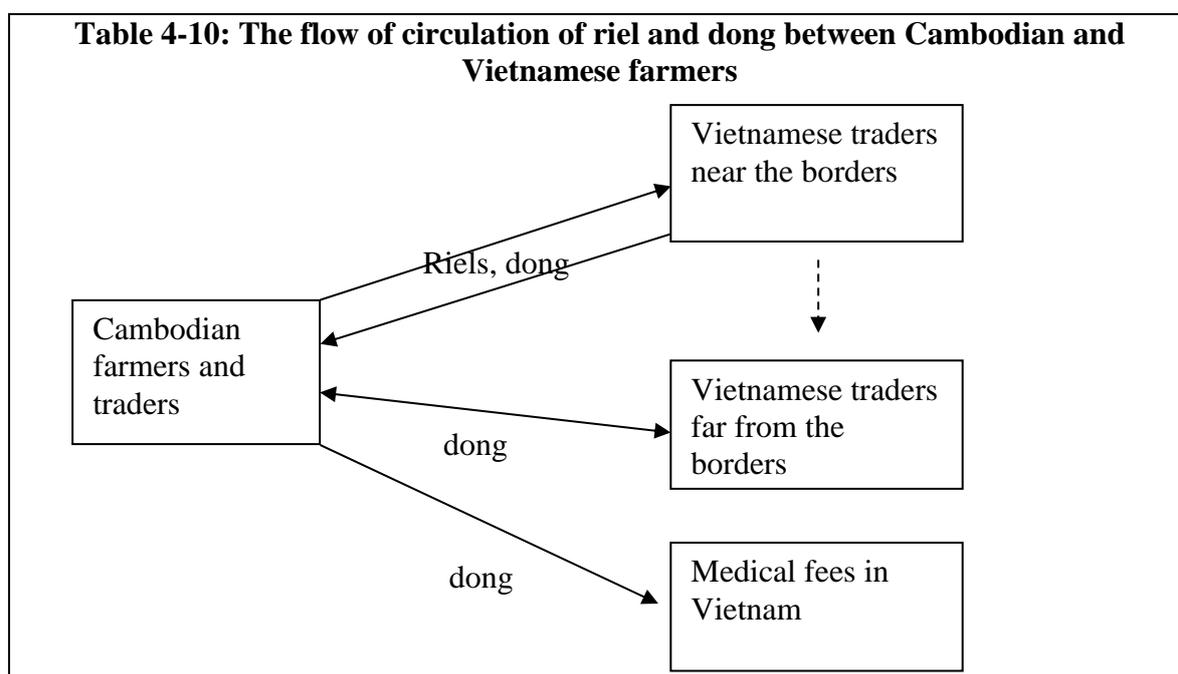
The survey on the socio-economic impact of Khmer-Vietnamese border trade in border areas with Vietnam (CDRI, 2005, pg. 64)<sup>149</sup> shows that economic activities that benefit most Cambodian farmers near the border are trade in agricultural products. Half the population of the *Chantrea* district (of Svay Rieng province), declare that the dong is the main currency used in their Khmer-Vietnamese border trade (CDRI, pg. 64).

<sup>149</sup> CDRI, 2005, the study on Chantrea district of Svay Rieng province.

Another reason that contributes to the fact that dongs circulate less than bahts in Cambodia that the Vietnamese living on the border do not use only dong, but also riel to pay for their purchases to Cambodian farmers. Only traders established within Vietnam pay their purchases of agricultural products fully in dongs to Cambodian farmers. According to surveys conducted by the Statistics Department of the National Bank of Cambodia in 2010 and 2011 on border trade in border ports, Cambodian and Vietnamese farmers and traders installed near the border, jointly use riels and dongs to settle their trade<sup>150</sup>.

Based on direct observation of economic activities in the Khmer-Vietnamese border regions and the estimation of border trade carried out by the Department of Statistics of the NBC (2011), it is probable that it is in the border areas of Svay Rieng that the dongs are most present, as compared to other Khmer-Vietnamese border provinces. Thus, while in the border areas of Kampong Cham agricultural exports to Vietnam are large enough, the riels are used conjunctively to settle these trades by Vietnamese traders. The dongs circulate least in rural border areas of Ratanakiri, Takeo, Mondulkiri, and Kampot<sup>151</sup>.

We also observe that farmers need dongs for different reasons. First, the dong is the currency needed to pay for medical costs in Vietnam. More and more farmers (from Vietnamese border areas, from the capital or from other provinces) choose Vietnam to benefit from medical treatment (Departments of Statistics, NBC, 2011) which is inexpensive and good quality. The dongs are then used by Cambodian traders to import agricultural and consumer products. It is estimated that 70 percent of the demanded vegetables of Cambodians are met by Vietnamese imports (CDRI, 2005).



## 2.4. Other Sources of Foreign Currencies

<sup>150</sup> Reports of surveys on border trades of Department of Statistics, addressed to the Governor of the National Bank of Cambodia, 2010 and 2011.

<sup>151</sup> The amount of exports via Ratanakiri is 9.703 million dollars, via Takeo 7.671 million dollars, via Mondulkiri 2.642 million dollars, and via Kampot 1.428 million dollars; Survey reports on border trade, NBC, 2011.

Foreign currencies may enter through channels other than those discussed above. An inflow source of baht, which is not significant, is the baht income of Cambodian sellers in Rong Kluea market (RK), which is located a few kilometers from the Cambodian border. Initially, the market was on Cambodian territory, but it was moved to Thailand in 1998 for safety reasons. Currently 90 percent of sellers in this market are Cambodian and live in Poi Pet (CDRI, 2005, p. 34).

Activities of casinos also provide foreign currencies (dollars, baht and to a lesser extent dongs). Most casinos are located on the Khmer-Thai borders and Khmer-Vietnamese borders, in the capital and Sihanoukville. The law forbids Cambodians to play in casinos. These are reserved for foreigners. We have no accurate estimate on the flow of foreign currency from casino incomes and thus fall within the Cambodian economy. But these casinos have created many jobs, pay wages in foreign currency and carry out foreign expenses.

According to our interviews with managers of casinos (Khou, 2010), those located near the Khmer-Thai borders (Banteay Meanchey, Battambang, Pailin, and Koh Kong), where almost all the players are Thai, receive incomes in baht. Conversely, casinos located near the Khmer-Vietnamese borders (Kampong Cham, Prey Veng and Svay Rieng, Ratanakiri, Kampot, Kandal, and Takeo) receive incomes in dollars and dongs. Casinos within the country, especially in Phnom Penh, essentially receive incomes in dollars. Casino staff in the Khmer-Thai border said that all expenses of their casinos are in baht, which included staff salaries. In contrast, it finds no payment of dong payroll in casinos near Khmer-Vietnamese borders. They are made in dollars.

**Table 4-11: Currencies of casino incomes**

	Nb of casinos*	Dominant nationality of the clients*	Currency (ies) of incomes**
BanteayMeanchey	11	Thai	baht
Odor Meanchey	2	Thai	baht
Koh Kong	1	Thai	baht
Battambang	2	Thai	dollar and bath
SvayRieng	15	Vietnamese	dollar and dong
Kampong Cham	2	Vietnamese	dollar and dong
Takeo	1	Vietnamese	dollar and dong
Kandal	4	Vietnamese	dollar and dong
Ratanakiri	1	Vietnamese	dollar and dong
Kampot	3	Vietnamese	dollar and dong
Other provinces (especially Phnom Penh, Sihanoukville)			dollar

Source: - \* Statistics Department, 2011, surveys on Khmer-Thai, Khmer-Vietnamese border trades: Report for the Governor of National Bank of Cambodia

- \*\*: Information obtained from Statistics Department of NBC (2011) and the interviews with managers of casinos (2011).

Finally, another source of foreign currency that cannot be overlooked is that of smuggling activities. Given the situation of the rule of law and corruption in Cambodia, (as we discussed in the previous chapter) it seems that these activities are in sources of foreign currency, especially dollars and bahts. In their review of sources of foreign currencies favoring the increase in dollarization, Mourouras and Russel (2000) stated that smuggling activities are non-negligible source of foreign currency, acting both on the supply and demand for foreign currencies in the economy.

## Section III: Trend and Concentration of Foreign Currencies Flow

### 3.1. Trends of Foreign Currencies Inflow

#### 3.1.1. Inflows of dollars

Dollars quickly dominated the monetary field in Cambodia. Experts and researchers agree to conclude that dollarization in Cambodia is not caused by hyperinflation or macroeconomic instability, but seems rather the result in the flood of billions of dollars in the early 1990s and then increasing inflows of dollars (Zamcróczy and Sa, 2001 and 2003; Menon, 1998 and 2008; Kiwon, 2005; Dabadie, 2006; Gardère, 2009).

Dollars enter Cambodia through the following channels: foreign aid, foreign direct investment, exports of garment industry, tourism and transfers from Cambodian expatriate and workers abroad.

- The first channel is foreign aid. Between 2006 and 2010, Cambodia received an average annual of 880 million dollars per year, or 9.1 percent of GDP. Yet the actual dollars coming through this channel is less than this amount because more than 50 percent of the amount of the aid is intended for expense on technical assistance and imports of materials, especially in construction. We estimate that 40 percent of total foreign aid, or 350 million dollars, an annual average, remains actually in Cambodia from 2006 to 2010. According to *Cambodian Rehabilitation and Development Board* (2010), foreign aid under grants form decreased in favor of loans at preferential rates and the total amount of foreign aid continued to increase. This increase was supported by higher loans<sup>152</sup>. This channel therefore continues to promote the increase in dollarization.

- The second inflow channel of dollars is by FDI. They followed almost the same evolution of international aid. Between 2006 and 2010, FDI increased to 700 million dollars per year in annual average, or 7.3% of annual GDP during this period. According to the *Cambodian Investment Board* (2010), this trend will continue in the coming years due to sustained economic growth, an attractive investment climate and significant potential for the Cambodian economy, especially in the agricultural sector.

- Inflow of dollars through salary payments of the garment sector is the third direct inflow channel of dollars in volume. They declined compared to the first half of the 2000s. The amount of dollars entering the Cambodian economy is still well below the total income of the sector; the import of equipment of production representing more than half of income. Revenues from the sector that supply the dollar economy are used for salary payments and some expenses for tax payments, housing, electricity, etc. In the annual average, the wages paid to employees of the garment sector accounted for 328 million dollars between 2006 and 2010 and other expenses are estimated between 5 and 10% of incomes, or about 75 million dollars. This channel directly supplies the Cambodian population in dollars, especially low revenues. According to the estimate by the Ministry of Economy and Finance, the profits of the garment sector will continue to increase in the next three years provided that the economic situation of the United States and Europe improve.

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<sup>152</sup> Some economists believe that the increase in loans is primarily related to projects to exploit hydrocarbon resources which will begin in 2012 in Cambodia.

- The tourism sector is the fourth inflow channel of dollars. It boomed since the third general election in 2003, and generated approximately 1 billion dollars per year between 2002 and 2010, or 13 percent of GDP. However, a relatively smaller portion of these revenues directly benefits the Cambodian economy. This is a sector with potential for the country that can generate foreign currency flow which is increasingly important (Annual Report of the Ministry of Tourism, 2011). Between 2006 and 2010, we estimate that 739 million dollars from the tourism sector are injected into the economy each year.

- Finally, fund transfers from Cambodian migrant workers abroad are an increasingly important source of foreign currencies for the Cambodian economy. Between 2006 and 2010, the amount of these transfers averaged 300 million dollars per year. These transfers lead to an inflow not only in dollars, but also in baht. As estimate by the World Bank (2011), the tendency of these transfers is increasing. It can be also be explained mainly by the increase in the number of Cambodian migrant workers abroad. Assuming that the average amount of transfers in baht during the period of 2006-2010 is 45 million dollars, we conclude that the amount of transfers in dollars and other currencies is 255 million dollars per year.

### **3.1.2. Inflows of bahts**

The baht ranked second in terms of foreign currencies in the monetary space. Channels of baht are few and smaller in volume than those of the dollar. The border trade activities between Cambodian farmers and traders and Thai are the main sources of baht. Proximity and favorable prices offered by Thai traders indicated that the population near the border sells their agricultural products to Thailand. We estimate that the inflow of bahts resulting from these border exports was 38 million dollars per year. Another source of baht constitutes the fund transfers of Cambodian migrant workers in Thailand to their families. As we estimated, the inflow of baht from this source is about 45 million dollars. It is difficult to assess the inflow of foreign currency related to the revenues of casinos and other sources in baht such as smuggling activities.

These inflow channels of baht nevertheless appear to be declining. Indeed, the flow of migrant workers seem to have a downward trend due to, on one hand, the restriction from the Thai authorities on immigration and a decline of Thai employment following a slowdown of growth, and on the other hand the dynamism of the labor market in Cambodia, which absorbs more labor. Similarly, if the border disputes between Cambodia and Thailand are not resolved, the closure of Khmer-Thai border would be a possible, and a factor to the slowdown of border trade and inflows of Cambodian migrant workers in Thailand.

Moreover, according to the Agence Kampuchea Press (AKP) (2011), a Thai company has recently signed a contract for the first time, an investment in the garment sector in Koh Kong. In April 2012, it will operate a garment factory in the free zone of Koh Kong and employ between 2,200 and 2,500 employees. It has plans to open four factories in total in Koh Kong, which would employ 10,000 employees<sup>153</sup>. It is likely that wages will be paid in baht; the baht are already used to pay salaries in casinos, hotels, and restaurants in Koh Kong and in some areas such as Banteay Meanchey and Pailin. If this were the case, the payment of wages in baht of this company will promote circulation of baht in Koh Kong.

### **3.1.3. Inflows of Dongs**

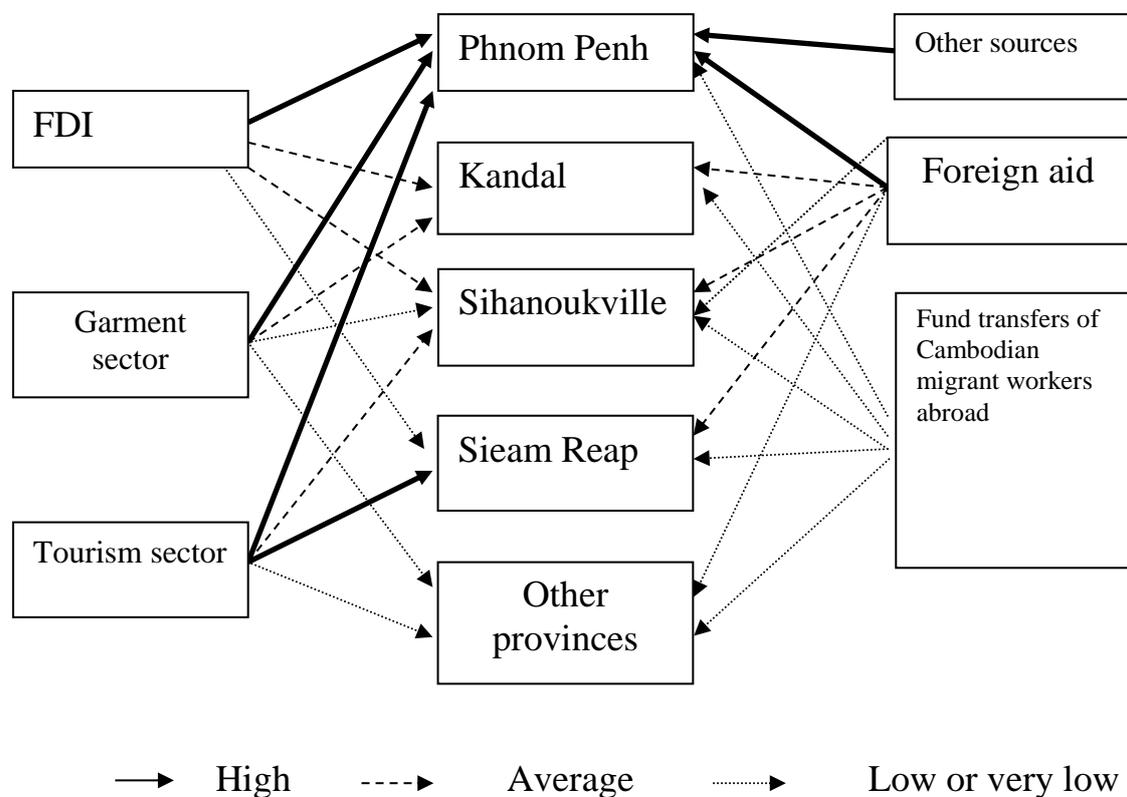
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<sup>153</sup> Dated November 2, 2011, Agence Kampuchea Press (AKP), <http://www.akp.gov.kh>



This concentration can be explained by a very large geographic concentration of the inflow of foreign currencies. The dollar flow usually concentrates in Phnom Penh. The capital benefits from three quarters of the volume of FDI, 39 percent of the tourism sector, 80 percent of salaries of garment sector, a relatively large share of foreign aid and other sources of dollars. The second province in which dollars enter the most is Siem Reap. Tourism is the main source of dollars; about half of tourists coming to Cambodia visit Siem Reap. Kandal and Sihanoukville are also inflow points of dollars. These two provinces benefit from FDI in the garment sector and a substantial part of foreign aid. In addition, Sihanoukville is the third tourist destination after Phnom Penh and Siem Reap. Other provinces receive very little of dollars.

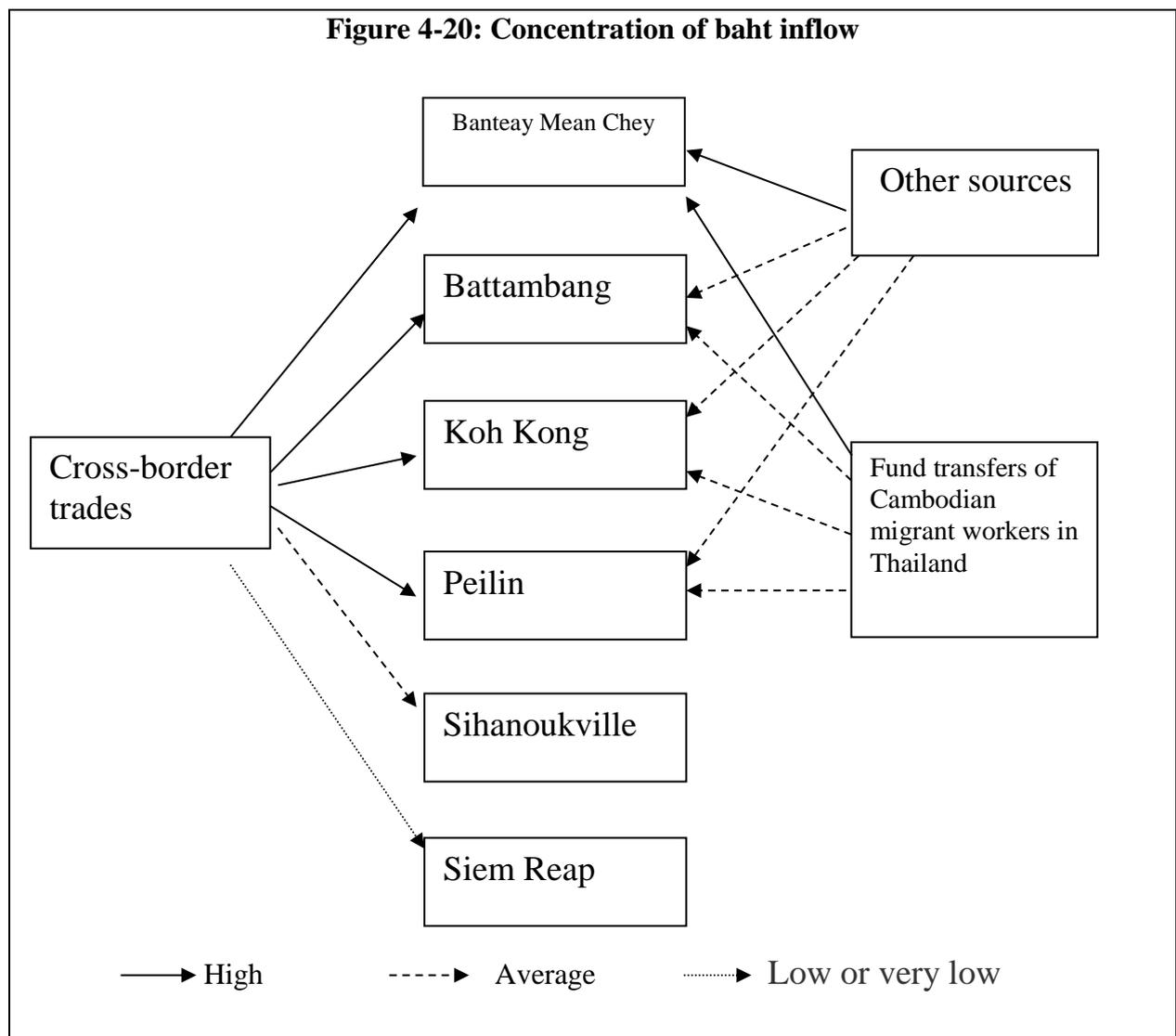
**Figure 4-19: Concentration of dollar inflow**



### 3.2.2. Concentration of bahts

The inflow of bahts seems to be concentrated in the Khmer-Thai border areas in six provinces: Banteay Meanchey, Battambang, Koh Kong, Pailin, Siem Reap, and Sihanoukville. ACLEDA Bank has defined these provinces as “baht areas”, that is to say areas where it offers its services in baht as well as in dong and riel; baht services are transfers, account opening, deposits, loans etc. Among these six provinces, it is very likely that bahts circulate more in Banteay Meanchey, Koh Kong, Pailin, and Battambang. These provinces have enough important trade links with Thailand. The survey of border trade in the cities of Banteay Meanchey of CDRI (2005) showed that bahts are predominant in 14 villages out of the 20 villages of Ou Chrov district of Banteay Meanchey province. Border trade between Cambodian farmers and traders with Thailand are the most important source of bahts for Banteay Meanchey, Battambang, Koh Kong, and Pailin. Transfers of Cambodian migrant workers in Thailand and casino

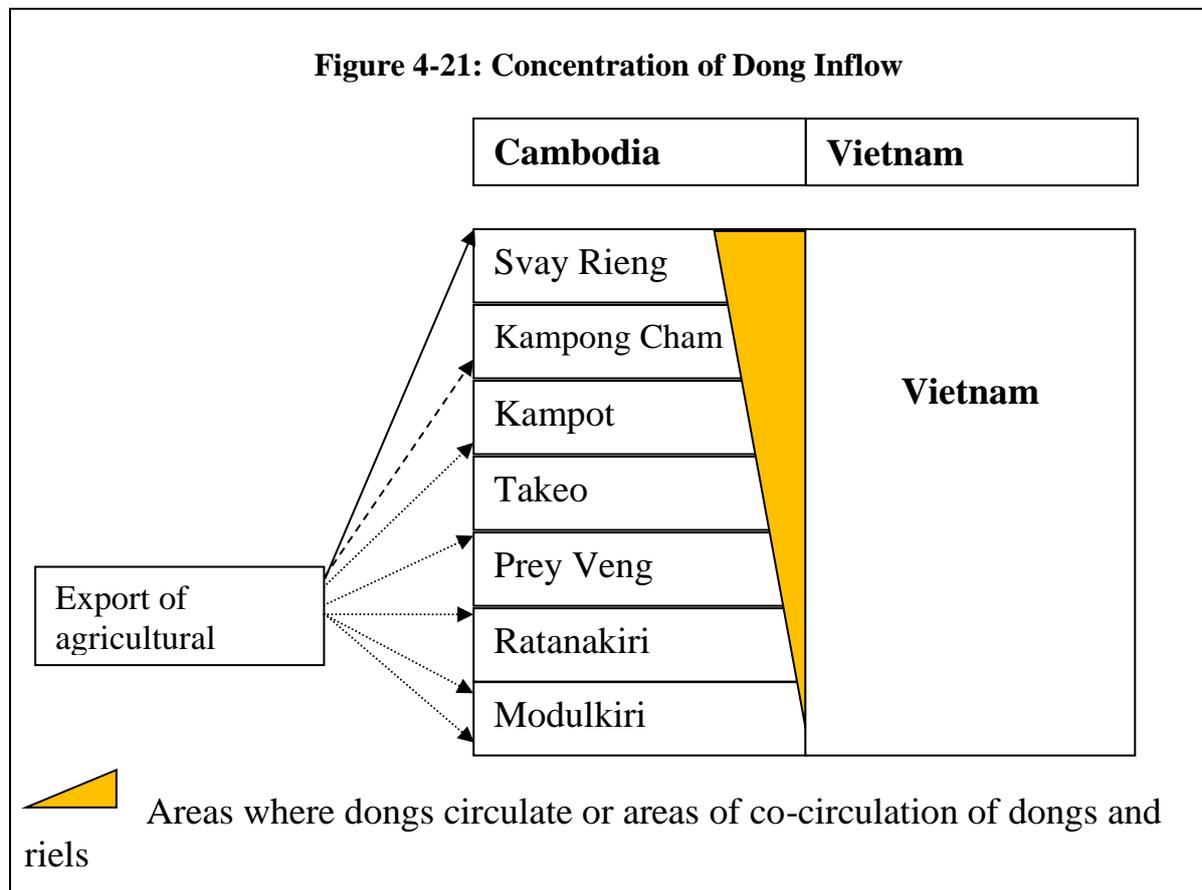
incomes also generate inflow of bahts in Banteay Meanchey, Koh Kong, and Pailin. Based on the inflow channels of bahts and the economic size of these six provinces, it seems that the baht concentrates most in Banteay Meanchey followed by Battambang, Koh Kong, and Pailin. They circulate marginally in Siem Reap and Sihanoukville. The economy of these two provinces is not very dependent on border trade with Thailand and it is tourism and economic zones that attract foremost the dollars.



### 3.2.3. Concentration of Dongs

The dongs circulate only in areas near the Vietnamese border: SvayRieng, Kampong Cham, Kampot, Takeo, Prey Veng, Ratanakiri, and Mondulakiri. Typically, the dong is not predominant in the monetary field of these regions because the riel also circulates there. Agriculture is the main economic activity generating dongs. According to surveys on border trades conducted by the NBC, trade activities between Cambodian farmers and traders with Vietnamese are higher in Kampong Cham and SvayRieng than in other Vietnamese border provinces. But as the riel is the most used currency by the Vietnamese to buy products

from Cambodian farmers and traders in Kampong Cham, the dong\$ circulate less. It seems that SvayRieng is the province where dong\$ circulate the most. In other Vietnamese border provinces, dong\$ are minimally used by the inhabitants. In total, it seems that the dong\$ are not predominant in the seven border provinces.



### 3.2.4. Estimation of Dollar and Baht Inflows

Finally we arrive at estimations of the amounts of foreign currencies actually entering and supplying the Cambodian economy in dollar and in baht. Unfortunately, most flows of baht are informal; it was therefore difficult to estimate. Statistics of inflows of dong\$ are even more random because no statistics are available. In contrast, the flows of dollars are relatively well documented although some flows are not accounting or are underestimated.

We are thus able to deduct amounts of foreign currency officially recorded, and our estimations of volumes of foreign currencies that do not remain actually in the economy (such as drain of dollars of foreign aid to the outside, part of the income of the tourism sector or export incomes from the garment sector that distribute abroad ...), the actual volumes injected into the Cambodian economy.

These are all preliminary estimations on the amounts of foreign currency flows from abroad in Cambodia which is an ambition of completeness. For the amount of inflow of dollars, we estimate that the various channels supply in annual average the Cambodian economy for an amount of 2,254 million dollars over the period of 2006-2010. This is a minimum inflow

amount of dollars entering. Because some flows of dollars are not well included, due to lack of statistics, and the informal sector. Phnom Penh represents 51.9% of the total inflow of dollars, followed by Siem Reap 10.5%, Sihanoukville 5.1%, Kandal 4.2%, and Svay Rieng 1.6%. The proportion of dollars entering in other provinces represents only 26.7% of the total. The inflow of dollars is therefore heavily concentrated in Phnom Penh and Siem Reap.

Concerning the inflow of bahts, we estimate that this volume is equivalent to 113.8 million dollar annually, concentrated in Thai border areas over the same period. Banteay Meanchey province alone receives 65% of inflows of baht annually. The second province which receive the baht the most is Pailin, or 12% of the total, followed by Battambang 12%, then Koh Kong and Sihanoukville, 5% and 4.2% respectively.

These dollars and bahts remain partially in the economy and are partially exported through imports of goods and services and bank transfers in dollar from residents abroad.

**Table 4-12: Estimated amounts (minimum) of inflow of dollars (annual average between 2006-2010)**

In millions of dollars		Total	PP	SRP	SV	Kandal	SRG	Others
Foreign Aid	Provincial Distribution (60%) <sup>(1)</sup>	210	15.5	11.8	4.8	12.2	1.7	164.0
	National (40%) <sup>(2)</sup>	140	105.0	2.3	0.6	3.3	1.3	27.5
FDI <sup>(3)</sup>		697	522.8	27.9	55.8	34.9	7.0	48.8
Fund transfers from abroad (\$ and other currencies) <sup>(4)</sup>		290	28.8	19.4	4.8	27.4	10.5	199.1
Garment: salaries to Cambodian employees <sup>(5)</sup>		328	246.0	3.3	16.4	6.2	9.2	46.9
Garment: Various expenses of garment factories <sup>(6)</sup>		138	106.3	4.1	11.0	6.9	1.4	8.3
Tourism <sup>(7)</sup>		370	144.3	162.8	18.5	1.9	1.9	40.7
Exports (besides those of garment and re-exports) <sup>(8)</sup>		81	1.6	4.1	4.1	2.4	2.4	66.4
Total <sup>(9)</sup>		2254	1170.3	235.6	116.0	95.1	35.3	601.7
Distribution of USD flow in %			51.9	10.5	5.1	4.2	1.6	26.7

(1) : estimated in the point 1.1.4 of this chapter

(2) : Suppose that Phnom Penh has the most foreign aid at the national level, say three-quarters. We divide the rest (25%) to other provinces by number of inhabitants of the province.

(3) : distributed according to the proportion of FDI made in each province (see point 1.2.2 of this chapter.)

(4) : distributed by the number of inhabitants of the province

(5) : estimated in the point 2.1.2 of this chapter

(6) : distributed by distribution of garment enterprises in the country.

(7) : estimated in the point 2.2.2 and 2.2.3 of this chapter

(8) : estimated from export statistics.

(9) : This amount represents the total minimum amount of foreign currencies supply in annual average in Cambodian economy between 2006 and 2010. We recognize that some foreign currency flows are not considered in this calculation due to unavailable statistics.

**Table 4-13: Estimated amounts (minimum of inflow of baht (annual average between 2006 and 2010)**

In Millions of dollars	Total	BMC	BB	KK	PL	SV
Border trade*	68.8	41	7	3	14	3
Migrant workers in Thailand**	45	32	7	2	2	1
Total	113.8	73.68	13.63	5.69	16.01	4.79
Distribution in %	100%	64.7%	12.0%	5.0%	14.1%	4.2%

\* Estimated from amounts of Thai border trades (Source: Survey of Statistics Department on border trade in 2010)

\*\* Estimated from observations of money changers and/or surveyed exchange agents on the transfer market of bahts in Thai border areas during our surveys with the agents. This estimation also took into account the estimations of managers of bank/microfinance and branches of the NBC. However, there are no studies or estimations for this inflow of bahts sent by migrant workers in Thailand to each province. In addition, given many informal activities in Thai border areas, it is likely to underestimate the amount of inflow of bahts in Cambodia. This total amount is therefore the minimum amount of inflow of bahts to the Cambodian economy.

## Conclusion of Chapter

The analysis of inflow channels of foreign currencies gives us an overall picture of the inflow of each foreign currency in the country. These channels supplying the Cambodian economy in foreign currencies are the sectors and flows related to sectors outside of the country such as tourism, trade, foreign aid, FDI and fund transfers. These sectors have become the basis for economic growth in Cambodia. There is therefore a strong link between inflows of foreign currencies and growth. These flows also largely explain the extent and development of dollarization in the economy more than any other factors. In this context, the rise of dollarization and monetary plurality does not appear on the face of it as a break on the economic development of Cambodia; they are, on the contrary, the reflection, if not a factor of the improvement of economic performance of the country. This is a position limited to Cambodia, which rather goes against the findings of most economists who have worked on the phenomenon of dollarization in general, and who often see it as the cause of deteriorating health of some economies by the weakening of the national currency, hyperinflation and macroeconomic instability.

Once we identified these points of currency inflows, we will find out the dynamics of circulation of each foreign currency within the territory. Analysis of the results of our survey in the next two chapters will allow us to further clarify and define the Cambodian monetary mapping.

## **Chapter 5: Surveys of Currency Circulation in Cambodia**

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- 1.1. Survey Methodology
  - 1.1.1. Survey Samples
  - 1.1.2. Reweighting of Results
  - 1.1.3. Studied Provinces
  - 1.1.4. Limitation of Results
- 1.2. Survey Objectives
  - 1.2.1. General Population
  - 1.2.2. Traders
  - 1.2.3. Manual Money changers
  - 1.2.4. Expatriates
  - 1.2.5. Tourists

#### **II. Presentation of Main Results of the Surveys**

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  - 2.1.1. Currencies of Revenue Sources
  - 2.1.2. Currencies for Expenditure
  - 2.1.3. Currencies for Savings
  - 2.1.4. Exchange Operation
  - 2.1.5. Respective Advantages of Different Currencies
  - 2.1.6. Perspectives on Uses of Currencies
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- 2.2. Currencies Used in Domestic Trade
  - 2.2.1. Currencies for Income
  - 2.2.2. Currencies for Price Display
  - 2.2.3. Exchange Operations
  - 2.2.4. Currencies of Loans
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  - 2.3.1. Traded Currencies
  - 2.3.2. Suppliers of Currencies
  - 2.3.3. Determination of Exchange Rates
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  - 2.4.2. Currencies of Expenditure and Means of Payments
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- 2.5. Tourists

#### **Conclusion of Chapter**

## Introduction

So far, our analysis of monetary plurality in Cambodia is mainly focused on the cohabitation of the U.S. dollar with the national currency and the effects of this international currency on the country's economy (Kem, 2005; Zamróczy & Sa, 2002, 2003; Dabadie & IM, 2006; Menon, 1998, 2008). Besides these two currencies, other neighboring currencies also circulate within the country and it is very likely that their weight, especially in the areas where they are circulating, is not negligible. Therefore, the analysis of monetary plurality would be incomplete without considering them too.

Some research works have helped to show the presence of the circulation of neighboring currencies in the country (Huot, 2008; Capannelli & Menon and al, 2010.). Although they found the money supply of neighboring currencies, the estimation methods could be questioned. Indeed, they are mainly based on assumptions without empirical foundation.

Moreover, even if the statistical data of dollars circulation are available in the financial sector, they are less reliable because most dollar bills in circulation are not registered; they circulate very informally (Zamróczy & Sa, 2002, 2003; Menon, 2008). Thus, the amount of this circulation has been estimated much higher than the amount registered in the banking sector. In order to properly analyze monetary plurality in Cambodia, some experts have recommended investigating the circulation of currencies (Dabadie, 2006).

In this chapter, we discuss the survey of the movement of currencies. Five economic actors, who have direct contact with foreign currencies in circulation, have been investigated. They include: the general population, traders, money changers, expatriates, and tourists. Eleven provinces are our survey targets. Then we successively present the main results of our surveys on each questionnaire of the interviewed agents.

## Section I. Methodology and Objectives of the Surveys

### 1.1. Survey Methodology

Financially supported by the Center of French Cooperation - Economics at the Royal University of Law and Economics in Phnom Penh (RULE), and TRIANGLE laboratory at the University of Lumière Lyon 2 and administered by the National Bank of Cambodia (the central bank), our surveys were conducted between August and October 2010 in eleven major provinces whose population accounts for 57 percent of the total population. The surveys were conducted by direct interviews with randomly selected respondents in the main town of the district and provinces, as well as markets, where economic activities take place.

Six investigators were on-site: Khou Vouthy and five students in their 4<sup>th</sup> year relocated from the University of Lumière 2 to RULE. They spent on average about a week in each province.

#### 1.1.1. Sample of the surveys

The total number of our sample was 3,232 participants. Five categories of economic agents who have contact with monetary plurality were investigated: the actors of exchange, the actors of trade, the general population, the expatriates, and the tourists. At the same time, we also interviewed the managers of the commercial banks and branches of the National Bank of Cambodia in the eleven surveyed provinces in order to obtain additional information about the history of the use of currencies, its current status and prospects for the future. They also helped us to choose the places for investigation.

- **General Population.** This category refers to the type of economic actor who represents the household. Seven professions were interviewed: those who work in the area of agriculture, construction, industry, tourism, other services including business, personnel of Non-Governmental Organizations (NGO) and the public sector. (mainly civil servants). The sample size of the surveyed general population is 1,292 people.
- **Actors of Trade.** They are traders (large, medium, and small). We tried to interview all kinds of traders who sell daily consumer goods, durable goods, agricultural materials and clothes andc. In total, 1,106 traders were interviewed.
- **Money Changers.** It refers to actors whose major activity is changing currency (national currency and foreign currencies) to gain profit. We exclude traders who exercise currency exchange activity as their secondary activity. We surveyed 458 money changers.
- **Expatriates.** These are actors with foreign nationality who are well-off and/or working in Cambodia. We interviewed foreign experts and consultants attached with the Ministries and the public institutions of Cambodia, the personnel of international NGOs, foreign retirees who are well-off and worked in Cambodia andc. 100 expatriates were interviewed.
- **Tourists.** They are actors of foreign nationality whose purpose of their stay is mainly to visit the country. They can be missionaries whose stay is also short. We interviewed 276 tourists to understand their use of currency in Cambodia.

### 1.1.2. Reweighting of Results

The reweighting by population, whose age is bandween 15-64 years, was used for the *general population* and the *changers*. The total population of eleven provinces studied represents geographically 57% of the population aged 15-64 in the country.

**Table 5-1: Reweighting coefficients for general population and manual money changers**

Province	Effectives (A)	% Effective (B)	Age (15-64) (C)	% Age (15-64) (D)	Coef. of Pond. (E)
Phnom Penh	184	14.2	99093184	21.0	1.5
Takeo	131	10.1	50280356	10.6	1.0
Svay Rieng	147	11.4	29797675	6.3	0.6
Kampong Cham	97	7.5	100967519	21.4	2.8
Battambang	172	13.3	63314746	13.4	1.0
Pailin	48	3.7	4550576	1.0	0.3
Banteay Meanchey	91	7.0	41942362	8.9	1.3
Siem Reap	159	12.3	54790596	11.6	0.9
Sihanoukville	111	8.6	14348675	3.0	0.4
Koh Kong	100	7.7	7155768	1.5	0.2
Stung Treng	52	4.0	6516003	1.4	0.3
Total	1,292	100.0	472757460	100	

\* Coefficient of reweighting is the ratio in percentage of the number of population aged 15-64 and the percentage of effective interviewees, i.e.  $E = D/B$

Source: Population of age 15-64 from the Census of the National Institute of Statistics of the Ministry of Plan of Cambodia, 2008.

For the *traders*, we weigh them by the number of establishment by province.

**Table 5-2: Reweighting coefficients for traders**

Province	Nb. of Establishment (A)	% Nb. of Establishment (B)	Effective survey (C)	% Effective (D)	Coef. of Pond. (E)
Phnom Penh	55593	26.0	110	9.94575	2.6
Takeo	27606	12.9	110	9.94575	1.3
Svay Rieng	12216	5.7	116	10.48825	0.5
Kampong Cham	43896	20.5	105	9.493671	2.2
Battambang	19539	9.1	148	13.38156	0.7
Pailin	1902	0.9	49	4.43038	0.2
Banteay Mean Chey	15536	7.3	92	8.318264	0.9
Siem Reap	22350	10.5	103	9.312839	1.1
Sihanoukville	8019	3.8	121	10.94033	0.3
Koh Kong	4361	2.0	89	8.047016	0.3
Steung Treng	2591	1.2	63	5.696203	0.2
	213609	100	1106	100	

\* Reweighting coefficient of is the ratio in percentage of the number of establishment and the percentage of effective interviewees, i.e.  $E = B/D$

Source: Number of the establishments from the Census of the National Institute of Statistics of the Ministry of Plan of Cambodia, 2009.

### 1.1.3. Studied Provinces

The subdivision of Cambodia: Cambodia consists of 24 provinces (Khmer ខេត្ត, *kheth*). The provinces are divided into districts (ស្រុក, *srok*) and municipalities (ក្រុង, *krong*). Districts are divided into communes (ឃុំ, *khum*) and Sangkat (សង្កាត់, *sangkat*). Communes and Sangkats are divided into villages (ភូមិ, *phum*).

The municipalities are divided into Sangkat (សង្កាត់, *sangkat*). Sangkats are divided into villages (ភូមិ, *phum*). Villages are divided into groups (ក្រុម, *krom*).

The capital is divided into Khans (ខ័ណ្ឌ, *khan*). Khans are divided into Sangkats (សង្កាត់, *sangkat*). Sangkats are divided into villages (ភូមិ, *phum*).

Of these twenty-four provinces, we selected eleven provinces. Five different regions were considered: the areas of economic and administrative center, tourist areas, and the border areas with Thailand, Viandnam, and Laos.

On areas where the survey was administered, interviews were conducted in the main district of the province (*Krong*) and the district lying near the border. Bandween these two regions, we also conducted interviews.

#### a. Economic and Administrative Centers: The capital

– Phnom Penh (PP): Economic and administrative centers of the country.

#### b. Tourist Areas

– Siem Reap (SRP): Tourists and also agricultural province.

– Sihanoukville (SV): Tourism coastal province and international port. Fishing also represents an important activity for this province.

#### c. Border Areas

– Provinces near the Thai border

- Banteay Meanchey (BMC): Province where agriculture (rice, corn, cassava andc.) is principal. Border trade is more dynamic here than in any other province near the Thailand border.
- Battambang (BB): The most important agricultural area of the country (rice, corn, cassava andc.).

- Pailin (PL): The smallest agricultural province.
- Koh Kong (KK): Coastal province. The main activities are agriculture and fishing.

**– Provinces near Viandnamese border**

- Svay Rieng (SRG): Province where the agricultural sector is principal and where Viandnamese border trade is very dynamic.
- Takeo (TK): Province where the agricultural sector is principal.
- Kampong Cham (KCH): Province where the agricultural sector is principal.

**– Provinces near Lao border**

- Steung Treng (ST): Province where the agricultural sector is principal.

**Figure 5-1: Map of Cambodia**



Surveys of expatriates and tourists are mainly conducted in Phnom Penh, while surveys of the general population, changers, and traders are spread out throughout the country (table 5-3).

**Table 5-3: Distribution of sample size by district**

Province/District		General population	Trader	Changers
<b>Phnom Penh</b>		<b>271</b>	<b>110</b>	<b>107</b>
<b>Takeo</b>		<b>137</b>	<b>118</b>	<b>51</b>
District Takeo	Krong Takeo	51	48	20
	Tramkok/Ang Ta Soam	19	5	6
	Kirivong/Tun Loap	19	3	10
	Prey Kabbas	24	11	7
	Angkor Borey	24	23	8
<b>Svay Rieng</b>		<b>81</b>	<b>116</b>	<b>63</b>
District Svay Rieng	Krong Svay Rieng	30	40	41
	Svay teab/Prasoutr	8	5	7
	Bavand/Chipou	13	31	15
	Krong Bavand	20	14	
	Neak Leung	10	26	
<b>Kampong Cham</b>		<b>277</b>	<b>97</b>	<b>27</b>
District Kampong Cham	Krong Kampong Cham	98	61	16
	Krong Suong	46	13	5
	Ponhea Kraek/Trapeang Phlong	65	0	0
	Memot	68	23	6
<b>Battambang</b>		<b>172</b>	<b>148</b>	<b>46</b>
District Battambang	Krong Bat Dambang	80	106	37
	Banan/Snoeng	35	15	4
	Samlout	56	27	5
<b>Pailin</b>		<b>12</b>	<b>49</b>	<b>14</b>
<b>Banteay Meanchey</b>		<b>115</b>	<b>92</b>	<b>34</b>
District Banteay Meanchey	Krong Banteay Meanchey	20	53	15
	Krong Poi Pand	21	25	15
	Krong Serei Sophoan	24	12	4
	Mongkol Borei	38	2	0
	Preah Nandr Preah	11	0	0
<b>Siem Reap</b>		<b>150</b>	<b>103</b>	<b>37</b>
District Siem Reap	Krong Siem Reap	96	57	25
	Soutr Nikom	17	13	5
	Puok	37	33	7
<b>Sihanoukville</b>		<b>39</b>	<b>121</b>	<b>38</b>
District Sihanoukville	Krong Preah Sihanouk	25	84	34
	Steung Hav/Tumnob Rolok	12	33	4
	Steung Hav/Kampenh	2	4	0
<b>Koh Kong</b>		<b>20</b>	<b>89</b>	<b>30</b>

District Koh Kong	Krong Koh Kong	8	11	20
	Krong Koh Kong/Dang Tong/Poum 4	8	76	1
	Mondol Seima/Pak Khlang	3	2	9
<b>Steung Treng</b>		<b>18</b>	<b>63</b>	<b>11</b>
District Steung Treng	ST-Krong Stueng Traeng	11	61	11
	ST-Thala Barivat/Ousvay	6	2	0
<b>Total</b>		<b>1292</b>	<b>1106</b>	<b>458</b>

#### 1.1.4. Limitation Results

Although team members of the survey were properly trained and mastered well the questionnaires, we found various constraints that limited the relevance of our results. Several reasons could explain these constraints.

- **Low density of population:** The population density is low, especially in the less developed regions and the road conditions in some rural areas did not allow us to interview in some places where neighboring currencies are quite present. We were only able to go on national roads and some main roads that were in good condition, linking the main towns of the district or province. We therefore focus the interviews in only the main towns and at the market in each studied province.

- **Level of education and cooperation of the interviewees:** Another limitation is in the level of education and cooperation of the interviewees. The average duration devoted to conduct one interview is 20 minutes. But it depends largely on the level of education and cooperation of the interviewees. We spent plenty of time to explain to interviewees about the questions, objectives and interest of the surveys.

- **Reluctance to provide some information:** Some interviewees attempted to hide or manipulate some information or avoided answering some questions considered to be sensitive such as those concerning the level of revenue, the turn-over or savings andc. Some interviewees were also intimidated by our presence because they thought we were personnel administration who came to deduct the legitimacy of their activities or to know their non-declared revenues or profits.

- **The same person can have several professions:** Some interviewees have several activities. They often have a dual profession, especially civil servants, farmers, andc. Similarly, some traders sell several categories of goods. For example, a seller of rice also sells mobile phones, food for animals, andc. Moreover, money changers often have several activities besides exchanging money. They also sell jewelry as well as goods. This makes it difficult to categorize as well as to deduct the monies of the revenue sources from a given activity.

- **Lack of budget calculations, no book-keeping:** Some traders/changers do not calculate their revenue and their cash liquidity (cash flow). This is because they do not declare their revenue to the state and they do not hold an obligation to have book-keeping. Thus, although the interviewees are cooperative, they struggled to give us precise information about the flow of currency corresponding to their activities. They often confuse the turn-over and gross operation revenue (disposable income).

## **1.2. Survey Objectives**

The main objective of our surveys is to identify, approximately quantify, and analyze the relative circuit for various currencies. Remember that these are the first surveys of multiple currencies circulating in Cambodia. The central questions are the following:

- How is each currency being used by the different types of economic actors?
- What is the share represented by the different currencies in Cambodia's economy today?

In order to answer these key questions, we constructed questionnaires by type of economic actor whose objectives are the following:

### **1.2.1. General Population**

The main points we are trying to understand are the following:

- Composition of foreign currencies in the revenue.
- Proportion of revenue in each currency.
- Level of revenue and currencies of revenue sources.
- Monetary flow by different sources and destinations.
- Currencies of daily expenses and large transactions.
- The currency of savings
- The exchange operations.
- Particular reasons for holding several currencies.
- The perspective of holding currencies.

### **1.2.2. Traders**

We asked traders the following questions:

- The monetary flow relating to exchange within the country.
- What are the foreign currencies used in the supplying provinces?
- The currency attached to the prices.
- The proportion of the currencies in the income.
- The exchange operations.
- The borrowings.

### **1.2.3. Manual money changers**

The main points we are trying to understand are the following:

- What currencies are frequently exchanged?
- The direction of the exchange operations.
- The major actors in the exchange markets.
- The turn-over of the changers.
- The determination of exchange rates.
- The changer's money transfers.
- Other activities of the changers such as sales of precious items.

#### **1.2.4. Expatriates**

The following questions are studied:

- Currency composition in the revenue.
- Sources of revenue.
- Currencies of expenditure by expense type.
- Exchange operations.
- Ideas on the importance of monetary policy and dollarization.

#### **1.2.5. Tourists**

The following questions are studied:

- Proportion of currencies of expenditure.
- Exchange operations.
- Ideas on the convenience of currencies' use.

**Section II: Presentation of Main Results of the Surveys**

**2.1. Use of Currency by the General Population**

**2.1.1. Currencies of Revenue Sources**

- **Proportion of the Currencies Constituting the Revenue**

Our surveys reveal that four currencies constitute the revenue of Cambodians. These are the riel (national currency), dollar, baht, and dong. The riel and dollar are the main components of revenue. They are present in all studied provinces. 82 percent of the population only receives riels or dollars or both currencies. In each province, at least two currencies are present as components of revenue. One third of the surveyed population receives revenue in more than one currency. Riel is in the first place in the composition of revenue. Of the individuals surveyed 37.1 percent receive their revenue exclusively in riel, while 27.5 percent received it only in dollar. Baht and dong are not major components of revenue for the population, especially dong. In fact, only 2.2 percent receives baht and 0.3 percent in dong. They are mainly present in the border provinces of respective countries. Only 12.3 percent of the population partially receives baht (10%) or dong (2.3%). These two currencies are exclusive of each other.

**Table 5-4: Proportion of currencies constituting the revenues**

	0	]0-50[	[50-100[	100	Total
KHR	30.3%	9.2%	23.5%	37.1%	100%
USD	44.3%	16.6%	11.6%	27.5%	100%
THB	90.0%	5.1%	2.7%	2.2%	100%
VD	97.7%	1.3%	0.7%	0.3%	100%

- **Question (QGP 4):** In which currencies do you receive your revenues? In which proportions?
- **Reading of the table:** 23.5% of the surveyed individuals receive bandween [50-100[ of revenues in KHR
- QGP 4= Question 4 of the questionnaire *General Population*

- **Sources of Revenues**

Revenue currencies come from different economic actors who employ workers, purchase goods and services or simply transfer their funds to other agents. We divide them into three categories: employers, markands, and family. Employers in our surveys refer to public and private enterprises or the state. The population receives revenue of the markands by selling goods and services. Another source of revenue is sending money from family established in Cambodia or abroad. Sending revenue from abroad became increasingly important for the poor families as we demonstrated in Chapter 4.

Of those surveyed, 54 percent declared ganding revenues from employers; among them, 50 percent receive it only in dollars and 37 percent in riels. Among this population, 6.4 percent and 2.1 percent were paid in KHR and USD, and in KHR and THB by their employers, respectively. It refers probably, in these cases, to individuals with more than one job. According to our survey, 16 percent of this population has a dual activity, especially civil servants and

farmers<sup>154</sup>. The fact that the majority of the individuals declare ganding revenue in dollars reflects that most domestic and foreign enterprises in Cambodia pay wages in Dollars. An unexpected result shows that baht is also used for wage payments. Yand it represents a very small proportion of the population, or 4.6 percent. These employers are mainly those in casinos, hotels, and also small and medium enterprises that receive their revenue mainly or exclusively in baht along the Khmer-Thai border provinces. Dong is not used to pay wages even if there are casinos, hotels and enterprises located near the Khmer-Viandnamese border.

Thirty-five percent of the population declare that the revenue come from the markand where the riel remains dominant. Of this population, 48.8% of the individuals request to be paid in riel, 4 percent in dollars and 9.7 percent in baht. A very marginal portion of the population (0.7%) receive revenues in dong. Twenty-nine percent of the individuals receive revenues from the markand in two currencies (20% for riel and dollar, and 9% for riel and baht).

The third source of revenue is financial support fromfamily members. Eleven percent of the individuals declare receiving funds from family members both in Cambodia and abroad, of which 39.7 percent were obtained exclusively in dollars; 34.2 percent in riel; 4.1 percent in baht; and 0.4 percent in dong. Funds sent within the country generally come from family members who immigrate and work in the capital or in the tourist areas. Employees in the garment industry regularly send funds to their families living in the rural areas. When it comes to funds from abroad, which constitutes 9 percent of the surveyed population; 83.6 percent of these remittences are sent indollars, 10.3 percent in baht, and 6 percent in another currency. Sending funds indollarsoccurs on an irregular basis whereas sending baht is usually done 3-4 times per year.

**Table 5-5: Source of Revenue of the Population**

	Employers	Market	Family (domestic)	Family (abroad)
Riel	37.3	48.8	34.2	0
Dollar	50.3	4.0	39.7	83.6
Baht	4.6	9.7	4.1	10.3
Dong	0	0.7	0.4	0
Riel and dollar	6.4	20.0	15.8	0
Riel and baht	1.2	9.0	2.1	0
Other currency	0	0	0	6
Total	100%	100%	100%	100%

- **Question** (QGP 8&9): 8- Distribution of your financial incomes and do you receive financial aid from your relatives abroad?
- **Reading of the table:** Among those who declare ganding revenue from the employers, 37.3 percent receive them in only riel.

**Table 5-6: Currency of money sending from abroad and frequency (in number of people)**

<sup>154</sup> According to the Census of the National Institute of Statistics of the Ministry of Plan of Cambodia in 2008, 52% of the total population of Cambodia has a secondary activity besides the main activity (NIS/MP, 2009).

	Monthly	Quarterly	Semesterly	Annually	> 1 year	Irregular	Total
Dollar	8	9	13	15	10	42	97
Baht	2	6	2	1	0	1	12
Other currency	0	2	1	1	0	2	6
Total	10	17	16	17	10	45	115

- **Question** (QGP 9-1, 9-2, 9-3): In which currency and how often do you receive financial aid from your relatives abroad?
- **Reading of the table:** Among those who declare ganting money sent from abroad, 8% receive it monthly in riel.

- **Currencies of loans**

Another source of very irregular currencies and which is subject to repayment is made by loans. With the development of the financial system, the commercial banks are present in many provinces in the country<sup>155</sup>, especially microfinance institutions (MFIs) which have their networks in the rural areas. However, banks and MFIs are not the only ones that offer financial services. There is also informal lenders who are well represented throughout the country. For the individuals who cannot meet prudential requirements of the banks and MFIs, informal loans are their only source of funding. Informal loans include loans from informal agent of loans, from family or friends. Thirtypercent of the surveyed population declares having borrowed informally.

The results of our surveys on loan currency of the population are not surprising because they correspond to what we discussed in chapter 4. The majority of individuals have borrowed in dollars, while riel and baht are in second and third place, respectively. In contrast, for informal loans, the riel takes the lead, followed by the dollar and the baht. Of those surveyed, 73.8 percent of the population has borrowed only in dollars from the commercial banks, 17.1 in riel and 1.7 percent in baht, respectively. At the same time, 7.3 percent of the individuals make loans in riels and dollars. In contrast, there are 35.3 percent that borrow in riel at microfinance institutions (MFIs), but those who borrow in dollars remain the majority and represent 58.5% of the population. Regarding informal loans, we found that the proportion of individuals who borrow exclusively in riel is the highest (43.9 percent). There are 37.7 percent in dollars, 6.1 percent in baht, and 0.1 percent in dong. Informal loans in both riels and dollars make up 9.2 percent of the population.

**Table 5-7: Proportion of individuals who borrow in each currency or in several currencies (in percentage)**

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<sup>155</sup> Although there are not many of them there. In rural provinces (Steung Treng, Takeo, Mondulakiri, Ratanakiri andc.), there are one or two banks.

Money borrow	Banks	Microfinance	Informal loan
riel	17.1	35.3	43.9
dollar	73.8	58.8	37.7
baht	1.7	1.2	6.1
Dong	0.0	0.0	0.6
riel and dollar	7.3	3.5	9.2
riel and baht	0.0	0.0	0.9
Total	100%	100%	100%

- **Question** (QGP 15): Do you have a bank account? If yes, in which currency? And in which proportion?
- **Reading of the table:** 17.1 percent of the surveyed individuals have saved exclusively in riel at the commercial banks.

### 2.1.2. Currencies for Expenditure

The Cambodian economy is considered a *cash-based economy*, in other words, the payments are mostly in cash. According to a 2008 study by ANZ Bank, less than 10 percent of the population has a bank account.

When asked "How many currencies do you have in your pocket for expenses and in what proportion of each currency on the day of the survey? ", 48.5% of the surveyed individuals said they only have riels, 0.8% have dollars, and 51% have more than one currency in their pockets. Riels and dollars are the main components of the currencies of daily expenses. Moreover, among those who have one or more currencies in their pocket in general: 99% holds riels; 45% who holds dollars; and 10.6% who holds baht. Possession of dong is very low, (0.4%) of the surveyed population.

**Table 5-8: Currency held in the pocket and on the day of survey (in percentage)**

	0	] 0-50[	[50-100[	100	Total
KHR	1.0	17.4	33.1	48.5	100
USD	54.5	23.4	21.4	0.8	100
THB	89.3	8.2	2.3	0.1	100
VN	99.6	0.3	0.1	0	100

- **Question** (QGP 13): In which proportion are your different currencies in the pocket?
- **Reading of the table:** 48.5 percent of the individuals hold only riels in the pocket.

In addition to the question of the currencies in the pocket, which reflects the currencies of expenses for the day of the survey, we also asked about the currencies of daily expenses. Not surprisingly, it was found that riel remains dominant in this type of expenditure. In addition, the proportion of surveyed individuals who make daily expense exclusively in riel is higher than those who responded to the question of currencies in the pocket (66.4 percent compared to 48.5 percent). However, a quarter of the population makes the expenses in dollars in combination with one or more other currencies, usually riels in general. The baht and especially

dong are rarely used for daily expenses. Only 6% of the population uses baht in combination with other currencies, against 1.2 percent for dong.

**Table 5-9: Proportion of individuals who make current expenditure in each currency**

	0	]0-50[	[50-100[	100	Total
KHR	3.1	5.3	25.1	66.4	100
USD	74.7	16.1	8.8	0.31	100
THB	94	4.8	1.2	0	100
VND	98.1	0.5	0.7	0	100

- **Question** (QGP 10): In which currency do you use for current expenditure?
- **Reading of the table:** 66.4 percent of the interviewed individuals declare making the everyday expenses exclusively in Riel.

The picture becomes different when talking about currencies of payments of large transactions. The amount considered "large expenses" was not sand in our surveys. In fact, an amount considered to be large by one individual might be small or very small for others. Thus we do not try to define it. The survey results show that the currency used mainly for transactions judged as large is the dollar. Of the surveyed individuals, 46.9 percent use only dollars for these expenses. The riel is in second place, with 32.4 percent of the individuals that make large expenses in riel, of which the majority of them receive revenue in riel. However, there are only 6.5 percent who make the expense in baht and 1 percent in dong. There are only 12 percent who make expenses in more than one currency: 8.8 percent in riel and dollar; 1.9% in dollar and baht; and 0.9 percent in riel and baht.

**Table 5-10: Proportion of population who make large expenses in each currency (in percentage)**

Money	In %
KHR	32.4
USD	46.9
THB	6.5
VND	1.0
KHR and USD	8.8
KHR and THB	0.9
USD and THB	1.9
Total	100

- **Question** (QGP 6): In which currency do you pay your large expenses?
- **Reading of the table:** 32.4 percent of the interviewed individuals make the large expenses in riel.

### 2.1.3. Currencies for Savings

The savings is a quite sensitive question in the eyes of the respondents. Yand there is still 52 percent of the surveyed population who answered "yes, I save." Although savings can be in several forms (real estate, gold, jewelry andc.), for our research, we are interested insavings in the form of "hoarding" or *tontin*, or bank deposits. Three currencies are used for the savings of the surveyed population: riel, dollars, and baht. We divide savings into two categories: those in the banking system and those outside the banks (especially in the form of *tontin*, and hoarding).

According to our surveys, when they are saving in riel, 81 percent saves outside of banks, but when they save in dollars, 32 percent save outside of banks. Savings outside of banks represents 92 percent of the population who save in baht. As we showed in chapter 3, the banking system declared receiving deposits in baht since 2005. This is explained by the late presence of commercial banks in the areas where the population receives revenue in baht. At the provincial level, more than half of the population saves in dollar in the banking system. In addition, savings in baht is mostly done outside of the banking system. Among those who save in baht are mainly in Battambang, Pailin, and BanteayMeanchey of which 70percent save outside of banks. In provinces other than those at the Khmer-Thai border, baht are not the currency of savings.

**Table 5-11: Proportion of individuals who save. (in percentage)**

	Saving		Total
	Yes	No	100
Phnom Penh	63	37	100
Takeo	37	63	100
Svay Rieng	37	63	100
Kampong Cham	53	47	100
Battambang	35	65	100
Pailin	44	56	100
Banteay Meanchey	48	52	100
Siem Reap	59	41	100
Sihanoukville	63	37	100
Koh Kong	75	25	100
Stung Treng	83	17	100
Cambodia	52	48	100

- **Question** (QGP 16): Do you save money?
- **Reading of the table:** 63 percent of the interviewed residents in Phnom Penh declare saving.

**Table 5-12: Proportion of individuals who save in the banking system and outside of banks in each currency**

	KHR			USD			THB		
	S.B	S.OB	Total	S.B	S.OB	Total	S.B	S.OB	Total
Cambodia	19	81	100	68	32	100	8	92	100
Phnom Penh	38	63	100	77	23	100	0	0	100
Takeo	9	91	100	71	29	100	0	0	100
Svay Rieng	12	88	100	57	43	100	0	0	100
Kampong Cham	3	97	100	52	48	100	0	0	100
Battambang	15	85	100	76	24	100	0	100	100
Pailin	13	87	100	100	0	100	0	100	100
Ban. Meanchey	34	66	100	72	28	100	30	70	100
Siem Reap	19	81	100	56	44	100	0	0	100
Sihanoukville	10	90	100	81	19	100	0	100	100
Koh Kong	3	97	100	86	14	100	0	100	100
Stung Treng	65	35	100	90	10	100	0	0	100

- **Question** (QGP 16): If yes, in which currency do you save? Within the banking system?
- **Reading of the table:** 19 percent of the interviewed individuals declare that they save in riel, they do so in the banking system.
- **S.B:** Save in bank; **S.OB:** Save outside bank

#### 2.1.4. Exchange Operations

The population has several sources of revenue, but at the same time they also make expenses in several currencies depending on the types of expenses and geographical areas. Normally, the population exchanges their national currency to international currency (dollar or euro) or to official currency of the visited country when they travel to that country. In general, Cambodians rarely travel abroad, mainly because of their low income. They would have to spend the equivalent of four-months salary<sup>156</sup> to buy a round ticket of Phnom Penh-Bangkok and the sum of two-year salary to buy a round ticket of Phnom Penh-Paris<sup>157</sup>. However, they may be part of the population that exchanges money most frequently in the world; in fact, 83% of the population declares exchanging money at least 3-4 times per year. They do not exchange mainly for the purpose of traveling abroad, but to spend it in their own country.

The segment of the population that exchanges the most are those who have the majority of revenue in different currencies and those who live in the area where different currencies are present. Among those who receive 100% of their revenue in dollars, 85% of them exchange at least once a month. In contrast, among those who receive 100% of their revenue in riel, there are 25% who exchange at least once to dollars. The percentage of the population in various provinces that exchange money are; 90 percent in Phnom Penh and Sihanoukville; 95 percent

<sup>156</sup> GDP per capita in 2010 divided by 12. GDP per capita in 2010 is equal to 802 Dollars.

<sup>157</sup> The price of round tickets of Phnom Penh-Bangkok for Thai Airway is 273 dollars in 14 January 2010 and that of Phnom Penh-Paris for that day is 1363 euros, equivalent to 1728 dollars (exchange rate 1 EUR = 1.268 USD as of 13 January 2012).

in Banteay Meanchey and Koh Kong, 92 percent in Pailin; and 60 percent in Takeo, 76 and 77 percent in Svay Rieng and Steung Treng.

**Table 5-13: Proportion of individuals who exchange money (in percentage)**

	In Percentage		In Percentage
Cambodia	83%		
Phnom Penh	90%	Banteay Meanchey	95%
Takeo	60%	Siem Reap	84%
Svay Rieng	76%	Sihanoukville	90%
Kampong Cham	89%	Koh Kong	95%
Battambang	74%	Stung Treng	77%
Pailin	92%		

- **Question** (QGP 17): Do you exchange money?
- **Reading of the table:** 83 percent of the interviewed individuals declare exchanging money.
- **In which direction do you make exchange operations? How often?**

The exchange from dollars to riels is the most frequent exchange operation; 76% of the studied population conducts this type of exchange, 23.8% among them does so at least three times a month. Fifty percent of the population exchange from riels to dollars and 5% do so at least three times a month. There is 15.6 percent of the population who exchange from baht to riel, 9.8 percent among them does so at least three times per month. In addition, they exchange less from baht to dollars (2.8%) than from dollars to baht (4.5%), but the exchange from dollars to dong (3.3%) is more common than from dong to dollar (0.9%). One of the reasons why the baht are exchanged to dollar more than from dollars to baht is that people who receive revenue in baht exchange baht to dollar in order to purchase durable goods whose prices are sand in dollars (such as means of transport, some machines or equipment used in the agricultural sector) or simply to save as noted in the previous section. The majority of the population has a preference for savings in dollar against baht. In general, the exchange from USD to THB, from USD to VND, from KHR to VND, from VND to KHR, from VND to USD, from THB to USD, is very low. It is worth noting that the exchange from THB to VND or from VND to THB does not exist. This indicates that those who receive revenues in baht do not make expenses in dong and vice versa, in other words, baht and dong do not live togandher or share the markand significantly.

**Table 5-14: Direction of exchange of general population and exchange frequency (in percentage)**

Synthandic results	> 1 Time/month	3-4 times/year	Never/rarely	Total
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From USD to	KHR	45.7	23.8	30.6	100
	THB	1.6	1.2	97.2	100
	VND	1.9	1.4	96.7	100
From KHR to	USD	15.2	20.1	64.7	100
	THB	6.4	3.5	90.2	100
	VND	0.8	2.2	96.9	100
From THB to	USD	2.2	2.3	95.5	100
	KHR	9.8	5.8	84.4	100
	VND	0.0	0.1	99.9	100
From VND to	USD	0.6	0.3	99.2	100
	KHR	0.9	1.3	97.8	100
	THB	0.0	0.0	100.0	100

- **Question** (QGP 17-1): If yes, in which direction do you exchange the money? How often?
- **Reading of the table:** 45.7 percent of the interviewed individuals exchange from USD to KHR, more than once per month

- **With whom does the population make exchange operations?**

Our surveys found that manual money changers dominate the exchange mark and. Ninety-three percent of the population who exchange money does so with the manual money changers and 64 percent does so frequently. Seven percent does so with traders and 7.8 percent with the banks/MFIs. However, only 1.9 percent exchange often or very often with the traders and 4.8 percent with the banks/MFIs. We observe that traders who exchange for customers are those who are around the markets. According to our interviews with the heads of banks and MFIs, people often do not exchange money with the banks/MFIs, but they do so because they repay to the banks/MFIs their loans in another currency. The most common case is when loans are made in dollars and the population pays the debts in riel. Among the interviewed MFIs, one MFI makes exchanges outside its subscribers (they exchange money with the public in order to collect riel)<sup>158</sup>, but other MFIs do so with their subscribers through debt repayment. The banks also declared that the population exchanges money in different ways i- they come directly to the counters of banks to exchange ii- they exchange by withdrawing from the ATM the money other than the one of his account<sup>159</sup> iii- they make payments of the transactions in currencies other than the one they deposit in their account (normally payments for electricity or water whose bill is only denominated in riel). However, more than 90 percent of the population declares that they never exchange money at the banks or MFIs.

**Table 5-15: Percentage of individuals who exchange with manual money changers, traders and banks/MFIs (in percentage)**

	Never/rarely	Sometimes	Often and very often	Total
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<sup>158</sup> According to the Exchange Act (1997) and the Law on Banks and Financial Institutions (1999), license, obtained in order to carry on banking and microfinance activities, does not include the permission to conduct the exchange activities because they are subject to another license. Until now, no MFI has requested a license to conduct the exchange activities. Exchange operations of the MFIs do not conform well to the law.

<sup>159</sup> Generally ATM puts two currencies available to the public: dollar and riel.

Money Changers	6.7	29.6	63.7	100
Traders	94.0	4.1	1.9	100
Banks/MFIs	92.3	3.0	4.8	100

- **Question** (QGP 17-2): If yes, with which types of money changer do you exchange?
- **Reading of the table:** 63.7 percent of the interviewed individuals often exchange the money with the money changers.

### 2.1.5. Respective Advantages of Different currencies

- **Why do you use riel/dollar/baht/dong?**

Because there are several currencies for sources of revenues, various advantages of the use of one/several currencies, and different preferences depending on the individuals, multiple currencies can coexist. The results of our surveys highlight the evidence to this point. Sixty-nine percent of the individuals use one or several currencies because these currencies are their sources of revenues. Eighty-four percent use one currency because of the convenience of its use, 70 percent because it is the national currency and 54 percent for reasons of familiarity. There are 76 percent who declare that they prefer to use the currencies of their purchases. Forty-three percent hold one currency to avoid exchange losses while 24 and 25 percent cited the prestige and stability of the value of the currency, respectively. At the same time, we note that the nationalism reason for the use of the national currency is behind convenience, in other words, the population uses one currency that they find convenient even if it is not the national currency.

**Table 5-16: Reasons for holding one currency. (Multiple responses)**

	Number of responses	In % of total effectives (1292)
Source of revenue	887	69
National currency	902	70
Familiarity	692	54
Practicality	1087	84
Purchases of Currency	985	76
Stability of Value	321	25
Prestige	304	24
Avoid loss of exchange	560	43

- **Question** (QGP 19): Do you prefer holding KHR/USD/THB/VD for reasons such as: it is the currency of your revenues, national currency, etc.?
- **Reading of the table:** 69 percent of the interviewed individuals prefer holding one currency because it is the currency of the source of their revenues.

We will interpret successively each result of the holding currencies.

- **"Nationalism" reason:** Almost all interviewed individuals declare that they hold riels because this money is the national currency. This shows that Cambodian people feel strongly attached with their national currency.

**Table 5-17: Reason «National Currency»**

Phnom Penh	99
Takeo	100
Svay Rieng	100
Kampong Cham	99
Battambang	99
Pailin	100
Banteay Meanchey	100
Siem Reap	98
Sihanoukville	100
Koh Kong	100
Stung Treng	100
Cambodia	99

- **Question** (QGP 19): «You prefer using riel because it is the national currency»
- **Reading of the table:** In Phnom Penh, 99 percent of the interviewed individuals declare that they hold riels because it is the national currency or because individuals like riels.
- **The familiarity:** At the national scale, half of the interviewed individuals feel closer to the riel. One third cited the dollar and only 2.6 percent cited the baht. At the same time, we find that 11.2 percent of the individuals feel closer to the riel and the dollar. At the provincial level, only the residents of Phnom Penh felt more attached to the dollar, or 70.8 percent against 25.8 percent who feel closer to the riel. In other provinces, more than half of the individuals declared feeling closer to the riel than the dollar, with the exception of Banteay Meanchey. In the areas of the Thai border, there are people who feel closer to the baht: there are 13.8 percent in Banteay Meanchey, 6.7 percent in Koh Kong, 3.6 percent in Sihanoukville and 1.6 percent in Battambang.

In general, we observe that there are a significant number of individuals who feel closer to monetary plurality. In Pailin, 25 percent of the surveyed individuals feel closer to the riel and dollar; there are 18.8 percent in Siem Reap, 15.4 percent in Steung Treng, 14.6 percent in Battambang, 14.3 percent in Sihanoukville, 10 percent in Banteay Meanchey and 8.9 percent in Kampong Cham. At the same time, 6.7 and 6.5 percent of the interviewed individuals are more familiar with three currencies: KHR, USD, and THB in Battambang and Koh Kong, respectively.

**Table 5-18: Reason « familiarity » for the use of one currency (in percentage of individuals)**

	KHR	USD	THB	VND	KHR and USD	KHR and THB	USD and THB	THB and VND	KHR, USD and THB	Total

PP	25.8	70.8	0	0	3.3	0	0	0	0	100
TK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SRG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
KCH	65.4	24.1	1.6	0	8.9	0	0	0	0	100
BB	55.3	20.3	1.6	0	14.6	0.8	0	0.8	6.5	100
PL	62.5	12.5	0	0	25.0	0	0	0	0	100
BMC	37.5	31.3	13.8	0	10.0	3.8	3.8	0	0	100
SRP	55.6	25.6	0	0	18.8	0	0	0	0	100
SV	60.7	21.4	3.6	0	14.3	0	0	0	0	100
KK	60.0	20.0	6.7	0	6.7	0	0	0	6.7	100
ST	46.2	38.5	0	0	15.4	0	0	0	0	100
<b>Cambodia</b>	<b>50.9</b>	<b>32.9</b>	<b>2.6</b>	<b>0</b>	<b>11.2</b>	<b>0.6</b>	<b>0.4</b>	<b>0.1</b>	<b>1.3</b>	<b>100</b>

- **Question** (QGP 19): «You prefer using one currency because you're familiar with it»
- **Reading of the table:** In Phnom Penh, 25.8 percent of the interviewed individuals declare that they hold riels because they feel more familiar with it.
- **Sources of revenue:** 25.9 and 2.4 percent of the surveyed individuals declare that they hold dollars and bahts, respectively, because they are the currency of their revenue, while 48.4 hold riels for the same reason (the source of their revenue). When we examine province by province, we see that 77, 3.15, and 30.8 percent of the population in Phnom Penh, Siem Reap, and Sihanoukville, respectively, use dollars because it is the currency of their sources of revenue. In addition, there are the surveyed individuals who use several currencies as their revenues are also in several currencies. At the national scale, there are 18.8, 2.3, and 1.6, that hold i. the KHR and USD, ii. the KHR of THB, and iii. the KHR, THB, and USD, respectively.

**Table 5-19: Reason « Source of Revenue » (in percentage of individuals)**

	KHR	USD	THB	KHR and USD	KHR and THB	USD and THB	KHR, USD and THB	KHR, USD and VND	Total
Phnom Penh	15.1	77.0	0.0	7.9	0	0	0	0	100

Takeo	95.5	0.0	0.0	4.5	0	0	0	0	100
Svay Rieng	66.7	25.0	0.0	8.3	0	0	0	0	100
Kampong Cham	38.2	18.3	0.0	42.4	0	0	0	1.1	100
Battambang	75.9	5.7	1.9	10.1	1.9	0	4.4	0	100
Pailin	63.6	9.1	9.1	0	9.1	0	9.1	0	100
Banteay Meanchey	55.1	10.1	14.6	4.5	10.1	4.5	1.1	0	100
Siem Reap	58.5	31.5	0.0	9.2	0.0	0	0.8	0	100
Sihanoukville	35.9	30.8	5.1	12.8	10.3	0	5.1	0	100
Koh Kong	31.6	21.1	10.5	10.5	15.8	0	10.5	0	100
Stung Treng	42.9	28.6	0	28.6	0	0	0	0	100
<b>Cambodia</b>	<b>48.3</b>	<b>25.9</b>	<b>2.4</b>	<b>18.8</b>	<b>2.3</b>	<b>0.5</b>	<b>1.6</b>	<b>0.3</b>	<b>100</b>

- **Question (QGP 19):** «You prefer using one currency because it is the currency of our revenues»
- **Reading of the table:** In Phnom Penh, 15.8 percent of the interviewed individuals declare that they hold riels because it is the currency of their revenues.
  
- **Convenience:** 70 percent of the studied population finds riel more convenient whereas only 7.5 percent find the dollars convenient to use, and only 0.2 and 0.1 percent when it comes to the baht and dong, respectively. At the same time, about 20 percent of the people find it convenient to employ monandary plurality: 18.6, 1.1, 1.1, and 0.5 percent, find it convenient to use in parallel i. KHR and USD, ii. THB and KHR and, iii. KHR, USD and THB, and iv. KHR, USD and VND, respectively. In general, all eleven surveyed provinces recognize the convenience of using KHR, followed by the use of the combination of KHR and USD.

**Table 5-20: Reason « convenience » for the use of one currency (in percentage of individuals)**

	KHR	USD	THB	VND	KHR and USD	KHR and THB	KHR, USD and THB	KHR, USD and VND	Total
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Phnom Penh	57.2	18.3	0	0	24.5	0	0	0	100
Takeo	87.8	8.2	0	0	4.1	0	0	0	100
Svay Rieng	74.8	13.5	0	5.3	6.5	0	0	0	100
Kampong Cham	75.6	5.2	0	0	17.0	0	0	2.2	100
Battambang	69.9	3.0	0.6	0	18.7	2.4	5.4	0	100
Pailin	83.3	0	0	0	8.3	8.3	0	0	100
Banteay Meanchey	82.0	2.7	0.9	0	9.0	4.5	0.9	0	100
Siem Reap	71.6	4.1	0	0	24.3	0	0	0	100
Sihanoukville	69.2	2.6	0	0	25.6	2.6	0	0	100
Koh Kong	65.0	5.0	0	0	10.0	10	10	0	100
Stung Treng	58.8	5.9	0	0	35.3	0	0	0	100
Cambodia	70.0	7.5	0.2	0.1	18.6	1.2	1.1	0.5	100

- **Question** (QGP 19): «You prefer using one currency because you find it easy to use»
- **Reading of the table:** In Phnom Penh, 57.2 percent of the interviewed individuals declare that they hold riels because they find it convenient to use.
- **Stability of value:** When we asked about stability of value as the reason for holding of one currency, we have another picture. The riel is not usually a currency that attracts stability like the dollar and the baht. In terms of dollars, 69.5 percent hold this currency for its stability and 9.4 percent for baht. The population does not hold the dong for stability. About 95 percent of the interviewed people in Phnom Penh and Siem Reap hold dollars because they trust its value; this number is almost 100 percent in Steung Treng. In Banteay Meanchey, Koh Kong, Battambang, 51.4 percent, 22.2 percent, and 14.6 percent, of the population respectively, hold the baht for its stable value.

In addition, 7.5 and 5.2 percent of the people declare holding KHR and USD, and USD and THB, respectively, for their stability.

**Table 5-21: Reason « value stability » for the use of one currency (in percentage of individuals)**

	KHR	USD	THB	KHR and USD	KHR and THB	USD and THB	USD and VND	KHR, USD and THB	KHR, USD and VND	Total

Phnom Penh	0.1	95.3	2.3	2.3	0	0	0	0	0	100
Takeo	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Svay Rieng	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kampong Cham	10.1	67.4	0.0	15.7	0	0	3.4	0	3.4	100
Battambang	7.3	48.8	14.6	9.8	2.4	17.1	0	0	0	100
Pailin	0	50	0	0	0	50.0	0	0	0	100
Banteay Meanchey	2.7	29.7	51.4	2.7	0	13.5	0	0	0	100
Siem Reap	5.0	93.3	0	0	0	1.7	0	0	0	100
Sihanoukville	10.5	68.4	5.3	10.5	0	5.3	0	0	0	100
Koh Kong	11.1	55.6	22.2	0	0	11.1	0	0	0	100
Stung Treng	0	100	0	0	0	0	0	0	0	100
Cambodia	6.2	69.5	9.4	7.5	0.3	5.2	1.0	0	1.0	100

- **Question** (QGP 19): «You prefer using a currency because its value is stable»
- **Reading of the table:** In Phnom Penh, 0.1 percent of the interviewed individuals declare that they hold riels because its value is stable.
- **Currencies of my purchases:** The obtained responses to the question "money of my purchases" are not very different from other responses that we saw. The population continues to use several currencies because they need to pay for their purchases. The results from the Phnom Penh population confirms the high degree of dollarization as 59.2 percent of these individuals hold dollars because that is the currency of their purchases, while the riel represents only 11.7 percent. In provinces other than Phnom Penh, riels are held for purchases, more than dollars. Similarly, we also find that 3.4 percent of the people in Battambang who hold bahts as the currency of their purchases, 7.7% in Pailin, 14.4% in Banteay Meanchey, 5.6% in Koh Kong, 2.7% in Sihanoukville, and 0.6% in Siem Reap. The proportion of individuals reporting the use of several monies for reasons of purchases is quite high. At the national scale, 29 percent of the individuals holds KHR and USD for the reason of purchase. 2.3, 2.0, and 1.5 percent respectively in the case of the combination of (KHR, THB and USD), (USD and THB), and (KHR and THB).

**Table 5-22: Reason « my shopping money » for the use of one currency (in percentage of individuals)**

	KHR	USD	THB	VN D	KHR and USD	KHR and THB	KHR and VND	USD and THB	USD & VND	KHR, USD and THB	KHR, USD and VND	USD, THB and VND	Total
PP	11.7	59.2	0	0	29.1	0	0	0	0	0	0	0	100

TK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SRG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
KCH	47.8	3.4	0	1.1	40.3	0	1.1	0	0	0	6.3	0	100
BB	46.6	14.2	3.4	0	21.6	1.4	0	4.1	0	8.8	0	0	100
PL	46.2	7.7	7.7	0	7.7	7.7	0	7.7	0	15.4	0	0	100
BMC	41.2	14.4	14.4	0	10.3	8.2	0	10.3	0	1.0	0	0	100
SRP	34.8	26.2	0	0	37.6	0	0	0.7	0	0.7	0	0	100
SV	37.8	8.1	2.7	0	37.8	2.7	0	5.4	0	5.4	0	0	100
KK	27.8	5.6	5.6	0	22.2	16.7	0	0	0	22.2	0	0	100
ST	53.3	13.3	0	0	33.3	0	0	0	0	0	0	0	100
Cambodia	<b>34.1</b>	<b>26.2</b>	<b>2.2</b>	<b>0.3</b>	<b>29.0</b>	<b>1.5</b>	<b>0.3</b>	<b>2.0</b>	<b>0.1</b>	<b>2.3</b>	<b>0.7</b>	<b>0</b>	<b>100</b>

- **Question (QGP 19):** «You prefer using one currency because it is the currency of your purchases»
- **Reading of the table:** In Phnom Penh, 11.7 percent of the interviewed individuals declare that they hold riels because it is the currency of their purchases.
- **Prestige:** The use of one currency could reflect the personality of its holder. In this respect, the results show that 66.9 percent of the interviewed individuals think that the use of the dollar gives them prestige. Those who pay in dollars are considered (according to them) as well positioned in society. There are only 16.1 percent who consider that payment in riel brings prestige to the person and only 1.6 percent when it comes to the baht. The dong does not give prestige to its holders. People who live in Phnom Penh appreciate dollars the most and think that the use of the dollar gives them prestige (93.6 percent and 6.4% when it comes to riel). The people that live near the Thai border consider that using the baht brings them prestige (only 10 percent).

The use of monetary plurality also gives prestige. 10.3 percent of the people consider so when they hold KHR and USD, while between 1.3 and 1.6 percent in the case of (USD and THB), (KHR, USD, and THB), and (KHR and THB), respectively.

**Table 5-23: Reason « Prestige » for the use of one currency (in percentage of individuals)**

	KHR	USD	THB	KHR and USD	KHR and THB	USD and THB	KHR, USD and THB	Total
Phnom Penh	6.4	93.6	0	0	0	0	0	100

Takeo	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Svay Rieng	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kampong Cham	8.0	76.0	0	12	0	0	0	100
Battambang	25.4	42.4	1.7	15.3	1.7	6.8	6.8	100
Pailin	25.0	50.0	0	0	0	25	0	100
Banteay Meanchey	25.0	47.7	6.8	13.6	6.8	0	0	100
Siem Reap	15.3	74.6	0	10.2	0	0	0	100
Sihanoukville	20.0	60.0	10	10	0	0	0	100
Koh Kong	20.0	80.0	0	0	0	0	0	100
Stung Treng	33.3	50.0	0	16.7	0	0	0	100
<b>Cambodia</b>	<b>16.1</b>	<b>66.9</b>	<b>1.6</b>	<b>10.3</b>	<b>1.3</b>	<b>1.6</b>	<b>1.3</b>	<b>100</b>

- **Question (OGP 19):** «You prefer using one currency because it gives prestige to the holder»
- **Reading of the table:** In Phnom Penh, 6.4 percent of the interviewed individuals declare that they hold riels because it gives them prestige.
- **Avoid exchange loss:** If one were to spend in one currency other than that we have, we could lose in the exchange. In this case, in order to avoid this loss, Cambodian people prefer to keep several currencies for their expenses. According to our surveys, 39.3 percent prefer to hold dollars to avoid exchange loss, while 28.1 percent possess riels, 6.3 percent for baht, and only 0.3 for dong. More than half of the residents of Phnom Penh, Kampong Cham, and Steung Treng prefer to hold dollars to avoid exchange loss, and between 14 to 29 percent of the residents of Pailin, Banteay Meanchey, and Koh Kong when it comes to baht.

We further observe that approximately 20 percent of the surveyed individuals keep KHR and USD at the same time to avoid the exchange loss.

**Table 5-24: Reason « avoid exchange loss » for the use of one currency (in percentage of individuals)**

	KHR	USD	THB	VND	KHR and USD	KHR and THB	KHR and VND	USD and THB	USD and VND	THB and VND	KHR, VND and THB	KHR, USD and VND	USD, THB and VND	Total
PP	17.0	61.4	0	0	21.6	0	0	0	0	0	0	0	0	100

TK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100
SRG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100
KCH	10.0	59.3	0	0	28.6	0	0	0	0	0	0	2.1	0	100
BB	40.9	21.5	5.4	0	19.4	2.2	0	7.5	0	0	3.2	0	0	100
PL	42.9	14.3	14.3	0	0	0	0	28.6	0	0	0	0	0	100
BMC	38.8	13.4	14.9	0	6.0	7.5	0	13.4	0	0	6.0	0	0	100
SRP	43.2	28.4	0	0	25	0	0	2.3	0	1.1	0	0	0	100
SV	26.1	47.8	4.3	0	17.4	0	0	0	0	0	4.3	0	0	100
KK	35.7	14.3	28.6	0	0	7.1	0	14.3	0	0	0	0	0	100
ST	12.5	75.0	0	0	12.5	0	0	0	0	0	0	0	0	100
Cam bodia	28.1	39.3	3.9	0.9	19.9	1.5	0	4.0	0.2	0.2	1.5	0.6	0	100

- **Question** (QGP 19): «You prefer using one currency to avoid exchange loss»
- **Reading of the table:** In Phnom Penh, 17.0 percent of the interviewed individuals declare that they hold riels to avoid the exchange loss.

## 2.1.6. Perspective of Use of Currencies

- **Which currency would you use if your revenue increased?**

If revenues increased, the population would spend more in riel and save in dollars. Accordingly, 61.6 percent declare they would increase spending only in riel if their revenues grew. In contrast, 17.4 percent would spend only in dollars and 9 percent in two currencies: riels and dollars. This general trend is not for residents of Phnom Penh because the majority would spend more in dollars. The upward trend for expenses in baht is found in Banteay Meanchey (6.6 percent), Koh Kong (4 percent), Pailin (2.1 percent), and Sihanoukville (0.9 percent). Regarding dong, 17.7 percent of the people in SvayRieng would increase spending in dong if their revenues increased. In addition, there is a slight tendency to increase spending in two currencies at the same time, riel and dollar, between 3.5 and 29 percent depending on the province.

Regarding the prospect of spending several currencies, we observe that 16.9 percent of the surveyed individuals would increase their spending in two currencies (USD and KHR), if their revenues grew. This tells us the future development of monetary plurality (KHR and USD) in Cambodia.

**Table 5-25: Perspective of spending in each currency: Proportion of individuals who would increase spending in each currency if their revenues grew (in percentage)**

	riel	dollar	baht	dong	riel and dollar	riel, dollar and baht	Other currency	Total
Cambodia	61.6%	17.4%	0.7%	1.1%	16.9%	1.1%	1.1%	100%
Phnom Penh	34.2%	45.1%	0	0	20.7%	0	0	100%

Takeo	65.4%	5.4%	0	0	29.2%	0	0	100%
Svay Rieng	44.9%	10.2%	0	17.7%	16.3%	0.7%	10.2%	100%
Kampong Cham	69.1%	11.3%	0	0	19.6%	0	0	100%
Battambang	81.4%	10.5%	0	0	3.5%	4.1%	0.6%	100%
Pailin	60.4%	14.6%	2.1%	0	12.5%	4.2%	6.3%	100%
Banteay Meanchey	76.9%	5.5%	6.6%	0	5.5%	4.4%	1.1%	100%
Siem Reap	64.8%	14.5%	0	0	20.8%	0	0	100%
Sihanoukville	64.9%	10.8%	0.9%	0	16.2%	1.8%	5.4%	100%
Koh Kong	67.0%	10.0%	4.0%	0	8.0%	4.0%	7.0%	100%
Stung Treng	82.7%	7.7%	0	0	9.6%	0	0	100%

- **Question** (QGP 18): How would the proportion of expenses in KHR/USD/THB/VND/others change if your revenues increased?
- **Reading of the table:** In Phnom Penh, 34.2 percent of the individuals would increase expenses in riel if their revenues increased.

- **Which money would you save if your revenue increased?**

When it comes to monies of savings, dollars are positioned in the most prominent place. Of the surveyed population, 51.3 percent said they would save only in dollars, while 34 percent would save only in riel. Savings in dollars would increase for nearly three-quarters of the residents in Phnom Penh. If their revenue grew, 14.7 percent would save in riel, and 11.4 percent in riels and dollars. Most of the residents of Takeo declare increasing their savings in riel (58.7%). Five border provinces also increase the savings in baht, among which, the residents of Banteay Meanchey would do so the most, at 17.8% against 10% in Koh Kong, 4.2% in Pailin, 3.6% in Sihanoukville, and finally 1.8% in Battambang. Moreover, it is only in the province of SvayRieng that people would increase their savings in dong (8.9%).

Finally, we find that nearly 10 percent of the surveyed individuals would save in two currencies at the same time (riels and dollars). This proportion is lower than spending in these two currencies (16.9%) as we saw above, because of the preference for saving in dollars.

**Table 5-26: Perspective of savings in each currency: Proportion of individuals would increase savings in each currency if their income grew (in percentage)**

	riel	dollar	baht	dong	riel and dollar	Other currency	Total
Cambodia	34.0%	51.3%	2.1%	0.6%	9.7%	2.3%	100%
Phnom Penh	14.7%	73.4%	0.0%	0.0%	11.4%	0.5%	100%

Takeo	58.7%	28.6%	0.0%	0.0%	12.7%	0.0%	100%
Svay Rieng	26.0%	45.9%	0.0%	8.9%	17.1%	2.1%	100%
Kampong Cham	36.1%	53.6%	0.0%	0.0%	10.3%	0.0%	100%
Battambang	43.3%	36.8%	1.8%	0.0%	7.6%	10.5%	100%
Pailin	52.1%	35.4%	4.2%	0.0%	4.2%	4.2%	100%
Banteay Meanchey	28.9%	48.9%	17.8%	0.0%	0.0%	4.4%	100%
Siem Reap	36.8%	51.6%	0	0.0%	11.6%	0.0%	100%
Sihanoukville	34.2%	54.1%	3.6%	0.0%	3.6%	4.5%	100%
Koh Kong	32.0%	45.0%	10.0%	0.0%	7.0%	6.0%	100%
Stung Treng	46.2%	44.2%	0.0%	0.0%	7.7%	1.9%	100%

- **Question** (QGP 18): How would the proportion of savings in KHR/USD/THB/VND/others change if your revenue increased?
- **Reading of the table:** In Phnom Penh, 34.0 percent of the individuals would save in riel if their revenues increased.

### 2.1.7. Estimation of Proportion of Currencies Circulating from General Population's Revenues

- **Estimation method of proportion of currencies circulating from general population's revenues**

Suppose that:

- RT: Represents total national revenue of the *general population*
- PR: Represents the proportion of total revenue in riel to the total national revenue or the proportion of riels circulating from the revenues of the *general population*
- PS: Represents the proportion of total revenue in dollar to the total national revenue or the proportion of dollars circulating from the revenues of the *general population*
- PB: Represents the proportion of total revenue in baht to the total national revenue or the proportion of bahts circulating from the revenues of the *general population*
- PD: Represents the proportion of total revenue in dong to the total national revenue or the proportion of dongs circulating from the revenues of the *general population*
- R: Represents total revenue in riel
- S: Represents total revenue in dollar
- B: Represents total revenue in baht
- D: Represents total revenue in dong
- I: Represents individual

We could then write the following equations:

- Total national revenue can be written:  $RT = R + S + B + D$  (A)
- Total revenue in riel can be written:  $R = \sum_i Ri$  (B)
- Total revenue in dollar can be written:  $S = \sum_i Si$  (C)
- Total revenue in baht can be written:  $B = \sum_i Bi$  (D)
- Total revenue in dong can be written:  $D = \sum_i Di$  (E)

The proportion of currencies circulating from the revenues of the *general population* can be written:

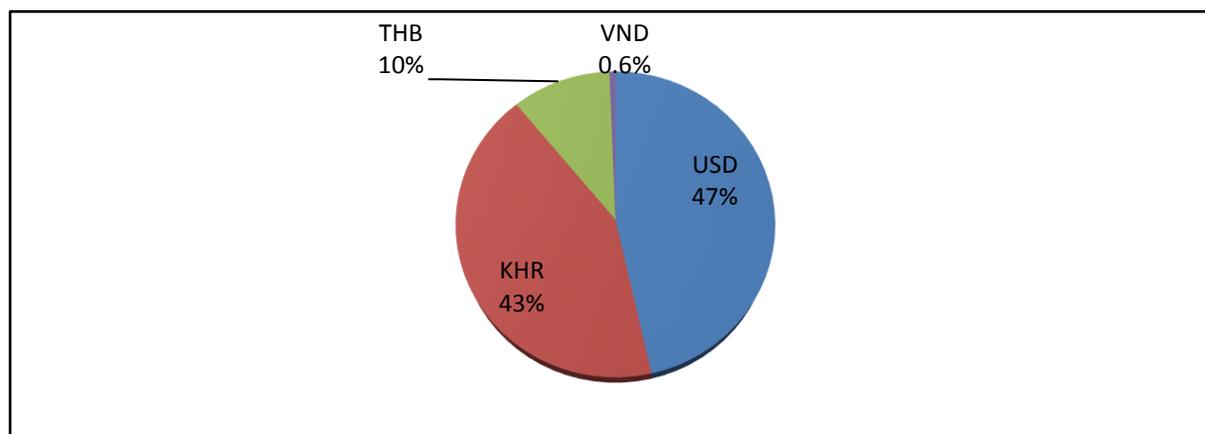
- Proportion of total revenue in riel to the total national revenue can be written:  
 $PR = R/RT$  (F)
- Proportion of total revenue in dollar to the total national revenue can be written:  
 $PS = S/RT$  (G)
- Proportion of total revenue in baht to the total national revenue can be written:  
 $PB = B/RT$  (H)
- Proportion of total revenue in dong to the total national revenue can be written:  
 $PD = D/RT$  (I)

From the survey results, we know the total revenue of each currency of each individual ( $R_i$ ,  $S_i$ ,  $B_i$ , and  $D_i$ ), we could sum them up to find the total national revenue ( $RT$ ). Reweighting results by our coefficient, we can finally estimate the proportion of currencies circulating from the *general population* ( $PR$ ,  $PS$ ,  $PB$ , and  $PD$ ).

Based on this method, we find that dollars in circulation accounted for 47 percent of the money supply, riels in circulation accounted for 43 percent, bahts 10 percent, and dongs 0.6 percent.

This proportion does not represent money supply in each currency in the economy as the revenues of the enterprises, traders, and other economic agents are not all taken into account in this estimate.

**Figure 5-2: Proportion of currency circulating estimated from general population's revenues**



## 2.2. Currencies Used in Internal Trade

We surveyed 23 categories of activities of traders. Twenty-one percent of the surveyed traders have more than two activities. Traders of *textile products* are the most numerous to be surveyed, followed by *electronic products* and *groceries*, which represent respectively 20%, 9.9%, and 9.6%.

**Table 5-27: Main activities of the surveyed traders**

	Products to sell	Number	Percentage
1	Milled rice	57	5.15
2	Vegetables	24	2.16
3	Fruits	30	2.71
4	Grocery	106	9.58
5	Other agricultural products	11	0.99
6	Fertilizers & pesticides	25	2.26
7	Machinery and agricultural materials	40	3.61
8	Textile	230	20.79
9	Construction materials	50	4.52
10	Pharmacy	32	2.89
11	Products of hygiene and beauty	62	5.60
12	Transportation (bicycle, motorcycle, etc.).	32	2.89
13	Petrol and gas	10	0.90
14	Jewelry store	51	4.61
15	Souvenirs	9	0.81
16	Other services & trade	64	5.78
17	Household goods	50	4.52
18	Electronic products	109	9.85
19	Drinks	36	3.25
20	Foods for animals	4	0.36
21	Equipment goods	16	1.44
22	Parts of machines	37	3.34
23	Seafood	21	1.89
	Total	1106	100

Note: Nomenclature proposed by the author after seen the of responses of interviews

Among the 11 surveyed provinces, trade is mainly concentrated in Phnom Penh, followed by Battambang, Banteay Meanchey, Siem Reap, Kampong Cham, and Sihanoukville. Their market and share is 72.8 percent, 12.2 percent, 4.5 percent, 4.3 percent, 4.2 percent, and 4.2 percent, respectively. Takeo, Svay Rieng, Koh Kong, Pailin and Stung Treng have a market and share of less than 4 percent.

### 2.2.1. Currencies for Income

- **Currencies for wholesale**

In domestic trade networks, three currencies are used for payments: dollar, riel, and baht. We also dandected the use of the dong, but its relative importance is very low and limited to the province of Svay Rieng which is located in the Khmer-Vietnamese border. In all surveyed provinces, two currencies, the riel and dollar, are generally used in a higher or lower proportion depending on the area. The baht is present in the trades in BB, BMC, KK, PL, SV, SRP, and PP. Rielsare the most used currency to purchase for traders in TK, SRG, KCH and ST, while dollars arandhe most used currency by traders in PP, SRP, and SV. At the national level, weighted by the number of establishments, results show that 43.9 percent of the tradersmake

their purchases more than 50 percent of the time in riel (of which, 27 percent exclusively in riel). In contrast, about 48.6 percent declare making more than 50 percent of their purchases in dollars (of which, 23.3 percent exclusively in dollars). Baht is primarily used for the purchases of agricultural products or fertilizers and pesticides, machinery and parts of machine, food for animals imported from Thailand, as well as for the purchases of Thai textile products (clothing, shoes and c.) in the Thai border areas. Of the traders, 13.5 percent declare using the baht to make more than 50 percent of their purchases (of which, 8.2 percent are exclusively in baht). In addition, the dong has not penetrated commercial networks, as 99.8 percent declare they did not use dong.

**Table 5-28: Supply of currencies by province**

Province	Proportion trader*	Purchases in riel (in %)			Purchase in dollar (in %)		
		0	[50-100]	100	0	[50-100]	100
PP	72.8%	43.4	24.9	10.2	11.3	77	38.0
TK	3.0%	27.3	63.7	48.5	48.5	39.4	27.3
SRG	1.8%	30.0	50	45.0	50.0	45	25.0
KCH	4.2%	12.8	66	42.6	42.6	42.6	12.8
BB	12.2%	36.3	43.7	29.6	54.8	25.1	8.1
PL	0.9%	30.0	70	40.0	75.0	12.5	12.5
BMC	4.5%	72.0	16	10.0	69.4	16.4	8.2
SRP	4.3%	50.0	33.3	8.3	20.8	62.5	35.4
SV	4.2%	37.0	39.1	26.1	47.8	39.1	17.4
KK	1.8%	25.0	60	30.0	80.0	0	0.0
ST	0.6%	0.0	71.5	42.9	42.9	42.9	0.0
Cambodia		35.1%	43.9%	27.0%	37.7%	0.486	23.3%

- **Question** (QTRA 2): Where do you buy goods? In which currency do you pay for purchases?
- **Reading of the table:** In Phnom Penh, 34.0 percent of the individuals would save in riel if their revenues increased.
- QTRA 2: Question 2 of the questionnaire of the traders
- \* Proportion of the traders who purchase the goods in each province

### Supply of currencies by province (2)

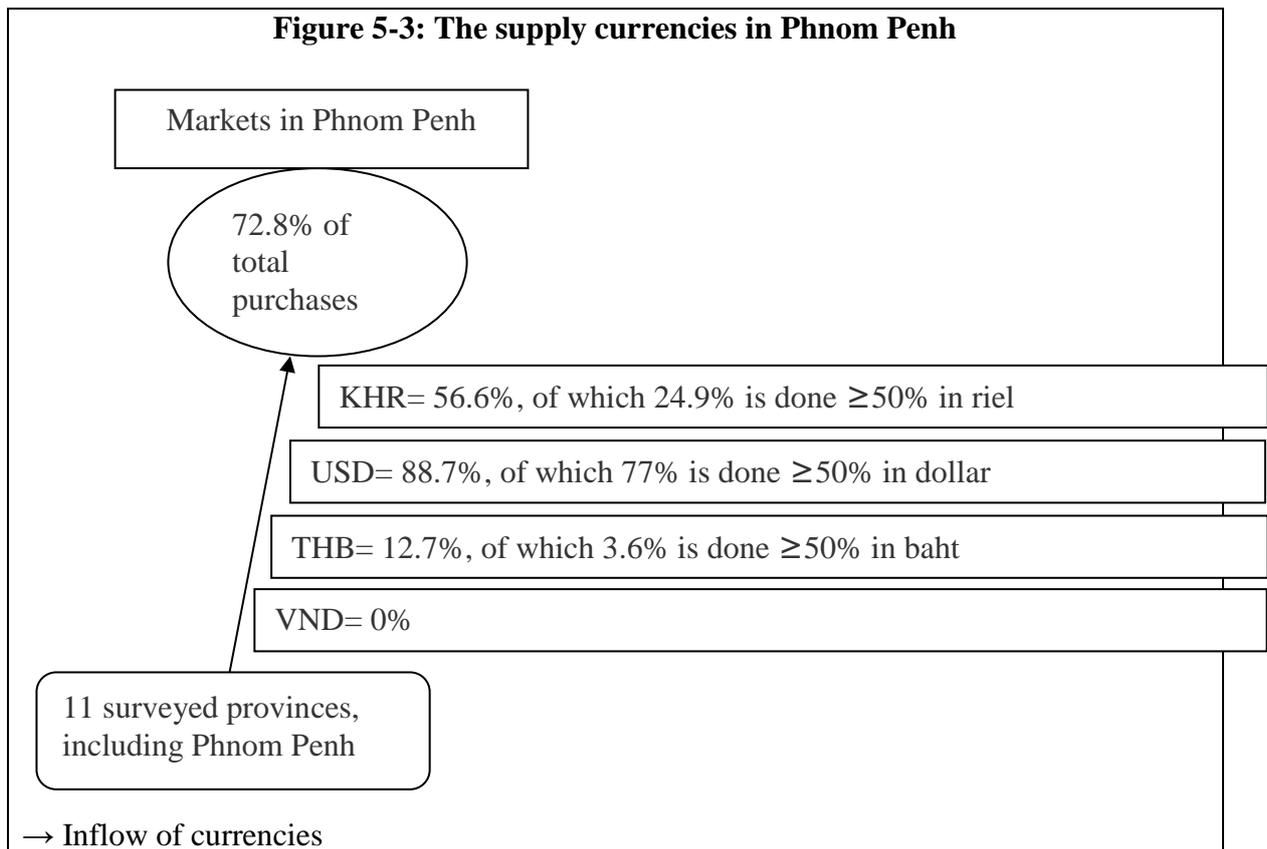
Traders	Proportion traders	Purchases in baht (in %)			Purchases of dong (in %)		
		0	[50-100]	100	0	[50-100]	100
PP	72.8%	87.3	3.6	0.4	100	0	0
TK	3.0%	100.0	0	0.0	100	0	0
SRG	1.8%	100.0	0	0.0	90	0	5
KCH	4.2%	100	0	0	100	0	0
BB	12.2%	51.9	36.3	20.7	100	0	0
PL	0.9%	75.0	25	0.0	100	0	0
BMC	4.5%	22.4	65.3	55.1	100	0	0
SRP	4.3%	66.7	16.7	6.3	100	0	0
SV	4.2%	65.2	21.7	15.2	100	0	0
KK	1.8%	35	50	25.0	100	0	0
ST	0.6%	85.7	0	0	100	0	0
Cambodia		82.4%	13,5%	8.2%	102.6%	0.3%	0.3%

From the results in Table 5-28 above, we find that the traders' supply of goods and services within the country mainly concentrates in Phnom Penh. Of the surveyed traders, 72.8% reported purchasing goods in Phnom Penh, while 12.2 percent do so in BB and 4.5 percent in BMC. These trade flows reflect the flow of currencies. In order to compare more clearly the flow of currencies used to pay the traders, we choose four provinces to show them: Phnom Penh (where dollars dominate), Banteay Meanchey (where the bahts circulates), Svay Rieng (where dong circulates) and Kampong Cham (where riels seem to dominate) (Figure 5-2, 5-3, 5-4, and 5-5).

In Phnom Penh, the flows of currencies that enter are:

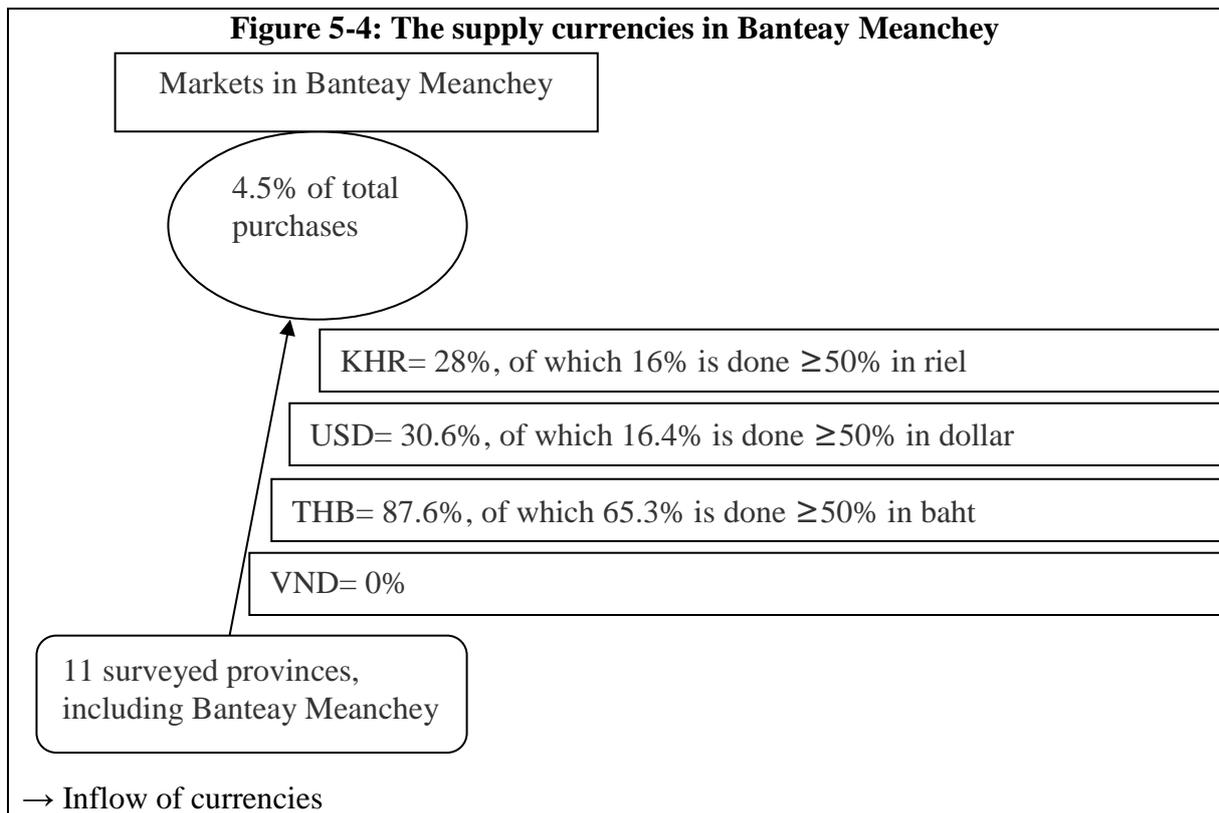
- KHR: 56.6 percent of the surveyed traders declare having paid for their purchases in riel. Among them, 24.9 percent do so for more than 50 percent of their total purchases.
- USD: 88.7 percent of the surveyed traders declare having paid for their purchases in dollars. Among them, 77 percent do so for more than 50 percent of their total purchases.
- THB: 12.7 percent of the surveyed traders declare having paid their purchases in baht. Among them, 3.6 percent do so for more than 50 percent of their total purchases.

**Figure 5-3: The supply currencies in Phnom Penh**



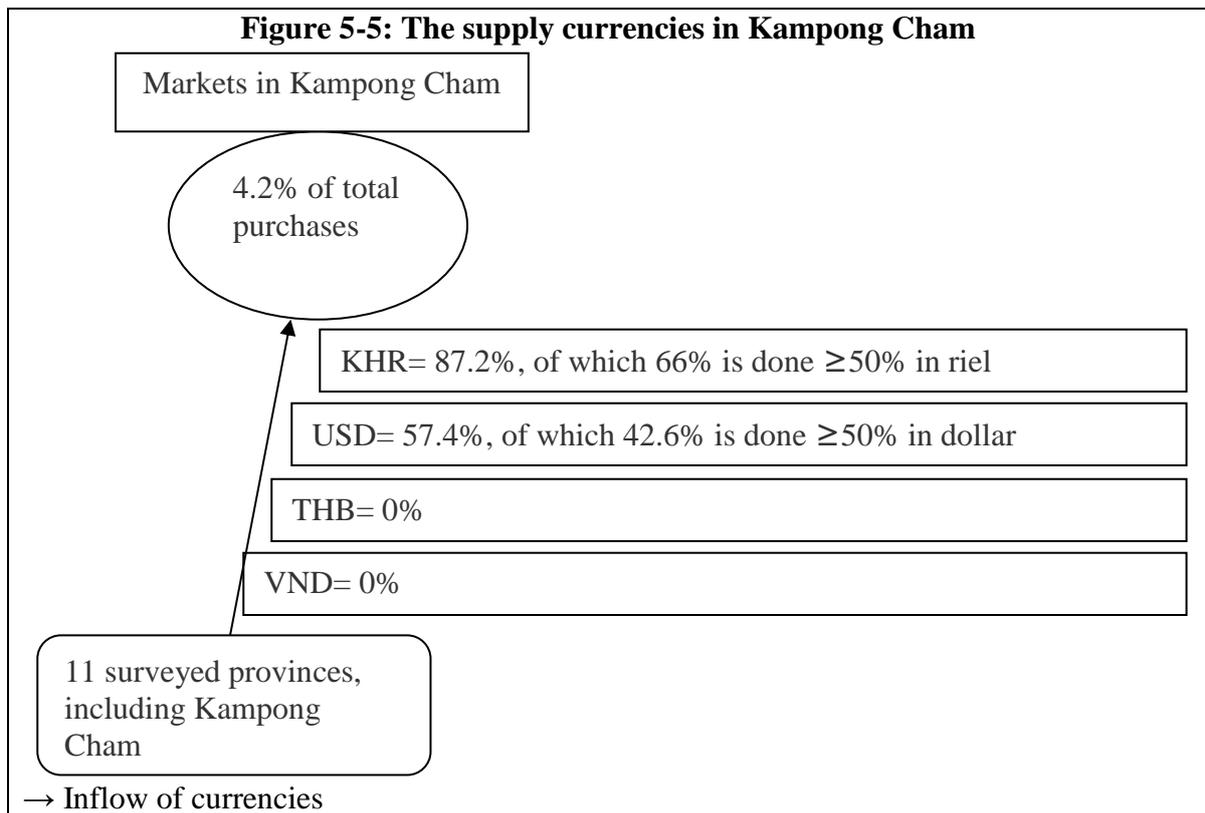
In Banteay Meanchey, the flow of currencies that enter are the following:

- KHR: 28 percent of the surveyed traders declare having paid for their purchases in riel. Among them, 16 percent do so for more than 50 percent of their total purchases.
- USD: 30.6 percent of the surveyed traders declare having paid for their purchases in dollars. Among them, 16.4 percent do so for more than 50 percent of their total purchases.
- THB: 87.6 percent of the surveyed traders declare having paid their purchases in baht. Among them, 65.3 percent do so for more than 50 percent of their total purchases.



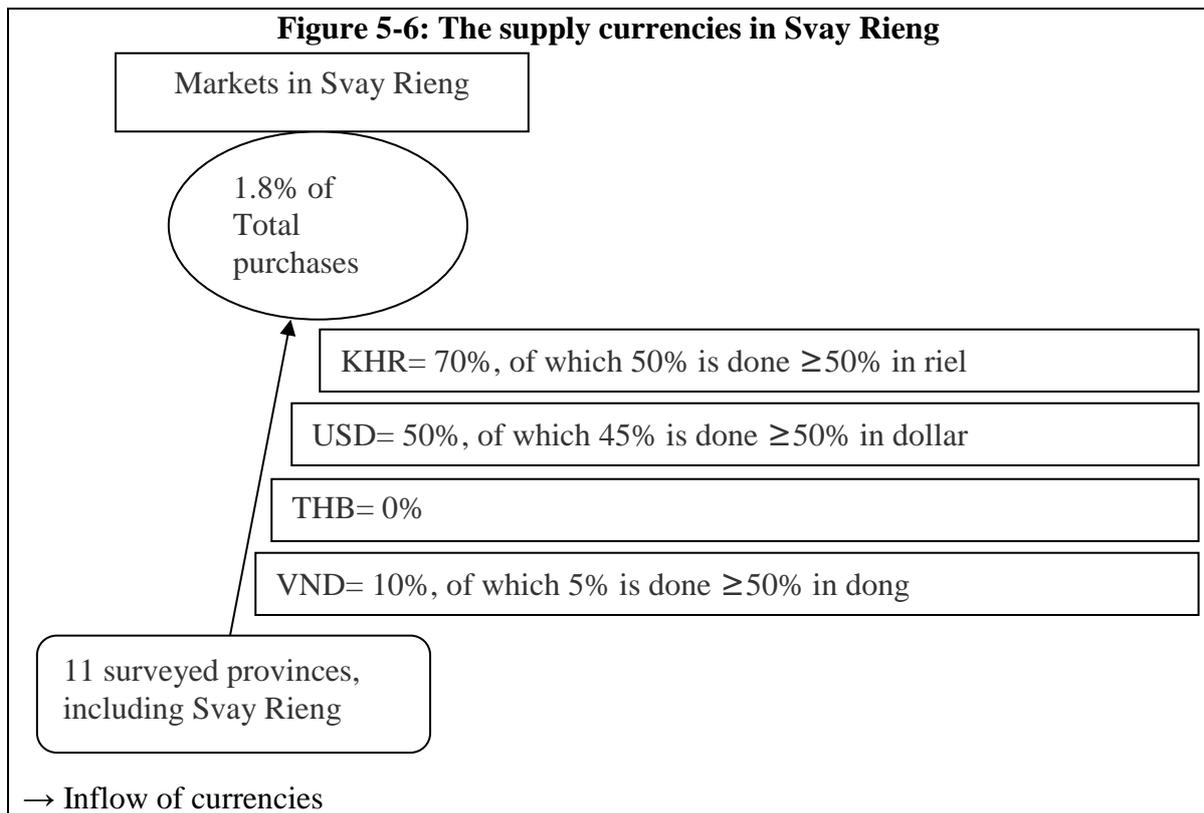
In Kampong Cham, the flows of currencies that enter are the following:

- KHR: 87.2 percent of the surveyed traders declare having paid for their purchases in in riel. Among them, 66 percent do so for more than 50 percent of their total purchases.
- USD: 57.4 percent of the surveyed traders declare having paid for their purchases in in dollars. Among them, 42.6 percent do so for more than 50 percent of their total purchases.



In Svay Rieng, the flows of currencies that enter are the following:

- KHR: 70 percent of the surveyed traders declare having paid for their purchases in riel. Among them, 50 percent do so for more than 50 percent of their total purchases.
- USD: 50 percent of the surveyed traders declare having paid their purchases in dollar. Among them, 45 percent do so for more than 50 percent of their total purchases.
- VND: 10 percent of the surveyed traders declare having paid for their purchases in dong. Among them, 5 percent do so for more than 50 percent of their total purchases.



In addition, for the currencies of supplies calculation, 28% of the traders declare calculations in dollars, 16 percent in riels, 5 percent in bahts, 21 percent in dollars and riels, and 11 percent in dollars and bahts. 72 percent uses dollars alone or jointly with another currency to calculate their purchases. The dollars plays an important role in the traders' supply calculation.

- **Currencies of retail sales**

Although traders use more dollars for their supplies, most traders declare that they receive income from retail sales in riel to more than 50 percent of total incomes. Of the traders, 73.5 percent reported receiving revenues of more than 50 percent in riel, while 33.8% are paid more than 50 percent in dollars. In addition, only 2.5 percent of traders pay more than 50 percent in baht and less than one percent in dong.

At the provincial level, the proportion of traders who receive 50 percent of their income in riel (the lowest compared to other provinces) are in PP, SVR, SRP, and BMC, and they represent 48 percent, 67 percent, 67 percent, and 70 percent, respectively. At the same time, PP and SRP are the two provinces in which the proportion of traders who are paid more than 50 percent in dollars, are the highest (62.7 percent for PP and 41 percent for SRP). In addition, BMC and KK are the provinces where baht are being used the most to pay between traders. The traders who receive more than 50 percent of income in baht represent 26.1 percent and 4.5 percent, respectively. The only province where dong is used to pay for purchases to traders is SRG, which represents 15.7 percent.

**Table 5-29: Currencies of retail sales (1)**

	KHR				USD			
	0	]0-50[	[50-100]	100	0	]0-50[	[50-100]	100
Phnom Penh	9.2%	42.2%	48.6%	1.8%	1.8%	35.5%	62.7%	10.0%
Takeo	2.7%	3.6%	93.7%	25.5%	25.5%	58.2%	16.3%	2.7%
Svay Rieng	7.0%	26.1%	67.0%	20.9%	24.3%	58.3%	17.4%	2.6%
Kampong Cham	0.0%	12.5%	87.5%	6.7%	8.7%	59.6%	31.7%	0.0%
Battambang	2.7%	11.6%	85.6%	26.7%	30.8%	54.1%	15.1%	1.4%
Pailin	0.0%	2.0%	98.0%	42.9%	51.0%	44.9%	4.0%	2.0%
Banteay Meanchey	10.9%	18.5%	70.7%	25.0%	59.8%	30.4%	9.8%	3.3%
Siem Reap	5.8%	27.2%	67.0%	29.1%	29.7%	28.7%	41.6%	4.0%
Sihanoukville	0.8%	17.8%	81.4%	8.5%	13.6%	59.3%	27.1%	0.0%
Koh Kong	2.2%	7.9%	89.8%	21.3%	31.5%	60.7%	7.8%	1.1%
Stung Treng	3.2%	1.6%	95.3%	14.3%	15.9%	71.4%	12.7%	3.2%
Cambodia	4.9%	21.6%	73.5%	15.0%	19.0%	47.2%	33.8%	4.0%

- **Question (QTRA2):** Which currencies/currency do you receive from retail sales? Specify the proportion.
- **Reading of the table:** In Phnom Penh, 9.2 percent of the interviewed traders do not get revenues in riel.

**Currencies of retail sales (2)**

	THB				VND			
	0	]0-50[	[50-100]	100	0	]0-50[	[50-100]	100
Phnom Penh	99.1%	0.9%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Takeo	99.1%	0.9%	0.0%	0.0%	91.8%	8.2%	0.0%	0.0%
Svay Rieng	99.1%	0.0%	0.0%	0.0%	59.1%	25.2%	15.7%	0.9%
Kampong Cham	94.2%	5.8%	0.0%	0.0%	93.3%	6.7%	0.0%	0.0%
Battambang	58.2%	39.7%	2.1%	0.0%	100.0%	0.0%	0.0%	0.0%
Pailin	53.1%	44.9%	2.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Banteay Meanchey	30.4%	43.5%	26.1%	6.5%	100.0%	0.0%	0.0%	0.0%
Siem Reap	87.4%	12.6%	0.0%	0.0%	97.1%	2.9%	0.0%	0.0%
Sihanoukville	81.4%	16.1%	2.5%	0.0%	100.0%	0.0%	0.0%	0.0%
Koh Kong	39.3%	56.2%	4.5%	0.0%	100.0%	0.0%	0.0%	0.0%
Stung Treng	90.5%	9.5%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Cambodia	85.7%	11.9%	2.3%	0.5%	94.9%	4.2%	0.8%	0.0%

What do the traders do when they receive revenues in currencies that do not quite fit the needs of currencies for their supplies?

There are at least three solutions:

- i- Either, directly use the currency/currencies of the revenues to pay suppliers by accepting exchange rates of the suppliers;
- ii- Or, change the currencies with the exchange agents before purchasing to the suppliers;
- iii- Or, perform exchange activities for collecting the currencies they need.

For the first and second solutions, the traders bear additional costs because their suppliers can impose disadvantageous rates and the money changers also take a commission. A good solution for the traders who need currencies for their purchases is to perform exchange operations for the customers.

**2.2.2. Currencies for Price Display**

There is an abundant supply of multiple currencies as we have seen from the above. They are mainly in dollars, riels and bahts. We now examine the currencies that the traders use to display prices. Do they display them in single currency or in several currencies? What are their reasons?

According to our surveys, dollars and riels play a major role in the price display of the traders. Of the traders, 33.4 percent display their prices exclusively in riel, 26.2 percent in dollars, and 3.7 percent in baht. The dong is not an exclusively displayed currency. Some traders display their prices in several currencies depending on the origin of products in which 28.2 percent use dollars and riels as displayed currencies. In contrast, only 1.8 percent posts their prices in riel and baht. The number of displayed currency increases up to three for 3.9 percent of traders. One province where the dong is marginally used to display the price is Svay Rieng; the proportion of traders who do so represents less than 1 percent.

**Table 5-30: Display of price by traders (percentage of traders)**

Display of prices by province	riel	dollar	baht	riel and dollar	riel and baht	dollar and baht	riel, dollar and baht	riel, dollar and dong
Phnom Penh	10%	49%	0%	40%	0%	0%	1%	0%
Takeo	50%	20%	0%	28%	0%	0%	0%	0%
Svay Rieng	34%	22%	0%	19%	0%	0%	0%	12%
Kampong Cham	43%	18%	0%	37%	0%	0%	2%	0%
Battambang	44%	8%	9%	18%	5%	1%	13%	0%
Pailin	47%	2%	27%	2%	8%	6%	8%	0%
Banteay Meanchey	30%	7%	27%	2%	10%	8%	16%	0%
Siem Reap	37%	36%	1%	21%	1%	0%	4%	0%
Sihanoukville	45%	19%	4%	18%	7%	1%	6%	0%
Koh Kong	39%	6%	19%	4%	10%	12%	9%	0%
Stung Treng	48%	6%	0%	44%	0%	0%	2%	0%
Cambodia	33.4%	26.2%	3.7%	28.2%	1.8%	1.0%	3.9%	0.7%

- **Question** (QTRA 4): In which currency do you display price?
- **Reading of the table:** In Phnom Penh, 10 percent of the interviewed traders display price exclusively in riel.

- **The reasons of displaying the price in one and several currencies**

When we asked traders the reasons that drive them to display prices in one or several currencies at the same time, we realize that:

- Those who display in only one currency and especially in riel, are the traditional traders: 39 percent of them do so to facilitate the calculations and 35 percent by habit.

- Those who display in several currencies are the traders more open to the outside: 57 percent of them do so because they display the prices in the currency they use for suppliers (same currency as the purchase). This means that when they supply in dollars, they sell in dollars. In addition, 36 percent display in several prices to attract customers.

### 2.2.3. Exchange Operations

- **Do traders perform exchange activities for customers?**

The exchange operations of the traders (for the customer) whose purpose was to initially collect the currencies they need to purchase to the suppliers often become a secondary activity. In fact, they do not exchange in only one direction (the currency that does not match the supply to those that does), but in the opposite direction and they also agree to exchange several currencies they have. These exchange operations also bring them profit. Thirty percent of traders declare performing exchange operations for customers. 86.6% exchange from dollars to riels for customers (of which 31.7% frequently do so) and 37.1% from riels to dollars (of which 16.6% frequently do so). About 21.9% who exchange from baht to riel, and only 7.1% from riel to baht. The exchanges in the other direction among the four currencies (riel, dollar, baht, and dong) are not frequently made, especially from baht to dong or from dong to baht.

**Table 5-31: Percentage of traders who exchange money for customers**

	Yes
Phnom Penh	20%
Takeo	43%
Svay Rieng	47%
Kampong Cham	27%
Battambang	33%
Pailin	47%
Banteay Meanchey	33%
Siem Reap	31%
Sihanoukville	32%
Koh Kong	35%
Stung Treng	44%
Cambodia	30%

- **Question** (QTRA 9): Do you exchange several different currencies with your customers?
- **Reading of the table:** In Phnom Penh, 20 percent of the interviewed traders make the exchange operations for the customer.

**Table 5-32: Proportion of traders who exchange one currency for another**

Exchanges for Clients	% change	Sometimes	Frequently
From dollar to riels	86.6%	55.0%	31.7%

From dollar to bahts	2.7%	1.6%	1.1%
From dollar to dong	3.0%	2.1%	0.8%
From riel to dollars	37.1%	20.5%	16.6%
From riel to bahts	7.1%	4.4%	2.7%
From riel to dong	3.1%	2.0%	1.2%
From baht to riels	21.9%	16.6%	5.3%
From baht to dollars	4.3%	3.3%	1.0%
From baht to dong	0.1%	0.1%	0.0%
From dong in riels	5.5%	3.8%	1.8%
From dong in dollars	1.8%	0.8%	0.9%
From dong in baht	0.0%	0.0%	0.0%
Total	100%		

- **Question** (QTRA 9-1): if you do exchange operation with customers, in which direction do you exchange?
- **Reading of the table:** 86.6 percent of the interviewed traders exchange from dollar to riel  
55 percent among them do so somandimes  
31.7 percent among them do so frequently

The turnover of exchange activities that the traders perform for customers is about 230 dollars per day; the maximum surveyed amount is 10,000dollars. It is estimated that this amount is well below the turnover actually achieved.

- **How do the traders determine the exchange rate?**

According to our interviews, the exchange rates sand by the traders are not different from those sand by the manual changers. In fact, the goals of exchange operations for most traders are to collect currencies rather than to generate profits. If their rates were higher than those of other traders and moneychangers, the customers would not exchange much. Therefore, a good strategy is to sand a rate roughly the equivalent of the exchange rate of the markand.

Eighty-three percent of the traders take the exchange rate of the money changers to sand their rates, 8.8 percent sand their rates based on the exchange rates of other traders, 2.7 percent and 2.1 percent follow the exchange rates disseminated by television channels and newspapers, respectively. The more the traders are dynamic in exchange operations, the more they learn from several changers. Two to three times per day, the traders ask the information on the exchange rates from changers in order to follow the evolution of the exchange rate. In addition, in Phnom Penh, 22.7 percent of the traders learn about the exchange rate of other traders. In other provinces, the information about the exchange ratecomes mainly from the large changers of the province, especially in BMC, SRP, and KK.

**Table 5-33: Percentage of manual money changers who seek information on exchange rate with other agents to determine their exchange rates**

Province	NBC	Banks	Changers	Other traders	Television	Newspapers	Others	Total
----------	-----	-------	----------	---------------	------------	------------	--------	-------

PP	0.0%	4.5%	68.2%	22.7%	0.0%	4.5%	0.0%	100
TK	0.0%	19.1%	70.2%	6.4%	4.3%	0.0%	0.0%	100
SRG	0.0%	7.4%	85.2%	1.9%	3.7%	0.0%	1.9%	100
KCH	0.0%	3.6%	92.9%	3.6%	0.0%	3.6%	0.0%	100
BB	2.0%	4.1%	89.8%	8.2%	6.1%	2.0%	2.0%	100
PL	0.0%	0.0%	87.0%	8.7%	0.0%	0.0%	4.3%	100
BMC	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100
SRP	0.0%	3.1%	96.9%	0.0%	9.4%	0.0%	0.0%	100
SV	0.0%	0.0%	84.6%	5.1%	7.7%	0.0%	10.3%	100
KK	0.0%	3.2%	93.5%	0.0%	3.2%	0.0%	6.5%	100
ST	0.0%	25.0%	71.4%	14.3%	0.0%	0.0%	0.0%	100
Cambodia	0.2%	5.9%	83.1%	8.8%	2.7%	2.1%	0.8%	100

- **Question** (QTRA 9-2): Where do you get information on the exchange rate?
- **Reading of the table:** In Phnom Penh, 0.0% of the interviewed traders get the information about the exchange rate from the NBC.

- **Do traders exchange from exchange agencies?**

When traders do not perform exchange activities for customers to collect the currencies they need, or if they do, but the amount of currencies they need for their purchases are not enough, they will also exchange the currencies with the exchange agencies (changers or banks or other traders and etc.) to obtain the currencies of the supply. In some cases, the traders exchange currencies with the exchange agencies because they generate a surplus of one or more currencies from their exchange activity. The traders in the Thai border provinces are those that exchange the most.

**Table 5-34: Proportion of traders that exchange currencies with exchange agents.**

Province	In percentage
Phnom Penh	71.8%
Takeo	57.3%
Svay Rieng	75.9%
Kampong Cham	78.1%
Battambang	85.8%
Pailin	93.9%
Banteay Meanchey	89.1%
Siem Reap	84.5%
Sihanoukville	82.6%
Koh Kong	88.8%
Stung Treng	77.8%
Cambodia	76.3%

Province	In percentage
Banteay Meanchey	89.1%
Siem Reap	84.5%
Sihanoukville	82.6%
Koh Kong	88.8%
Stung Treng	77.8%

- **Question** (QTRA 8): Do you exchange money with outsiders other than your customers?
- **Reading of the table:** In Phnom Penh, 71.8% of the interviewed traders exchange the monies with the exchange agencies (changers, commercial banks andc.).

Among those who exchange, 70.4% exchange from riel to dollar (of which, 47.4 frequently do so). Conversely, 36.4 percent exchange from dollar to riel. Riels are requested here for various reasons: traders use them to purchase agricultural products, handicrafts of the farmers and other local products etc..., or they need riels for exchange activities for customers. In addition, 24.7% exchange from riel to baht (of which, 16.7% frequently do so). The proportion of traders who exchange from dollar to baht and especially from baht to dollar is low, accounting for 9.3% and 3.9%, respectively. The other direction of exchange between the four currencies are minimally conducted or do not exist.

**Table 5-35: Proportion of traders who exchange in each direction riel, dollar, baht and dong**

Exchange	% change	Sometimes	Frequently
From dollars to riels	36.4%	16.0%	20.4%
From dollars to bahts	9.3%	5.3%	4.0%
From dollars to dong	2.2%	1.2%	1.0%
From riels to dollars	70.4%	23.0%	47.4%
From riels to bahts	24.7%	8.1%	16.7%
From riels to dong	4.6%	1.9%	2.7%
From bahts to riels	3.4%	2%	1%
From bahts to dollars	3.9%	2%	2%
From bahts to dong	0.0%	0%	0%
From dongs to riels	1.9%	1%	1%
From dongs to dollars	0.8%	0%	1%
From dongs to bahts	0.0%	0%	0%

- **Question** (QTRA8-1): If you exchange money, in which direction do you exchange?
- **Reading of the table:** 36.4 percent of the interviewed traders exchange from dollar to riel  
16 percent among them do so sometimes  
20.4 percent among them do so frequently

- **Where do the traders exchange the most often?**

Among those who exchange, 95 percent exchange from the moneychangers; among them 67.9 percent do so frequently, 6.1 percent exchange from their counterparts and only 4.3 percent from the banks. We can observe here the predominant role of the changers not only in the markands where the customers are the general population but also for the traders. At the provincial level, the traders in Phnom Penh are those who frequently exchange among themselves, as compared to other provinces because of their well-connected and dynamic networks.

**Table 5-36: Proportion of traders who exchange with manual money changers, other traders, and banks**

	To Changers		To traders		To Banks		Total
	Someti mes	Frequentl y	Someti mes	Frequentl y	Someti mes	Frequen tly	
Cambodia	26.6%	67.9%	2.6%	3.5%	2.1%	2.3%	100%
Phnom Penh	36.7%	55.7%	5.1%	8.9%	0.0%	1.3%	100%
Takeo	27.0%	61.9%	7.9%	4.8%	4.8%	7.9%	100%
Svay Rieng	30.7%	64.8%	3.4%	2.3%	0.0%	1.1%	100%
Kampong Cham	25.6%	73.2%	0.0%	1.2%	3.7%	1.2%	100%
Battambang	18.9%	76.4%	0.8%	0.0%	3.9%	3.1%	100%
Pailin	25.5%	70.2%	0.0%	2.1%	0.0%	2.1%	100%
Banteay Meanchey	23.2%	76.8%	0.0%	1.2%	1.2%	0.0%	100%
Siem Reap	15.9%	77.3%	0.0%	1.1%	1.1%	2.3%	100%
Sihanoukville	13.7%	82.4%	1.0%	0.0%	1.0%	0.0%	100%
Koh Kong	26.3%	70.0%	0.0%	0.0%	2.5%	0.0%	100%
Stung Treng	18.4%	73.5%	0.0%	0.0%	10.2%	8.2%	100%
Cambodia	26.6%	67.9%	2.6%	3.5%	2.1%	2.3%	100%

- **Question** (QTRA 8-2): If you exchange money, with which money changers do you exchange?
- **Reading of the table:** 26.6 percent of the interviewed traders exchange sometimes with the changers.

#### 2.2.4. Currencies of Loans

According to agency officials at the banks and microfinance institutions (MFIs) in the surveyed provinces, traders are very important and credible customers. However, banks are still not the most important lenders for the traders. In fact, among the 20 percent of the interviewed traders who declare having borrowed, 69 percent still use informal loans. Only 31 percent borrow from the commercial banks and microfinance institutions (MFIs). In addition, the loans from the banking system are mainly in dollars; our survey demonstrates that 92 percent of traders borrow in dollars. There are only 5 percent who do so in riel and 3 percent in baht. In contrast, informal loans are 39 percent in dollars, 31 percent in riels, and 17 percent in riels and dollars.

**Table 5-37: Proportion of traders who borrow from banking system and informal agents**

	Proportion of Loan	USD (A)	KHR (B)	THB (C)	Total (A+B+C)
Banking system	31%	92%	5%	3%	100%
Informal	69%	39%	31%	17%	100%
Total	100%				

- **Question** (QTRA 10): Do you borrow money? If yes, in which currency do you borrow?
- **Reading of the table:** 31.1 percent of the interviewed traders borrow from the banking system (the banks and microfinance institutions).  
Among those who borrow from the banking system, 92 percent borrow in dollars.

## 2.3. Manual Money Changers

### 2.3.1. Traded Currencies

- **What are the currencies that the changers exchanged for the customers?**

The activities of the changers not only illustrate the inflow of currencies into a country, but also the circulation dynamics of the currencies in the context of monetary plurality. Four currencies including two international and two neighboring ones are often exchanged at the money changers: USD, EUR, THB, and VND. Our surveys show that we can exchange dollars with all kinds of money changers (from small to large) across the country. Eighty-five percent of the changers exchange bahts, 50 percent for dong and 30 percent for euros. We see at the same time that all the interviewed changers in the Khmer-Thai border provinces exchange bahts. They are less likely to do so in the capital and in the Khmer-Vietnamese border provinces (73% in Phnom Penh, 72% in Takeo and 46% in Svay Rieng). Most changers in the Khmer-Vietnamese border provinces accept exchange in dong (75-89 percent).

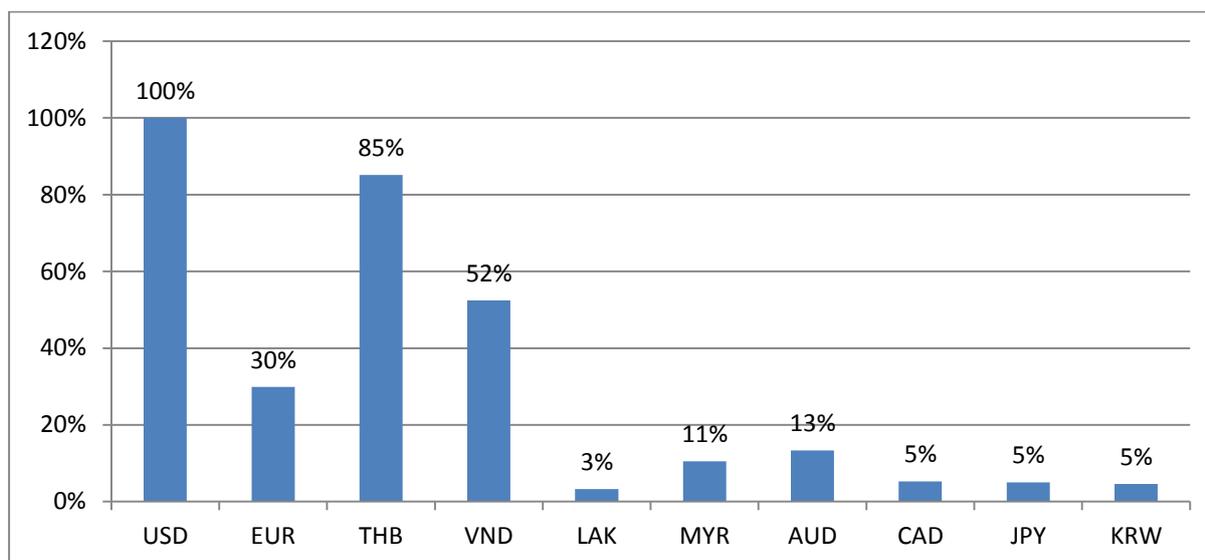
Very few changers of the provinces near Thailand exchange dong. There are less than 10% who do so in Pailin, Battambang and Banteay Meanchey. In contrast, we find that in Koh Kong, which lies on the Thai border, 32.3 percent of the money changers agree to exchange dong. This proportion may be a surprising figure considering the distance of this province to the Khmer-Vietnamese border. However, this increased proportion shows the reality of exchange operations in Koh Kong as dong entered this province by employees and Vietnamese sand mining companies<sup>160</sup> who settled there.

Of these four currencies, the euro has been exchanged but it has not circulated in the country. In contrast, for dollars, bahts, and dong, once they enter, some remain here and circulate and could be re-exchanged repeatedly.

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<sup>160</sup> Since Singapore has banned the operation of Indonesian sand, the state-city whose surface reaches 650 km<sup>2</sup>, is hard pressed to find the sand it needs for its gargantuan renovation and expansion. It also turned to a less regarding country and whose purchase cost of sand is very cheap: Cambodia. It is estimated that the amount of sand dredged around Koh Kong province between 7000 and 8000 tons per week ... (Kaset Journal, February 16, 2009). Among the companies that exploit, many are Vietnamese.

**Figure 5-7: Proportion of manual money changers that exchange currencies at national level**



**Table 5-38: Proportion manual money changers who exchange currency at provincial level**

	USD	EUR	THB	VND	LAK
PP	100%	48.6%	72.9%	63.6%	6.5%
Takeo	100%	12.0%	72.0%	74.0%	0.0%
SRG	100%	6.3%	42.9%	88.9%	0.0%
K.Cham	100%	40.7%	96.3%	88.9%	3.7%
BB	100%	13.3%	100.0%	8.9%	0.0%
Pailin	100%	33.3%	100.0%	6.7%	0.0%
BMC	100%	29.4%	100.0%	8.8%	2.9%
SRP	100%	21.6%	89.2%	21.6%	0.0%
SV	100%	48.6%	89.2%	45.9%	0.0%
KK	100%	25.8%	100.0%	32.3%	0.0%
S. Treng	100%	18.2%	90.9%	18.2%	63.6%
Cambodia	100%	29.9%	85.2%	52.5%	3.3%

- **Question** (QCHG 1): Which are the currencies you exchange?
- **Reading of the table:** In Phnom Penh, 100 percent of the changers often exchange dollars.

- **What is the exchange dynamic of each money in the Cambodian monetary field?**

We focus on the exchange between the four currencies: riel, dollar, baht and dong. According to the survey results, the most traded currencies are dollars and riels. Ninety-two percent of the changers declare exchanging very often from dollars to riels and 73 percent very often from riels to dollars. The second pair of the most traded currency is baht to riel, forty-six percent exchange from bahts to riel, and thirty percent exchange from riels to baht. For the two pairs (dollar-riel and baht-riel), we find that the changers often exchange more from dollars or bahts to riel than

from riels to dollar or baht in the surveyed provinces. It thus promotes the need of the riel and increases its circulation.

The third pair is dollar to baht. Most customers of the changers are traders who need baht to import Thai products or traders with revenues in baht who want to buy the products in Phnom Penh or other dollarized provinces. It may also happen that the general population exchange from baht to dollar to purchase the products whose prices are displayed in dollars (durable goods) or simply to save, as the dollar is the preferred currency of savings. At the national scale, 34 percent of the changers exchange from dollars to bahts and 31 percent from baht to dollar. Transactions of bahts and dollars are balanced almost everywhere. Regarding the exchange bandweendong-riel and dollar-dong, very few changers do so. This shows that the baht and dong are well separated in monetary spheres.

**Table 5-39: Proportion of manual money changers declaring to exchange often or very often (1)**

	From dollar to riel	From riel to dollar	From baht to riels	From riel to baht	From dong to riel	From riel to dong
Phnom Penh	99%	90%	20%	5%	21%	3%
Takeo	90%	65%	14%	2%	41%	16%
Svay Reang	94%	76%	8%	6%	71%	33%
K. Cham	100%	85%	41%	22%	48%	22%
Bamttambang	98%	89%	82%	53%	0%	0%
Pailin	93%	87%	100%	87%	0%	0%
B. Meanchey	97%	88%	97%	91%	0%	3%
Siem Reap	100%	95%	51%	35%	5%	0%
Sahanoukville	100%	73%	68%	57%	3%	11%
Koh Kong	74%	68%	100%	87%	0%	0%
Steung Treng	91%	91%	40%	27%	0%	0%
<b>Cambodia</b>	<b>92%</b>	<b>73%</b>	<b>46%</b>	<b>30%</b>	<b>24%</b>	<b>10%</b>

- **Question** (QCHG 2): In which direction do you perform exchange operation? At which frequency?
- **Reading of the table:** In Phnom Penh, 99 percent of the changers exchange often or very often from dollar to riel.

**Proportion of manual money changers declaring to exchange often or very often (2)**

	From dollar to riel	From riel to dollar	From baht to riels	From riel to baht	From dong to riel	From riel to dong
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Phnom Penh	99%	90%	20%	5%	21%	3%
Takeo	90%	65%	14%	2%	41%	16%
Svay Reang	94%	76%	8%	6%	71%	33%
K. Cham	100%	85%	41%	22%	48%	22%
Battambang	98%	89%	82%	53%	0%	0%
Pailin	93%	87%	100%	87%	0%	0%
B. Meanchey	97%	88%	97%	91%	0%	3%
Siem Reap	100%	95%	51%	35%	5%	0%
Sihanoukville	100%	73%	68%	57%	3%	11%
Koh Kong	74%	68%	100%	87%	0%	0%
Steung Treng	91%	91%	40%	27%	0%	0%
<b>Cambodia</b>	<b>92%</b>	<b>73%</b>	<b>46%</b>	<b>30%</b>	<b>24%</b>	<b>10%</b>

- **The daily turnover of the changers' exchange transactions**

Information on turnover is very difficult to get both from small changers and the large ones. They do not want to reveal it because of the legitimacy of their activities (without the authorization of the competent authorities) and the fear that administrative measures will be taken to legalize their activities or impose taxes on revenues or profits. And, we can get this information from some money changers.

We consider four types of changers based on the average daily turnover: micro, small, medium and large changers. The micro changers are those whose turnover is less than 1,000 USD. The small changers have turnover between 1,000-5,000 USD. For the medium changers, the turnover is between 5,000-10,000 USD. We consider changers to be large when the turnover is over USD 10,000 per day.

Cambodia has mostly micro or small type changers with daily turnover less than 5,000 USD. They represent more than 90 percent of the money changers. Fifty-five percent of the changers declare exchanging an amount equivalent to less than 1,000 USD per day and 37 percent between 1,000-5,000 USD. There are 5 and 2 percent only who exchange an amount equivalent between 5,000-10,000 USD and more than 10,000 USD, respectively. The maximum amount of exchange revealed by the survey is equivalent to 50,000 per day.

The managers of the branches of the NBC, commercial banks and money changers with whom we conducted the interviews, indicate that each province has two or three large changers who occupy a major share of the market and can influence the exchange market. Because it is their exchange rates that undermine those of the medium/small/micro changers and they are the ones that the small and medium changers normally exchange when they need liquidity.

**Table 5-40: Proportion of types of manual money changers**

	Type of changers				Total
	Micro	Pandit	Mean	Gross	
	<1000	[1000-5000[	[5000-10000	>10 0000	

Phnom Penh	58%	37%	5%	0% <sup>161</sup>	100%
Takeo	86%	12%	2%	0%	100%
Svay Rieng	78%	16%	2%	5%	100%
Kampong Cham	22%	67%	7%	4%	100%
Battambang	71%	24%	2%	2%	100%
Pailin	53%	47%	0%	0%	100%
Banteay Meanchey	35%	50%	12%	3%	100%
Siem Reap	76%	22%	0%	3%	100%
Sihanoukville	22%	51%	22%	5%	100%
Koh Kong	45%	48%	6%	0%	100%
Stung Treng	64%	9%	18%	9%	100%
Cambodia	55%	37%	5%	2%	100%

- **Question** (QCHG5): What is the average amount of exchange transactions performed in a day? (in dollar equivalent)
- **Reading of the table:** In Phnom Penh, 58 percent of the changers are the micro-changers.

### 2.3.2. Suppliers of Currencies

- To whom do the money changers go to when they need liquidities?

The changers are also traders, but instead of selling products, they sell currencies against currencies. Thus, their customers are at the same time their suppliers. They can earn easily and safely<sup>162</sup> by making the difference between the selling rate and buying rate, which is called the commission. The changers primarily use riels and all other currencies provided by their customers who are individuals, enterprises, traders and andc. When liquidity is needed, they tend to goto their counterparts (other changers) than to the banks.

We found that 71.6 percent of the interviewed changers declare that riels are partially provided by their customers. At the same time, 58.3 percent gand them from other changers, and 6.1 and 4 percent, from the National Bank of Cambodia and the commercial banks, respectively. Similarly for dollars, 77 percent of the money changers gand them from their customers, 43.7 percent from other changers and 4.1 percent from the commercial banks. As for the baht, its exchange operations are less active, 48.3 percent of the changers declaregandting them from the customers while 23.6 percent from other changers. Other sources such as the commercial banks and MFIs are negligible.

Until now, only nine large changers have the license to perform exchange operations, are invited to participate in auction sales of dollars, organized by the National Bank of Cambodia (NBC)<sup>163</sup>. The commercial banks and MFIs do not attend. So these are nine large changers who

<sup>161</sup> In this survey results table, we find no large changers in Phnom Penh. Yand they are there. This is partly because we have not investigated extensively with large changers in Phnom Penh and partly because some large changers who were surveyed did not declare themselves. Therefore, we conducted the second survey focusing on the exchange markand by interviewing large changers in Phnom Penh. We will discuss this point in dandail in Chapter 6.

<sup>162</sup> According to the interviews with money changers (2011), the money changers in Cambodia do not do *future* or *option* or *swap*, but only spot transaction.

<sup>163</sup> In 2010, there were 48 sessions of auction sales of dollars. At each session of the dollars auction, the NBC sold 1 million; in total, it sold 48 million dollars. In 2009, there were 32 sessions of dollarauction sales, total sales was 54 million. In contrast, in 2011 (until October), no session has been complanded. The auction sales of dollars are not regular; they mainly depend on the fluctuation (mostly upward, but also downward) of the exchange rate. (Source: NBC)

gand dollars from the Central Bank. At the same time, they buy riels when the exchange markand needs them.

**Table 5-41: The relative importance of suppliers for each currency for manual money changers (percentage) (Possible multiple responses)**

	KHR	USD	THB	VND
Clients	71.6	77.1	48.3	22.9
Other changers	58.3	43.7	23.6	11.8
Banks	3.9	4.1	0.4	0
Microfinance	0.7	0.4	0.7	0
NBC	6.1	0	0	0

- **Question** (QCHG1): Who are you currency suppliers? Please specify the percentage.
- **Reading of the table:** 71.6 percent of the changers and riels from their customers.

### 2.3.3. Dandermination of exchange rates

- How do they dandermine the exchange rate?

The official exchange rate sand every morning at 7: 30 AM by the NBC, is not really the benchmark for dandermining the exchange rate of the changers. A dynamic changer could learn about the exchange rate from several sources involved to dandermine its own rate (sale-purchase). We list five actors who can provide information on the exchange rates. Only 2.2 percent of changers consider the exchange rate of the NBC as one of his references. Almost all changers learn about the exchange rates from other changers and 32.2 percent state that they gand the exchange rates from the large changers in Phnom Penh whocan influence the national exchange markands. Of the changers, 8.4 percent gand them from the commercial banks. According to our interviews, the commercial banks are occasionally customers and suppliers for the changers. To dandermine the exchange rates bandween foreign currencies, another source of information is also essential: the international television channels that disseminate information on the exchange rate (Bloomberg, CNB andc.)

We'll talk about this point in more dandail in Chapter 6.

**Table 5-42: Proportion of manual money changers who learn about the exchange rate from different agents**

	In Percentage
To NBC	2.2
To Commercial Banks	8.4
To Other Changers	94.0
To Changers in Phnom Penh	32.2
To Television	13.2

- **Question** (QCHG7): Where do you and information on exchange rate?
- **Reading of the table:** 2.2 percent of the changers and the information about the exchange rate from the National Bank of Cambodia.

### 2.3.4. Other Activities of Money Changers

Apart from exchange activities, the changers often perform other commercial or financial activities. The most common cases involve the purchase and sale of jewelry or precious stones/mandals, informal loans and money transfer activities.

- **The purchase and sale of jewelry or precious stones/mandals**

Sixty-one percent of the changers practice the purchase and sale of jewelry or precious stones/mandals; we can also say that most traders of jewelry or precious stones/mandals make the exchanges. The currencies most commonly used by the customers to purchase these products are dollar and riel. Fifty-seven percent of the money changers receive at least 50 percent of the customer payments in dollars, and 52 percent in riel. There are only 8 percent who are paid at least 50 percent in baht.

In five provinces: PP, KCH, SRG, SV, and ST, most changers declare being paid more than 50 percent in dollars; there are 100%, 67%, 70%, 82%, 63%, respectively. Moreover, there are 95% in TK, 77% in SRG, 72% in KCH, 67% in BB, 80% in PL, and 76% in ST, who receive payments from the customers in more than 50% in riel. The use of baht for payment for the purchases of jewelry or precious stones/mandals is seen in BMC, in KK and to a lesser extent in BB and PL. There are 75% and 43% to be paid in more than 50% in baht in BMC and KK, respectively. In BB, 61% of the changers are paid less than 50% in baht and only 3% receive payments exclusively in baht. As for PL, 40% of the purchases are paid to less than 50% in baht. The dong is not the currency frequently used for the purchases of jewelry. Less than 15 percent of the money changers in three provinces (TK, SRG, KCH) declare being paid in dong (less than 50 percent).

**Table 5-43: Proportion of manual money changers declaring to practice buying-selling jewelry or precious stones/metal**

	USD				KHR			
	0	]0-50[	[50-100[	100	0	]0-50[	[50-100[	100
Phnom Penh	0	0	50%	50%	50%	35%	15%	0
Takeo	38%	36%	23%	3%	3%	3%	56%	38%
Svay Rieng	16%	48%	34%	2%	5%	18%	61%	16%
Kampong Cham	0%	33%	61%	6%	6%	22%	72%	0
Battambang	15%	67%	18%	0	6%	27%	55%	12%
Pailin	60%	20%	20%	0	0	20%	40%	40%
B. Meanchey	25%	50%	25%	0	44%	44%	13%	0
Siem Reap	0%	30%	63%	7%	7%	41%	52%	0
Sihanoukville	0%	18%	64%	18%	18%	55%	27%	0
Koh Kong	14%	57%	14%	14%	14%	57%	29%	0
Stung Treng	13%	25%	63%	0	0	25%	63%	13%
<b>Cambodia</b>	<b>10%</b>	<b>33%</b>	<b>43%</b>	<b>14%</b>	<b>19%</b>	<b>29%</b>	<b>45%</b>	<b>7%</b>

- **Question** (QCHG 8-3): If you do sell-purchase jewelry and precious stones, which are the currencies of this operation?
- **Reading of the table:** In Phnom Penh, among those who perform the activity of purchase-sale of items or precious stones, 50 percent and between [50-100] percent of revenues in dollars.

**Proportion of manual money changers declaring to practice buying-selling jewelry or precious stones/metals (2)**

	THB				VND			
	0	]0-50[	[50-100[	100	0	]0-50[	[50-100[	100
Phnom Penh	100%	0	0	0	100%	0	0	0
Takeo	100%	0	0	0	97%	3%	0	0
Svay Rieng	93%	7%	0	0	91%	9%	0	0
Kampong Cham	94%	6%	0	0	88%	12%	0	0

Battambang	36%	61%	0	3%	100%	0	0	0
Pailin	60%	40%	0	0	100%	0	0	0
B. Meanchey		25%	50%	25%	100%	0	0	0
Siem Reap	93%	7%	0	0	100%	0	0	0
Sihanoukville	91%	9%	0	0	100%	0	0	0
Koh Kong	14%	43%	43%	0	100%	0	0	0
Stung Treng	100%	0	0	0	100%	0	0	0
<b>Cambodia</b>	<b>78%</b>	<b>14%</b>	<b>5%</b>	<b>3%</b>	<b>97%</b>	<b>3%</b>	<b>0%</b>	<b>0%</b>

- **The activity of informal loans**

Informal loans are often another activity practiced by the changers. In general, borrowers must deposit collateral objects, such as jewelry, to qualify for a lower rate loans, otherwise, a very high rate would be imposed. As seen in the results of the loans of the general population or traders, the use of informal loans is always preferred because this system of loans is not as demanding as the banking system.

Thirty-nine percent of the changers declare performing the activity of informal loans. Loans in riel are higher than those in dollars, except in PP. At the national scale, 89 percent of the changers perform the lending activity; grant loans in riel against 86 percent who do so in dollars. Baht is lent by the changers in BMC, KK, BB, SV, and ST. The changers, who provide loans in BMC, declare doing so not only in USD and KHR but also in THB. Baht loans are also important in KK, 67 percent do so in more than 50 percent of total loans. In BB, SV and ST, there are fewer changers who lend in baht and the proportions of baht loans to total loans are small; there are 50 percent, 17 percent, and 14 percent who do so in less than 50 percent in baht. Dong loans remain very marginal in SRG and KCH.

**Table 5-44: Proportion of manual money changer making loans in each currency (among those who makes loans) (1)**

	Informal loans in dollar				Informal loans in riel			
	0	]0-50[	[50-100[	100	0	]0-50[	[50-100[	100
Phnom Penh	14%	0	50%	36%	36%	41%	9%	14%
Takeo	19%	44%	38%	0	0%	0	81%	19%
Svay Rieng	13%	40%	37%	10%	13%	27%	47%	13%
Kampong Cham	5%	16%	74%	5%	5%	53%	37%	5%
Battambang	21%	43%	36%	0	0	21%	57%	21%
B. Meanchey	43%	36%	21%	0	36%	43%	21%	0
Siem Reap	14%	29%	50%	7%	7%	36%	43%	14%
Sihanoukville	17%	17%	67%	0	0	17%	83%	0
Koh Kong	14%	71%	0	14%	0	67%	33%	0
Stung Treng	0	43%	57%	0	0	43%	57%	0
Cambodia	14%	24%	51%	10%	11%	33%	45%	11%

- **Question** (QCHG 8-1): Do you give informal loans?
- **Reading of the table:** In Phnom Penh, among the changers who provide loans, 50 percent do so between [50-100] percent in dollars.

**Proportion of manual money changers making loans in each currency (among those who makes loans) (2)**

	Informal loans in baht				Informal loans in dong			
	0	]0-50[	[50-100[	100	0	]0-50[	[50-100[	100

Phnom Penh	100%	0	0	0	100%	0	0	0
Takeo	100%	0	0	0	100%	0	0	0
Svay Rieng	100%	0	0	0	97%	3%	0	0
Kampong Cham	100%	0	0	0	95%	5%	0	0
Battambang	50%	50%	0	0	100%	0	0	0
B. Meanchey	0	43%	36%	21%	100%	0	0	0
Siem Reap	100%	0	0	0	100%	0	0	0
Sihanoukville	83%	17%	0	0	100%	0	0	0
Koh Kong	0%	33%	67%	0	100%	0	0	0
Stung Treng	86%	14%	0	0	100%	0	0	0
Cambodia	86%	10%	2%	0%	97%	1%	0%	0%

- **The business of money transfers**

The International Monetary Fund found that changers perform activities of money transfer in Cambodia. Our results of the research correspond to this statement with 5.6% declare performing operations of money transfer. According to our interviews, the large changers make the transfers not only within the country but also transfers with Thailand. There are networks between the changers, particularly in BMC and KK and PP with the transfer agents in Thailand. These networks provide an informal transfer system of baht between the two countries (Chapter 4). The Cambodian migrant workers in Thailand can send money through this system. Similarly, Cambodian traders who purchase Thai products can also make transfers of money to their suppliers in Thailand. Inside the country, the baht is transferred to the Khmer-Thai border provinces, as well as between the provinces and the capital.

The proportions of changers who make money transfers in each currency are relatively balanced. The most transferred currencies are the dollar and riel of which 61.7% of the involved changers declare doing so. Thirty-one percent declare transferring three currencies: dollar, riel, and baht and 1.7% declare transferring only riel and baht.

It was also found that the dong is not the currency transferred by the money changers, even in the provinces close to the Khmer-Vietnamese border.

**Table 5-45: Proportion of manual money changers reporting to receive transfer agents/manual money changers (inflow)**

Transfer-in	KHR and USD	KHR, USD and THB	KHR and THB	Others	Total
Phnom Penh	58.7	32.6	2.2	6.5	100
Takeo	100	0.0	0.0	0.0	100
Svay Rieng	100	0.0	0.0	0.0	100
Kampong Cham	60.0	33.3	0.0	6.7	100
Battambang	39.3	57.1	3.6	0.0	100
Pailin	77.8	22.2	0.0	0.0	100

B. Meanchey	19.0	66.7	4.8	9.5	100
Siem Reap	70.0	20.0	0.0	10.0	100
Sihanoukville	60.0	40.0	0.0	0.0	100
Koh Kong	40.0	40.0	20.0	0.0	100
Stung Treng	100.0	0.0	0.0	0.0	100
Cambodia	61.7	31.9	1.7	4.8	100

- **Question** (QCHG 8-2): Do you perform transfer operation activities?
- **Reading of the table:** In Phnom Penh, among the changers who operate the transfers, 58.7 percent receive the transferred money in dollar and riel.

**Table 5-46: Proportion of manual money changers declaring transfer to other transfer agents/manual money changers (outflow)**

Transfer-out	KHR and USD	KHR, USD and THB	KHR and THB	Others	Total
Phnom Penh	63.8	27.7	2.1	6.4	100
Takeo	100	0.0	0.0	0.0	100
Svay Rieng	100	0.0	0.0	0.0	100
Kampong Cham	75.0	12.5	0.0	12.5	100
Battambang	50.0	46.1	3.8	0.1	100
Pailin	40.0	60.0	0.0	0.0	100
B. Meanchey	27.8	61.1	5.6	5.6	100
Siem Reap	82.6	5.9	0.0	11.5	100
Sihanoukville	62.5	37.5	0.0	0.0	100
Koh Kong	44.4	33.4	22	0	100
Stung Treng	100.0	0.0	0.0	0.0	100
Cambodia	69.4	23.1	1.8	5.8	100

- **Question** (QCHG8-2): Do you perform transfer operation activities?
- **Reading of the table:** In Phnom Penh, among the changers who operate the transfers, 63.8 percent transfer to other destinations in dollar and riel.

## 2.4. Expatriates

Since the intervention of the United Nations to restore peace in Cambodia, more expatriates are increasingly sandtling in Cambodia. Currently, there are about 4,000-5,000 expatriates who live in Cambodia (EIC, 2012). We surveyed 100 expatriates, which includes Embassy staff, experts from public institutions (the Central Bank, the Ministry of Economy and Finance, andc.), foreign staff of private companies, teachers, students, interns, randirees and other professionals. Three-quarters of these expatriates come from Europe and the United States.

**Table 5-47: Profession of the surveyed expatriates**

Profession	In percentage
Personnel of Embassy	4
Experts	4
Personnel of private enterprise	6
Teachers	22
Students	7
Trainees	11
Randirees	2

Other professions	43
Total	100

**Table 5-48: Country of origin of the surveyed expatriates**

Native country	In percentage
Euroland	69
China	1
Japan	2
South Korea	1
Singapore	1
USA	14
Other Asian counties	4
Other European countries	3
Other countries	4
Total	100

According to our results, these expatriates are almost complandely dollarized. They receive revenues in foreign currency and then use them more or less directly. They rarely use the national currencyfor their expenses.

#### 2.4.1. Currencies of Revenues

Essentially, the expatriates receive their revenues in foreign currencies, of which 58.8 percent of the expatriates receive revenues exclusively in dollars. At the same time, 20.6 percent receive other foreign currencies (including the euro, yuan, andc.). In addition, there are also those who gand revenues in several currencies. They represent 20 percent of the surveyed expatriates.

**Table 5-49: Proportion of expatriates declaring to receive revenues in dollar/riel**

	0	]0-50[	[50-100[	100	Total
Dollar	26.8	1.0	13.4	58.8	100
Riel	90.7	7.2	2.1	0	100
Other currencies	73.2	4.1	2.1	20.6	100

- **Question** (QEXP 5): In which currencies do you receive your revenues? In which proportion?
- **Reading of the table:** 58.8 percent of the expatriates exclusively receive the revenues in dollars.

#### 2.4.2. Currencies of Expenditure and Means of Payments

Ninandy-six percent of expatriates spend more than 50 percent in dollars, 12.6 percent of them say they never use riels. In contrast, 65.3 percent spend less than 50 percent in riel. These payments are mainly for small payments for goods and services.

**Table 5-50: Proportion of expenses by expatriates in each currency**

	0	]0-50[	[50-100[	100	Total
Dollar	0	4.2	83.2	12.6	100
Riel	12.6	65.3	22.1	0	100
Other currencies	100	0	0	0	100

- **Question** (QEXP7): In which currency do you make current expenses? In which proportions?
- **Reading of the table:** 12.6 percent of expatriates spend on expenses exclusively in dollars.

Among expat spending, the most dollarized are rent, shopping for groceries at the supermarket and other shops for goods, restaurants that welcome foreigners, leisure, and transport (taxi and other payments). Almost all of these payments are made in dollars. In contrast, for payments in restaurants where there are mostly Cambodian people, the expense in the market and certain means of transport (the Motodop, the TukTuk), the expatriates usually pay partly in dollars, and partly in riels.

**Table 5-51: Proportion of expatriates who spend each currency according to each type of expense**

		USD				KHR			
		0	]0-50[	[50-100[	100	0	]0-50[	[50-100[	100
Rent		2.6	0.0	2.6	94.9	97.4	0.0	2.6	0.0
Restaurant	Welcoming foreigners	1.1	2.2	21.7	75.0	75.0	9.8	14.1	1.1
	Where there are mostly Cambodians	14.5	7.2	47.0	31.3	31.3	12.0	42.2	14.5
Means of transport	Own means	17.2	1.7	22.4	58.6	60.3	6.9	17.2	15.5
	Taxi	16.2	2.7	21.6	59.5	62.2	5.4	18.9	13.5
	Motodop	41.7	11.7	31.7	15.0	15.0	1.7	41.7	41.7
	Tuk Tuk	23.6	6.9	51.4	18.1	19.4	8.3	50.0	22.2

Leisure			5.4	0.0	37.8	56.8	56.8	10.8	27.0	5.4
Shop ping	Food	Markets	33.3	8.0	35.6	23.0	23.0	9.2	35.6	32.2
		Shops and stores	12.3	4.9	25.9	56.8	56.8	14.8	16.0	12.3
		Supermarkets	4.7	3.5	17.6	74.1	74.1	9.4	11.8	4.7
	Others	Markets	23.7	3.9	39.5	32.9	32.9	5.3	38.2	23.7
		Shops and stores	10.4	1.3	27.3	61.0	61.0	10.4	18.2	10.4
		Supermarkets	3.0	1.5	13.6	81.8	81.8	7.6	7.6	3.0

- **Question** (QEXP8): In which currencies do you make the following payments (rent, andc.)?
- **Reading of the table:** 94.9 percent of the expatriates pay their rents exclusively in dollars

Their payments are largely in cash in both dollars and riels, of which 63.8 and 94.5 percent reported only adjusting their purchases in cash in dollars and riels, respectively. For credit cards only 5.9 percent report using it exclusively. There are 26.6 percent at the same time who uses two payment methods: cash and credit card. Dollar checks are used only by 1.1 percent.

**Table 5-52: Proportion of expatriates using available payment methods**

In percentage	USD	KHR	Other currencies
Cash	63.8	94.5	88.9
Bank card	3.2	2.7	0.0
Check	1.1	0	11.1
Cash and bank card	26.6	2.7	0
Cash and check	1.1	0	0
Cash, bank card, and check	3.2	0	0
Others	1.1	0	0
Total	100	100	100

- **Question** (QEXP 6): What means of payment do you use? In which currency?
- **Reading of the table:** 63.8 percent of the expatriates make the payments in cash in dollars

### 2.4.3. Currency Exchange

As the majority of their revenues are in foreign currencies and they also pay some transactions in riel, 67 percent of expatriates report exchanging money. There are 44.6 percent who do so weekly, 29.2 percent monthly and 26.2 percent rarely or never. There are two directions of exchange for the expatriates: one from dollar to riel, and another from other foreign currencies to the dollar. Thirty-nine percent of expatriates declare exchanging from dollar to riel and at the same time 19.7 percent from other currencies to the dollar. However, other foreign currencies are not directly exchanged to riel.

Two exchange agencies with whom they normally exchange: changers and banks. Thirty-nine percent do so with the money changers and 28.7 percent with the banks (of which 20.7 percent physically at the counters of the bank and 8 percent by ATM). In addition, 10 percent also do so with the traders.

**Table 5-53: Proportion of expatriates who exchange money and the frequency of exchange**

Money exchange		Exchange frequency	
Yes	No	Weekly	44.6%
67%	33%	Monthly	29.2%
		Rarely/Never	26.2%
		Total	100%

- **Question** (QEXP 9 and 9-1): Have you done any exchange operations? If yes, how often?
- **Reading of the left table:** 67 percent of the expatriates make the exchange
- **Reading of the right table:** 44.6 percent of the expatriates make the exchange weekly

**Table 5-54: Direction of exchange made by expatriates (percent)  
(Possible multiple answers)**

	Yes (I exchange)	No (I do not exchange)	Total
From dollar to riel	39.4	60.6	100
From another currency to dollar	19.7	80.3	100
Other exchange	0	100	100

- **Question** (QEXP 9-2): In which direction do you do exchange operations?
- **Reading of the left table:** 39.4 percent of the expatriates make the exchange from dollar to riel

**Table 5-55: With which agents do expatriates exchange money?  
(Possible multiple answers)**

Exchange agents	Yes, I exchange	No, I don't exchange	Total
Airport	4.6	95.4	100
Hotel	4.6	95.4	100
Banks	20.7	79.3	100
ATM	8	92	100
Changers	39	61	100
Traders	10	90	100

- **Question** (QEXP9-3): Where do you change money?
- **Reading of the left table:** 4.6 percent of the expatriates declare having exchanged at the airport.

#### 2.4.4. Opinions on Monetary Plurality in Cambodia

As the surveyed expatriates are from different sectors (experts, personnel of NGOs, embassies, private enterprises, etc.), we asked their views on monetary plurality in Cambodia. Four questions were asked concerning this point:

- The importance of the dollar in circulation hinders the monetary authorities in the conduct of economic and monetary policy. Do you think it is important for Cambodia to have the means of such a policy?

Almost half of the expatriates think it is important for Cambodia to have the means of monetary policy, while only 7 percent do not think so. In addition, 45 percent have no idea.

**Table 5-56: Expatriates' opinions on the importance of monetary policy instruments**

Yes	48%
No	7%
Don't know	45%
Total	100%

- The Foreign investors working in Cambodia often appreciate being able to pay, and conduct the free exchange in dollars. Do you think that's a reason to stay in this system?

**Table 5-57: Opinion on the importance of the use of dollars to attract foreign investors**

Dollarized	48%
Less dollarized	36%
Non-dollarized	11%
Do not know	4%
Total	100%

- 48 percent of the expatriates think that staying in a dollarized system is a reason to attract foreign investors. At the same time, 36 percent think it is bandter to stay in a less dollarized system, while 11 do not think that's a reason.
- Others complain of having to operate partly in riel and partly in dollars or even baht. Do you think that's a reason to stay in this system?

**Table 5-58: Opinion on the complexity of the means of multiple payments to foreign investors.**

Dollarized	32%
Less dollarized	46%
Non-dollarized	15%
Do not know	7%
Total	100%

To avoid the complexity of using multiple currencies, 46 percent think it should stay in a less dollarized system. In addition, 32 percent think that dollarization is preferable to using fewer currencies. 15 percent think sees a need to de-dollarize the Cambodian economy.

- Cambodia is a country in Asia where most of the major investors and most imports are Asian, do you think that the current situation should evolve in the direction of dollarization

**Table 5-59: Review of the evolution of dollarization taking into account the fact that most large investors and most important investors are Asians**

Accrue	15%
Lesser	35%
Zero	26%

Don't know	24%
Total	100%

As most large investors and imports are Asian, 35 percent of the expatriates think that we should reduce dollarization. At the same time, 26 percent have a policy of full de-dollarization and 15 percent support the growing dollarization.

Expatriates do not have a clear position for dollarization or de-dollarization, but it seems that the current situation suits them.

## 2.5. Tourists

The tourism industry has become a pillar of economic growth in Cambodia. The number of tourists is increasing in this small country with a rich cultural heritage, including Angkor Wat. Tourism incomes account for 13 percent of GDP (between 2002 and 2010). They bring multiple currencies to Cambodia. We have interviewed tourists in order to understand their use of the currency. Of the 276 tourists we interviewed, mainly in Phnom Penh, nearly half are tourists from European countries that use the euro, 19.9 percent from other European countries, 9.4 percent from the United States and one fourth from other countries (Australia, South Korea, Viandnam and etc.).

**Table 5-60: Countries of surveyed tourists**

Countries	In percentage
Euroland	46.4
China	1.8
Japan	1.8
South Korea	3.6
Malaysia	0.7
New Zealand	0.4
Singapore	1.4
USA	9.4
Canada	1.8
Vietnam	2.2
Other Asian countries	1.1
Other American countries	1.8
Other European countries	19.9

African countries	0.4
Australia	7.2
Total	100

According to the survey results, we found that the majority of tourists spend mainly in dollars especially for hotels, access to sites, restaurants, souvenirs, tourism products and guides. Fifty-four percent of tourists pay less than 5 percent of their expenses in riel, 34.1 percent pay for their expenses from 5-20 percent in Riel. Only 11.9 percent spend more than 20 percent in riel. At the same time, 65.9 percent find the use of dollars in Cambodia very convenient to pay for all of their expenses. In contrast, there are 19.5 percent who find it convenient to pay in dollars for a part of their expenses.

Apart from the dollar and the riel, tourists also use other foreign currencies to pay for their purchases of which 3.3 percent find it convenient to pay in baht, 5.1 percent in euro, 0.4 percent in dong and 2.9 percent in other currencies (Korean Won, Japanese Yen and Chinese Renminbi). According to our interviews with the traders of souvenirs in Siem Reap: Thais pay almost all of their souvenir purchases in baht; Vietnamese pay for them 30 percent in dong, the Japanese pay for them 40 percent in Japanese yen; the Koreans pay them 50 percent in Korean won; the Chinese pay them 30 percent in Chinese Renminbi; and the Europeans (Euroland) pay for them 60 percent in Euro.

**Table 5-61: Currencies of major tourists' expenses**

	USD		KHR	
	>75%	100%	>75%	100%
Hotel*	100	100	0	0
Access to tourist sites	77.5	74.2	8.7	7.3
Restaurants where there are Cambodians	66.5	55.5	15.4	14.3
Restaurants welcoming foreigners	83.7	73.1	4.9	4.9
Guides	87.3	87.3	5.9	5.9
Souvenirs, tourist products	75.5	65.4	11.9	11.3

\* For hotel expenses: payments are made only in dollars and other foreign money (money used other than dollar is euro, bahts, Australia dollar andc).

- **Question** (QTOU 9-2): In which direction do you do exchange operations?
- **Reading of the table:** 39.4 percent of the tourists make the exchange from dollar to riel
- QTOU 9-2 = Question 9-2 of tourist questionnaire

**Table 5-62: Proportion of tourists who pay their expenses in riel**

You set your expenses in riel	In percentage
< 5% of total expenses	54%
Between 5-20% of total expenses	34.1%
>20% of total expenses	11.9%
Total	100%

- **Question** (QTOU 6): You made payment in riel (<5% of the total, andc.)

- **Reading of the table:** 54 percent of the tourists declare having paid less than 5 percent of their total expenses in riel.

**Table 5-63: Proportion of tourists who find it convenient to pay in dollar**

Payer in dollar	In percentage
All your expenses	65.9
A part of your expenses	19.6
Don't know	14.5
Total	100

- **Question** (QTOU 7): Do you find it practical to pay in dollar?
- **Reading of the table:** 54 percent of the tourists declare having paid less than 5 percent of their total expenses in riel.

**Table 5-64: Proportion of tourists who find it convenient to pay in other currencies**

Currency	In percentage
baht	3.3
dong	0.4
euro	5.1
Other currencies	2.9
No	88.4
Total	100

- **Question** (QTOU8): Do you find it practical to pay in a single currency? (dong, baht, etc.)
- **Reading of the table:** 3.3 percent of the tourists find it convenient to pay in baht.

The tourists also spend in riel and dollars, and thus they make the exchange. Half of the tourists do so through the banking system: 18.5 percent through the counters of the bank, and 13.8 percent through withdrawals of dollars from the ATM. Tourists also exchange with the money changers which represent 11.2 percent. As dollars are convenient to use, in general, the tourists bring along dollars to pay for their purchases or exchange their currency to dollars when they arrive to Cambodia. Seventeen percent of the tourists declare exchanging their national currency to dollars. There are only 2.2 percent who exchange to riel. Should they exchange from dollar to riel, the amount of exchange is not significant, it is just to have a small amount of riel to pay for certain expenses when the opportunity presents itself, such as certain purchases of drinks and local food, tips etc... Some (especially Asian tourists) exchange to riel to purchase local products: dried fish etc... whose prices are set in riel.

**Table 5-65: Places of exchange for tourists**

Place of Exchange	Yes, I exchange	No, I don't exchange	Total
Airport	13.8	86,2	100
Hotel	5.1	94,9	100
Banks	18.5	81,5	100
Changers	11.2	88,8	100
Traders	5.1	94,9	100

ATM	10.5	89,5	100
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- **Question** (QTOU4-27): Where do you exchange money?
- **Reading of the table:** 13.8 percent of the tourists exchange money at the airport.

**Table 5-66: Tourists: exchange directions**

	Yes, I exchange	No, I don't exchange	Total
From dollar to riel	30.4	69,6	100
Other currencies in dollar	17.4	82,6	100
Other currencies in riel	2.2	97,8	100

- **Question** (QTOU4-1): In which direction do you do exchange operation?
- **Reading of the table:** 30.4 percent of the tourists exchange from dollar to riel.

## Conclusion of Chapter

Our survey results confirmed most of the initial hypotheses of the phenomena. Four currencies circulate in this small country: the national currency (riel), dollar, baht, and dong. Kip, the official currency of the Lao People's Democratic Republic, does not circulate despite the fact that Cambodia and Lao share a border in the northern part of Cambodia.

The dollar and the riel are present throughout the country, while the baht and the dong are present in the provinces nearby Thailand and Viandnam, respectively. One third of the population receives revenue in more than one currency. Dollars remain predominant for the revenue of employees of the private sector, major purchases, bank accounts and savings, while the riel plays important role in Cambodian's daily life. Riel is the most used currency in rural areas.

Dollars occupy prominently in commercial networks within the country, followed by riels. About 60 percent of wholesale tradeis sand in dollars (more than 50 percent) compared to 45 percent in riel, 13.5 percent in baht and 0.3 percent in dong. One third of the traders engaged in the exchange activities to collect the currencies that they need to pay for their purchases, as well as to receive the commission.

The exchange operations concern all economic agents and support a particular profession, the changers. The exchange markands are dominated by manual money changers, while the banks play a marginal role. Micro, small and medium changers gand the exchange rate from the large changers. It seems that the setting of exchange rates of the large changers at the province is influenced by the exchange rate set by the large changers in Phnom Penh.

Expatriates and tourists are almost virtually dollarized. The revenues and expenses of the expatriates are more than ninandy percent in dollars. They make payments of only a small amount in riels. Similarly, the majority of tourists bring dollars with them to spend in Cambodia. When they bring currencies other than the dollar, they exchange those currencies to dollar rather than to riel.

# **Chapter 6: Monetary Plurality: A System that Works**

## **Summary**

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## Introduction

Dollarization in Cambodia remains a topical debate. Indeed, economists and experts are not able to clearly demonstrate the real benefits or disadvantages of monetary plurality in Cambodia. Some believe that monetary plurality in Cambodia, since its presence, has created an environment conducive to macroeconomic stability and development of the financial system. Others instead see this plurality as an obstacle to development and even a factor causing significant and recurring losses for the economy: loss of seigniorage<sup>164</sup> and loss of the role of lender of last resort, for example. Financial crises have highlighted the importance of the latter.

Nevertheless, it should be noted that Cambodian monetary plurality is a fact: it has accompanied the reconstruction and development of Cambodia's economic and financial system for almost three decades. This development did not seem threatened in the short and medium term. It is clear that monetary plurality is a system that works and that our assessment of it in Cambodia is positive or neutral, rather than negative.

In this chapter, we will briefly present the state of the financial and economic performance of Cambodia from the perspective of monetary plurality. Then we will study in more detail the operation of this system in the second section, focusing on highlighting the specialization of currencies in circulation. We conclude this chapter with a third section which will examine the exchange market, a market which plays a fundamental role in facilitating the coexistence of different currencies.

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<sup>164</sup> Zamróczy and Sa (2002) estimated that the loss of seigniorage would be equal to 4 percent of GDP (or 139 million dollars) in 2001. Moreover, Kiwon (2005) further analyzed the total loss of seigniorage and believes that the loss related to dollarization is much higher than its gains and advocates rapid de-dollarization from the Cambodian economy. He believes that the loss would amount to 681.8 million dollars until the end of 2004; the country lost 61.1 million dollars per year, or about 2 percent of GDP. Recently, Duma (2011) estimated a loss in the range of 0.1-0.5 percent of GDP. Moreover, according to Menon (2008), all the estimates of the loss of seigniorage would be underestimated due to unknown significant amounts of foreign currencies in circulation.

## Section I: Overview on Macroeconomic and Financial Development

As shown in Chapter 2, the presence of the baht and dong in Cambodian territory began since the start of the economic and social reconstruction (early 1980s). In an economy on the margins of the world (economic relations were limited in Vietnam, the Soviet Union and some European communist countries), it was the baht and the dong that were driving development of border trade. The development of these trades helped to improve the standard of living for the inhabitants. Moreover, until the massive inflow of dollars (1991-1992), almost all large transactions within the country were made in gold, although the national currency was already created and in circulation. Since its introduction in the economy, the dollar replaced the role of gold as the means of payment and a store of value and savings. The IMF (2000) confirms that there is no doubt the positive role the dollar played to support the reconstruction of the economy, although it resulted into a high degree of dollarization.

According to Hang (2010), Cambodia's modern economy had three growth phases: rehabilitation (1989-1998), reconstruction (1999-2003) and then economic boom (2004-2008). In addition, annual evaluations by the IMF<sup>165</sup> on economic performance of the country continued to see rapid development of this small economy, although its experts recommend that many structural reforms remain to be done to move towards sustainable growth.

The development of the economy follows a parallel dynamic in terms of increasing its dollarization. The ratio of foreign currency deposits relative to total deposits grew from one year to another; from 36.3 percent in 1993 to 81.4 percent in 2010. The amount of foreign currencies in circulation is estimated to be between 85-95 percent of the total (Rumbaugh, Ishi, Lianf and Musula (2000), Marciniak, Philip et al. (2001), Dabadie and Im (2006, 2007), and Zamróczy and Sa (2002, 2003)). Therefore, Cambodia's economy does not seem to be limited by increased dollarization.

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<sup>165</sup> Article IV of the IMF: Annual reports of evaluation of the economic situation in Cambodia.  
[www.imf.org](http://www.imf.org)

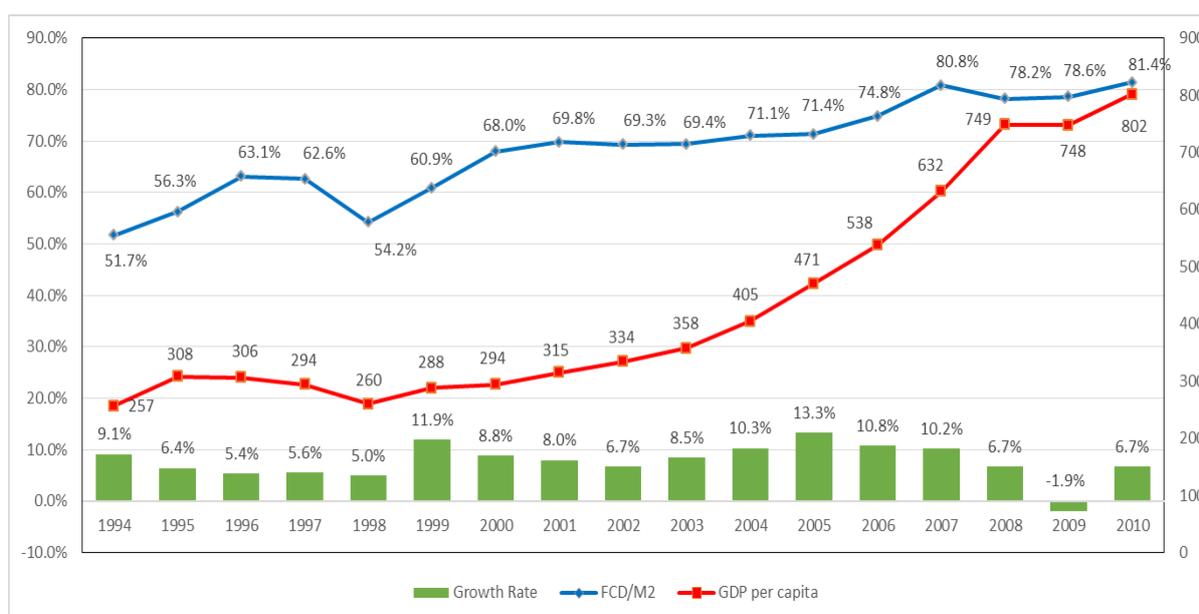
## • Economic Performance

Over the past two decades Cambodia experienced high growth rates. From 1994-1999 GDP grew an average of 7.2 percent a year and amounted to 9 percent between 2000-2010(excluding 2009, with a peak of 13.3% in 2005). This increase is accompanied by the continuous growth of GDP per capita. The latter tripled between 1994 and 2010, from 257 dollars to 802 dollars per year. Key factors in this growth are essentially exogenous: foreign aid, foreign direct investment, exports from the garment and tourism sectors. It should be noted that these sectors bring Cambodia revenues in foreign currencies. The latter were mainly re-injected directly into the economy; the use of foreign currencies and economic performance bind naturally.

We observe that the degree of dollarization and GDP per capita follow the same trend (Figure 6-1). In 1998, when the degree of dollarization fell, GDP per capita growth rates also decrease. In 1997-1998, two events impacted the Cambodian economy: the political crisis in 1997 and the Asian financial crisis of 1997-1998. The political crisis caused the withdrawal of assets in foreign currencies of non-residents as well as residents to overseas. It also led to the suspension of foreign aid projects and slowing flows related to such aid; the level of dollarization thus also slowed. According to Zamrocy and Sa the Asian Crisis did not have a direct impact on the Cambodian economy because the dollar was the main currency used (Zamróczy and Sa, 2002). From July 1997 to January 1998, the Thai baht depreciated by 71 percent against the dollar, while the riel depreciated by only 23 percent. The depreciation of the riel was not primarily due to the Asian Crisis, but instead the political crisis in 1997. We clearly identify here an important advantage in the use of the dollar: it protected the small economy against the fluctuation risks in exchange rates.

Furthermore, the use of baht and dong would also create opportunities for farmers in the provinces lying contiguous to the Thai and Vietnamese borders. According to a study by CDRI (*Cambodian Development Resource Institute*) (2005), the Khmer-Thai and Khmer-Vietnamese border trades contributed significantly to improve the living standards of inhabitants along the border provinces. These trading activities were greatly facilitated by the use of currencies of neighboring countries, resulting in high circulation of bahts and dongs in these provinces. The baht is therefore the only currency used in border trade with Thailand, while the dong prevails in trade with the Vietnamese. The prohibition of the use of these neighboring currencies could therefore result in counterproductive effects, particularly on border trade.

**Figure 6-1: Growth rate, GDP per capita and degree of dollarization (foreign currency deposits/M2): 1994-2010**



FCD: The banks' foreign currency deposits

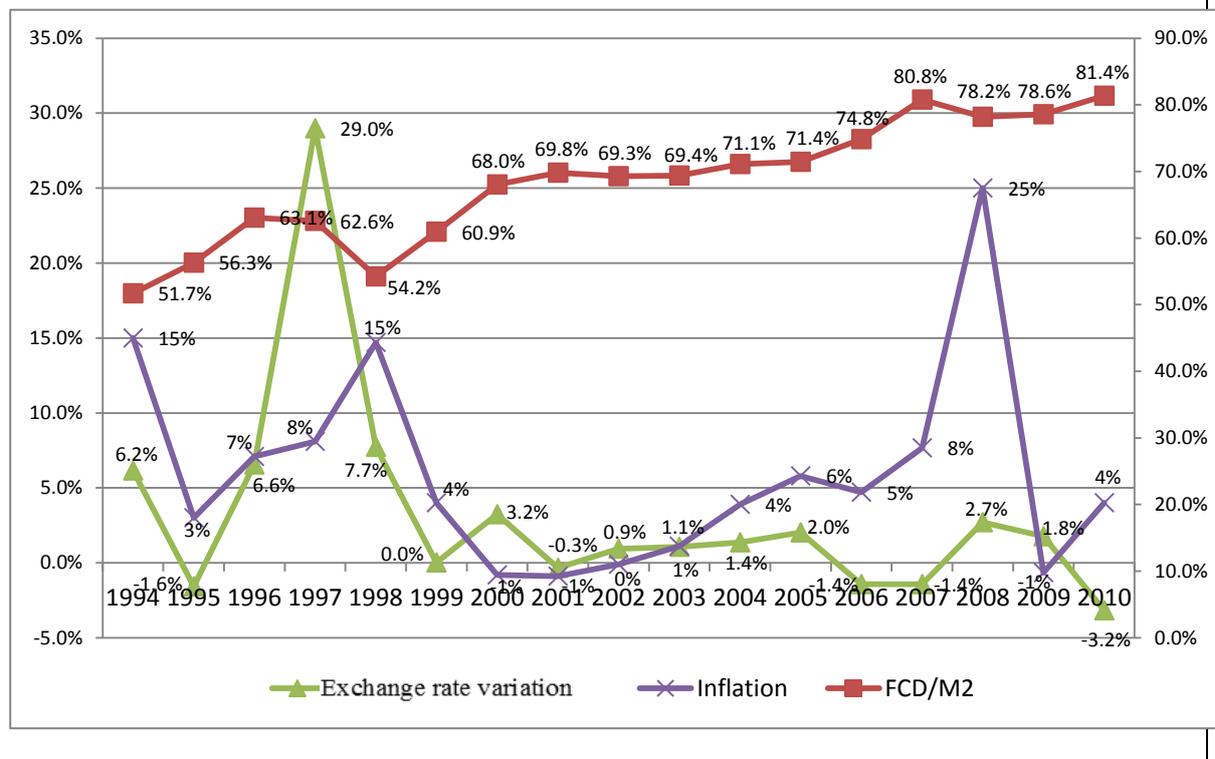
Source: National Bank of Cambodia

### • Monetary Stability

We see that Cambodia's economy of monetary plurality maintained a degree of monetary stability. The contrast is strong between 1989 and 1993 during which inflation was out of control, reaching a peak of 177 percent. The State then monetized budgetary deficits by resorting to printing money (riels) by the central bank. Since 1994 and especially throughout the last decade, inflation was under control, with the exception of 2008 when Cambodia experienced high inflation, although it was largely imported (linked to rising global prices of oil and food). Since 2000, monetary authorities have opted for a flexible but mastered exchange rate regime that allows them to keep the inflation rate at a low and manageable level: the stabilization of the exchange rate then lead to inflation between -1 % and 6%. The riel is vulnerable if inflation is high and if its value depreciates against the dollar. Stabilizing the inflation rate has directly contributed to preserving the purchasing power of the riel. Through the stabilization of the exchange and inflation rate, the trust in riel is therefore restored.

The Cambodian monetary landscape can be concluded as relative stability does not have disadvantages in the use of the riel. The use of the dollar always appreciates because of its stability and wide acceptance and the trust that it generates throughout the country. The baht, which gained appreciation after the crisis in 1997-1999, was sought by farmers and traders who sold their products in baht in the border provinces and the dong as a facilitator of trade between Cambodian farmers and Vietnamese traders. Each currency therefore has their strengths and was not threatened in the short and medium term.

**Figure 6-2: Variation of exchange rate (KHR-USD), inflation and degree of dollarization (foreign currency deposits/M2): 1994-2010**



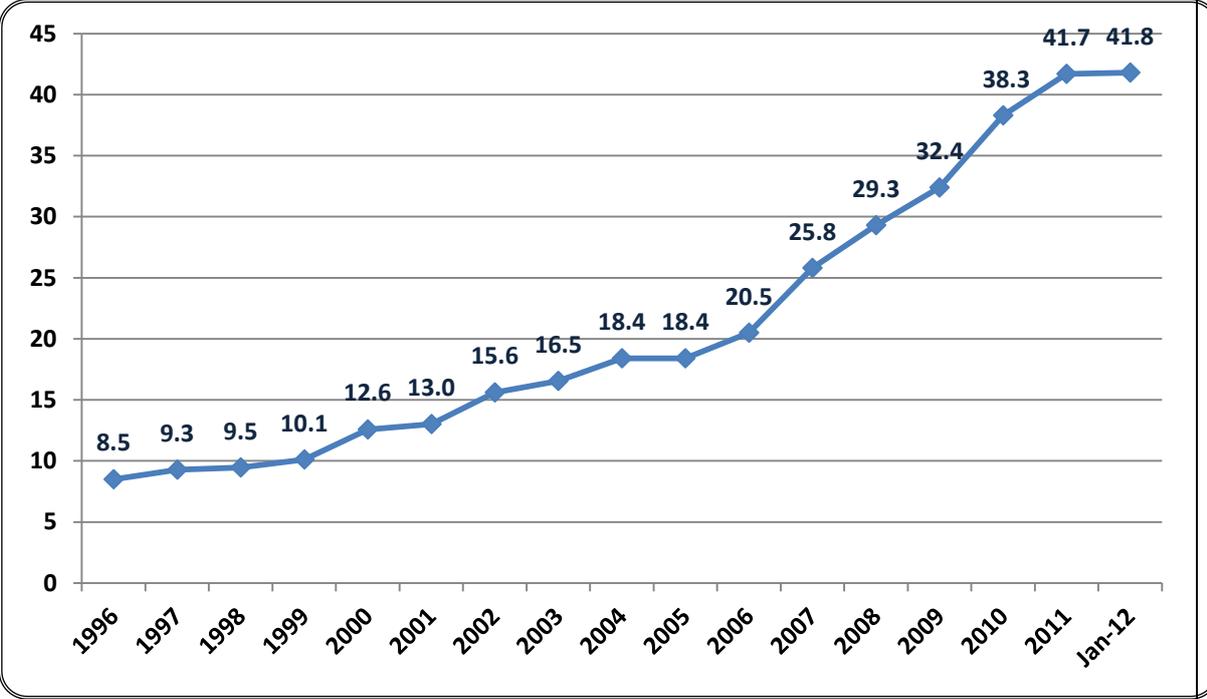
- **Development of Financial Sector**

It should be noted that the development of the banking sector, which dominates the financial sector in Cambodia<sup>166</sup>, began at the same time as the massive inflow of dollars in the early 1990s. The first currency which was placed in the system by the public was therefore the dollar. In the mid-2000s, the baht began to enter the banking system. Some banks agencies and microfinance institutions in Thai border areas receive baht deposits, and provide loans in baht. The banking system which became highly dollarized, actively contributed to economic growth from the early 2000s through its role in financial intermediation. More than 90 percent of deposits were in foreign currencies; riel deposits remained very low (less than 5 percent of total deposits between 1994 and 2010). During the last decade, the volume of deposits and bank loans have both increased significantly. We note that total bank deposits amounted to 662 million dollars in the early 2000s, to 5,347 million dollars in 2012, an increase by a factor of 8. At the same time, total bank credit increased from 335 million to 4,431 million dollars, an increase by 13 times. Dabadie (2006) concluded that *“The dollarization is higher and higher ... the intermediation is also growing fast, and even faster. Loans and deposits grew rapidly over the recent years, and at an astonishing 42% and 45% respectively in 2006”*. Between 1994 and 2010, foreign currency deposits increased by 680 percent and financial circuits are experiencing significant expansion (“financial deepening”), illustrated by the M2/GDP ratio, growing from 6% to 38% (NBC, 2011). This brings Balino, Bennet, and Borensztein (1999) to conclude that foreign currency deposits encourage financial intermediation in a country where trust in the national currency was lost by macroeconomic instability and rising inflation.

<sup>166</sup> Approximately 95% of total assets of the financial sector are assets from the banking sector (NBC)

It would be difficult to imagine the Cambodian banking system without dollars, which is deeply rooted. In addition, the receipt of baht deposits by the banks and microfinance institutions, which circulate widely outside the banking system<sup>167</sup>, is another important source of finance to increase productive loans to borrowers.

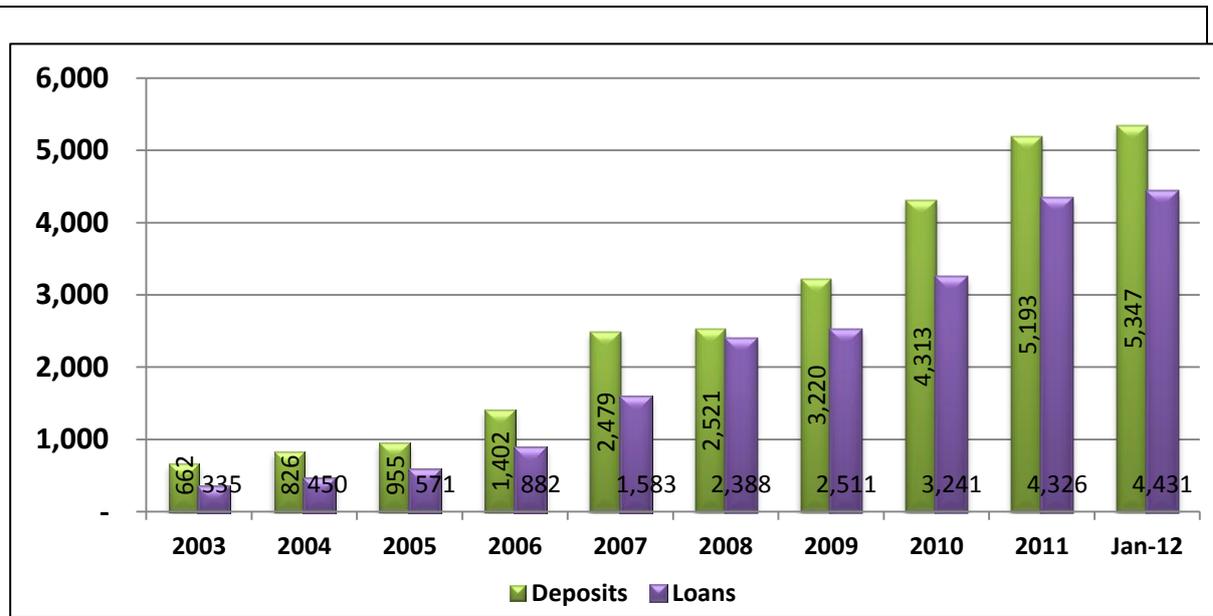
**Figure 6-3: Growth rate of financial circuits (M2 expressed as a percentage of GDP)**



Source: National Bank of Cambodia

**Figure 6-4: Bank deposits and credits (in millions of dollars)**

<sup>167</sup> According to our survey, 92% of the population who saves in baht does so outside the banking system (Chapter 5)



Source: National Bank of Cambodia

## Section II: Specialization of Currencies

The results presented in Chapter 5 led us to deepen our analysis of the use of currency in Cambodia. Indeed, we observe a geographical, functional, and social matrix, related to the use of different currencies. The holding of one or several currencies is related to both geographical and social class of their holders. In this scheme, a functional specialization of currency, each currency is reserved for one or more specific uses. It is in this perspective that we will present in this section three possible distributions, (i) geographical distribution, (ii) functional distribution and (iii) social distribution of currencies.

### 2.1. Geographic Distribution

We've addressed many observations on the issue of geographical distribution of currency circulation within the Cambodian economy. In general, we find that the riel is mostly in rural areas, the dollar in Phnom Penh and tourist areas, the baht in the border areas with Thailand and the dong in the border areas with Vietnam. Some studies even suggested the possible flow of kip (official currency of Laos) in the border areas with Laos. However, these are only the result of simple observations. We will focus here on analyzing the results of our survey to validate these observations on the circulation of currencies in different provinces of Cambodia.

#### 2.1.1. The Use of Riel

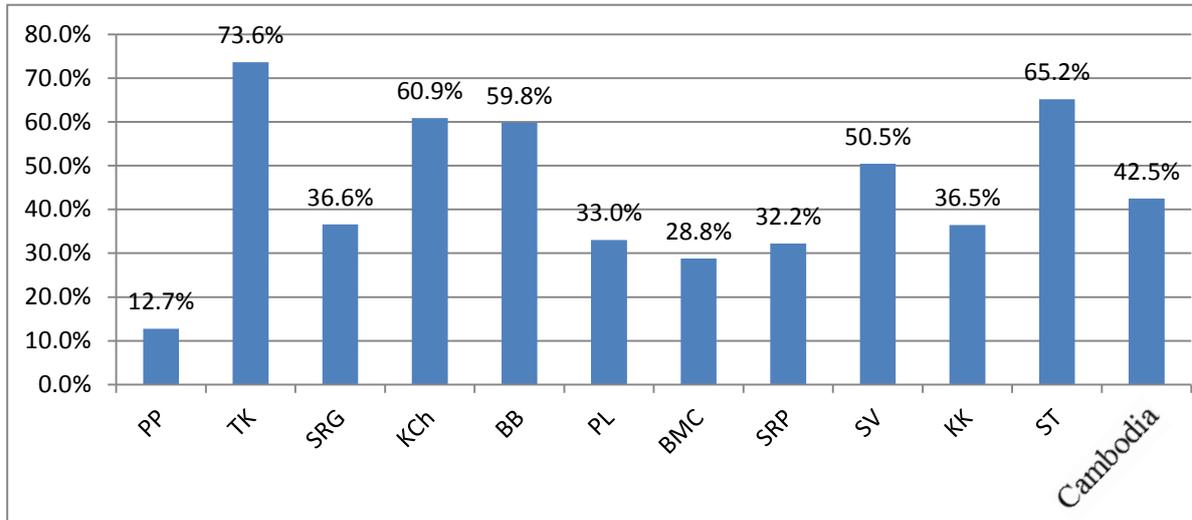
Cambodia is not fully dollarized. The riel remains very predominant in the revenue of rural areas, areas that account for 75 percent of the population. It is also the currency used for major expenses by the rural population. To measure the importance of the circulation of the riel by regions, we need to deepen the treatment of our results on the currencies used as a source of revenues and those used as basic expenses (food, clothing, and consumer goods) in each surveyed province.

- **Estimation of the proportion of riels circulating from the general population's revenues**

The results of our surveys show that in general the riel constitutes the bulk of revenues and expenses of individuals in all studied provinces, although its importance relative to other currencies varies according to geographical areas. In rural and agricultural areas, the riel dominates the monetary field. The proportion of riel in circulation relative to other currencies is very high in these areas. Four provinces use the riel heavily: TK, ST, KCH, and BB. The amount of riels in circulation is estimated at 73.6 percent of total currencies in circulation in TK, 65.2 percent in ST, 60.9 percent in KCH, and 59.8 percent in BB.

However, in PP, the proportion of riels in circulation is the lowest compared to other provinces. It represents only 12.7 percent. In SRP, this proportion is also relatively low, or 32.2 percent, followed by SV 50.5 percent. It is more modest in most border provinces with Thailand (BMC, KK, and PL) and in a border province with Vietnam (SRG). Indeed, in the border provinces with Thailand, except BB, the estimated proportion of riel in circulation ranges from 28.8 to 36.5 percent of the total currencies in circulation. Moreover, it represents 36.6 percent in SRG.

**Figure 6-5: Estimated proportion of riels circulating from the general population's revenue**



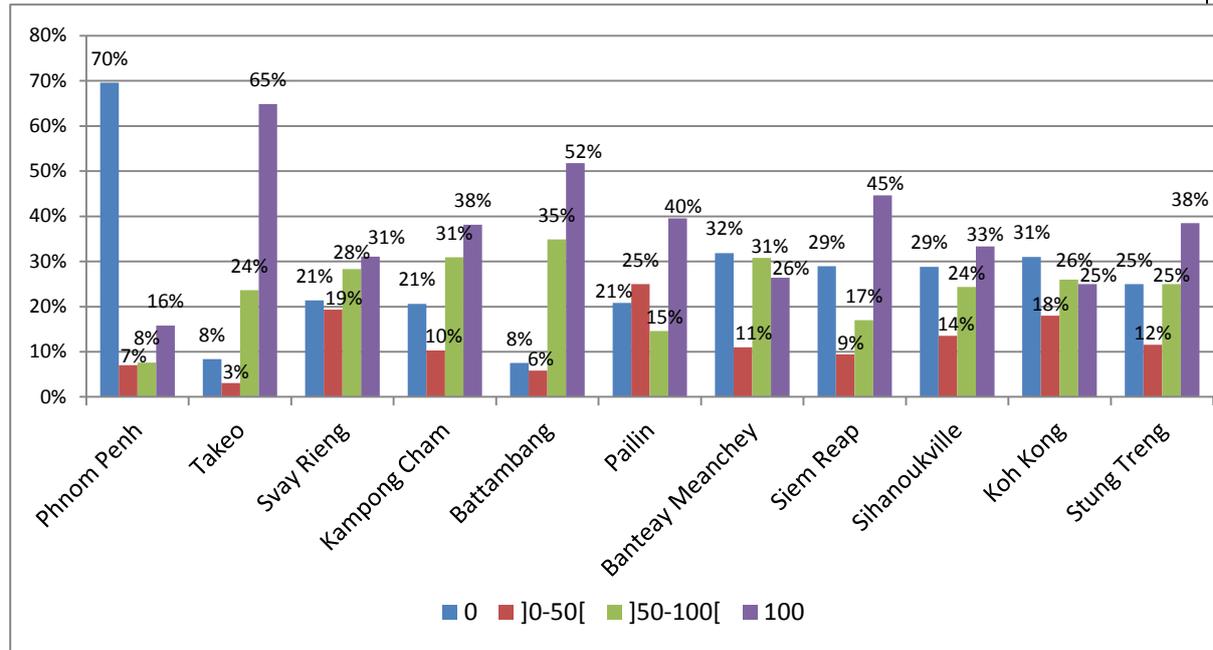
Note: The method for estimating the proportion of currencies from the revenues of the general population in each province has the same principle as the method used in Chapter 5: Sub-section 2.1.6.

#### • The Riel Revenues

Regarding the constituent currencies of revenue, more than half of surveyed individuals, excluding residents of PP, receive more than 50 percent of their revenues in riel. In Phnom Penh, only 31 percent receive some or all of their revenues in riel and 16 percent receive their revenues exclusively in riel. In TK, 65 percent of the population receives their revenues exclusively in riel, 55 percent in BB, 45 percent in Siem Reap, 38 percent in KMC and ST. In the border areas with Thailand, the relative importance of the riel decreases. Only 26 percent of the population receives their revenues exclusively in riel in BMC, 25 percent in KK, and 31 percent in SRG.

At the provincial level, we also find that riels are more prevalent in rural areas than in provincial towns and away from the border. From a general point of view, the economic zones within the provinces prefer the use of foreign currencies as they circulate more on these places of commercial activities and consequently of exchange activities. Therefore, farmers who obtain foreign currencies use them in part to purchase goods (mainly durable goods), to invest in the agricultural sector in the provincial towns and to exchange the remaining into riel with money changers for daily expenses, particularly those related to food.

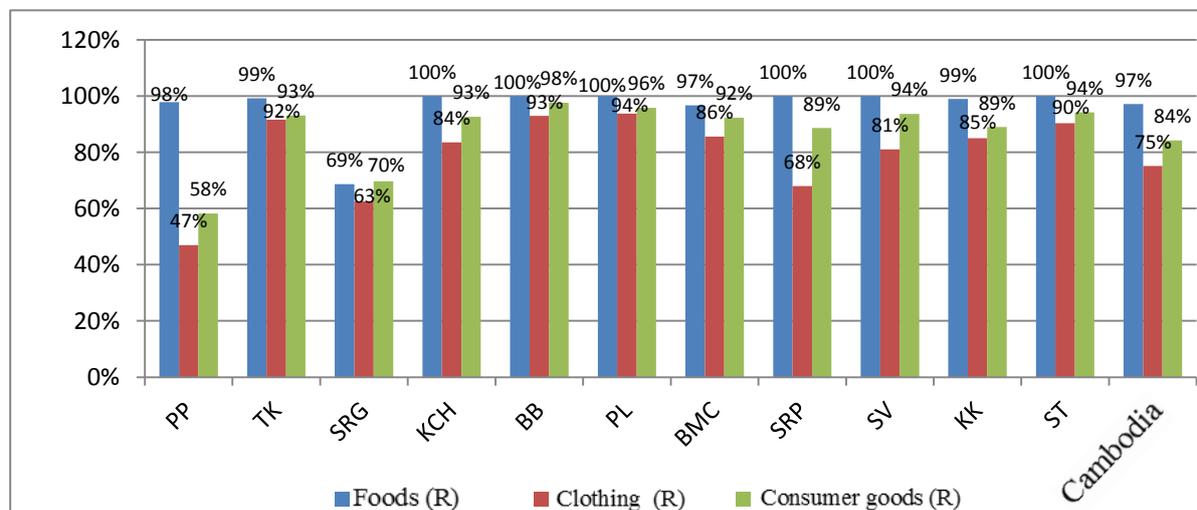
**Figure 6-6: Proportion of individuals reporting that they receive their revenue in riel**



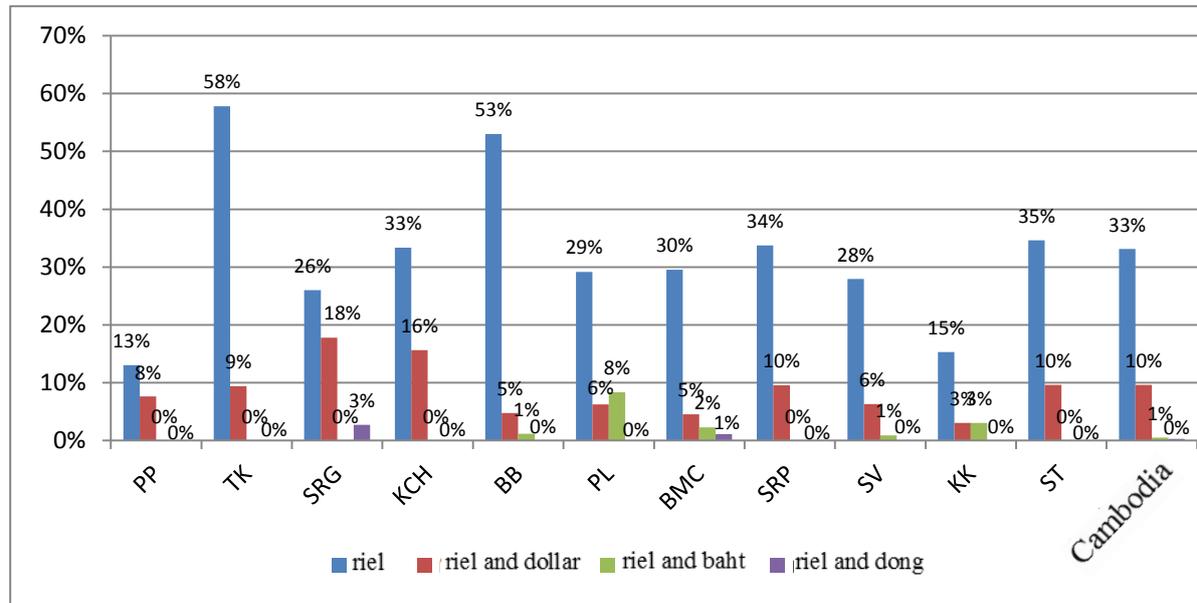
**• The Riel Expenditure**

The people of all surveyed provinces admit to often paying a portion or all of their expenses in riel. Between 97 and 100 percent of the interviewees admits to paying for their food purchases in riel. However, the proportion of the population reporting to use only riels for clothing purchases and consumer goods purchases is lower in PP, SRP, SV, and SRG than in other provinces. Fifty-three percent of the population said that they never use riels to pay for clothing purchases in Phnom Penh, followed by 37 percent in SRG, 32 percent in SRP, and 19 percent in SV. In other provinces, the proportion of individuals who do not pay for their clothing purchases in riel is lower and varies from 6 to 16 percent. For expense on durable goods or investments, it is only in two provinces -TK and BB- that more than half the population use riels. People in other provinces are doing so very little, especially in PP and other border provinces with Thailand.

**Figure 6-7: Proportion of individuals reporting to paying part or all of their expenses in riel**



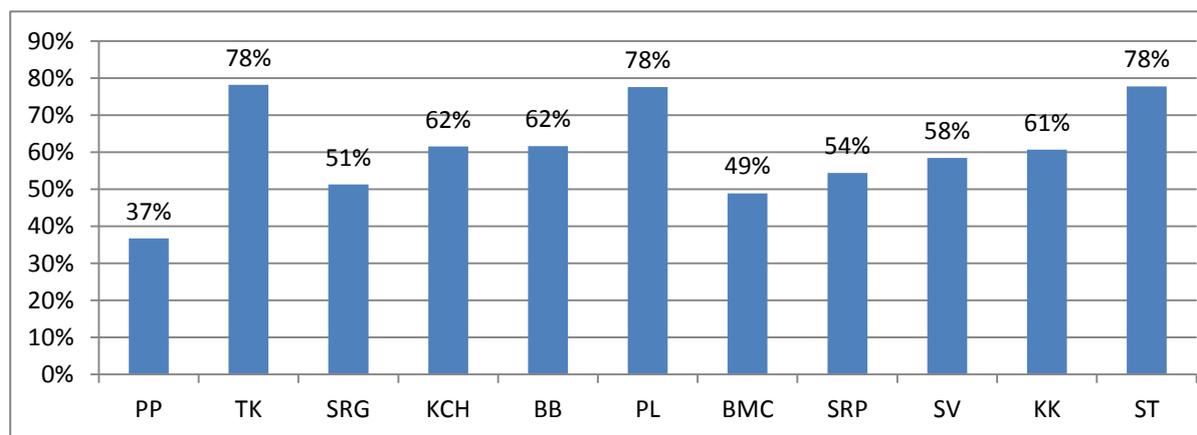
**Figure 6-8: Proportion of individuals claiming to pay for purchases of durable goods and investments in riel or in riel and other currencies**



**• Traders' Riel Income**

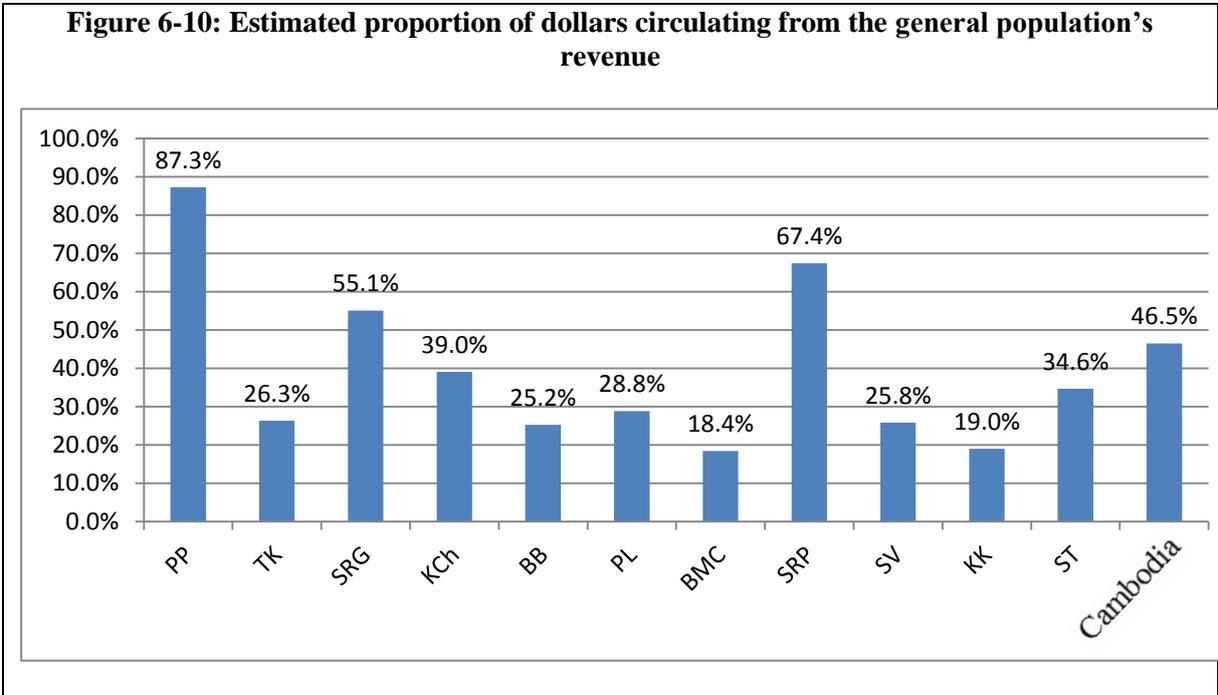
Another significant aspect which complements that of the circulation of riel by geographical area is that of the constituent currencies of the incomes of the commercial activities of traders. These incomes are the result of sales within the provinces. Again and not surprisingly, we find that although the riel is the major currency of incomes of all surveyed provinces, the proportion increases in rural and agricultural areas such as TK, ST, PL, KCH, BB. The riel is less used in the capital, PP and the “tourist provinces”, SRP, the province economically linked to Thailand, BMC, and the border province with Vietnam which operate the trades between Cambodian and Vietnamese farmers: SRG.

**Figure 6-9: Proportion of traders receiving more than 75% of their income in riel**



**2.1.2. The Use of Dollar**

In economic and tourist areas, dollars are more present. The most dollarized<sup>168</sup> provinces are PP, followed by SRP and SRG. Phnom Penh, Cambodia’s capital, is the most dollarized city. It is interesting to note that since the capital is heavily dollarized, there is an overwhelming perception by foreigners and most of the residents of PP, that Cambodia is highly dollarized throughout its territory. From the composition of revenues of the respondents, we estimate that the circulation of the dollar represents 87.3 percent of monetary supply in Phnom Penh. The second most dollarized area is SRP province, where circulation of dollars is estimated to be 67.4 percent of the money supply. The third zone is SRG, a province economically marked by its proximity to the Vietnamese border where money supply is dominated by dollars at 55.1 percent. In other provinces, the circulation of dollars is estimated to be less than half of the monetary supply. Economic border provinces with Thailand (BMC, KK, BB and PL) and a province of less economic importance, TK, are less dollarized, of which the proportion of circulation of dollars ranges between 18.4 to 29 percent. In KCH, an inland province of the country and in ST, the border province with Laos, the circulation of dollars is estimated to be between 35 and 39 percent of the money supply.

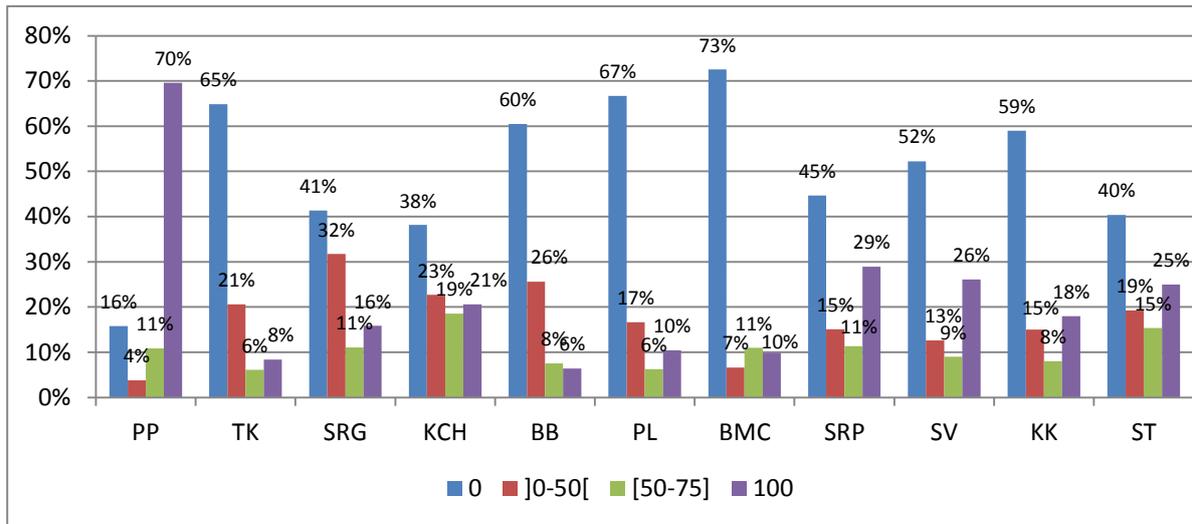


**• Dollar Revenues**

In Phnom Penh, 70 percent of people receive their revenues exclusively in dollars. In SRP it is 29 percent and 26 percent in Sihanoukville. In these three provinces, dollar revenues are injected by private companies, NGOs, international organizations, expenses of expatriates and tourists, and are made mostly or exclusively in dollars. In more rural provinces, the proportion of individuals who receive their revenues exclusively in dollars is much lower, varying from 6 percent to 25 percent. In the border provinces with Thailand, they are only 6 percent in BB, 10 percent in BMC and PL and 18 percent in KK who receive their revenues only in dollars.

<sup>168</sup> In this subsection, the term “dollarization” is limited to the circulation of the dollar. In other sections, dollarization refers to the meaning commonly defined as: the use of foreign currencies.

**Figure 6-11: Proportion of individuals report receiving their revenues in dollars**

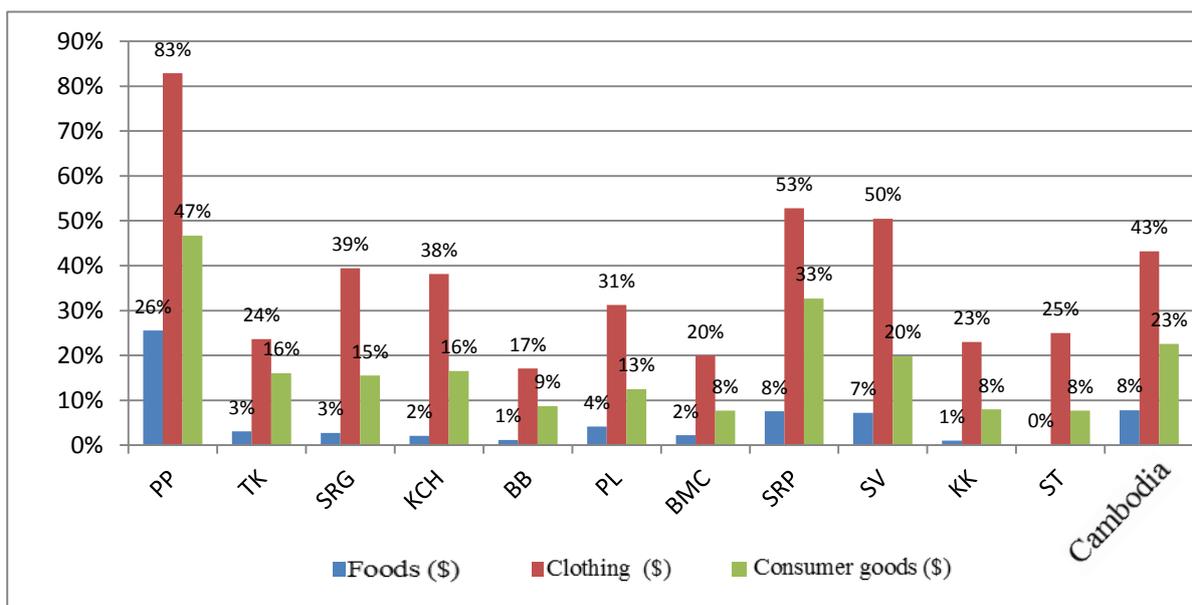


• **The Dollar Expenditure**

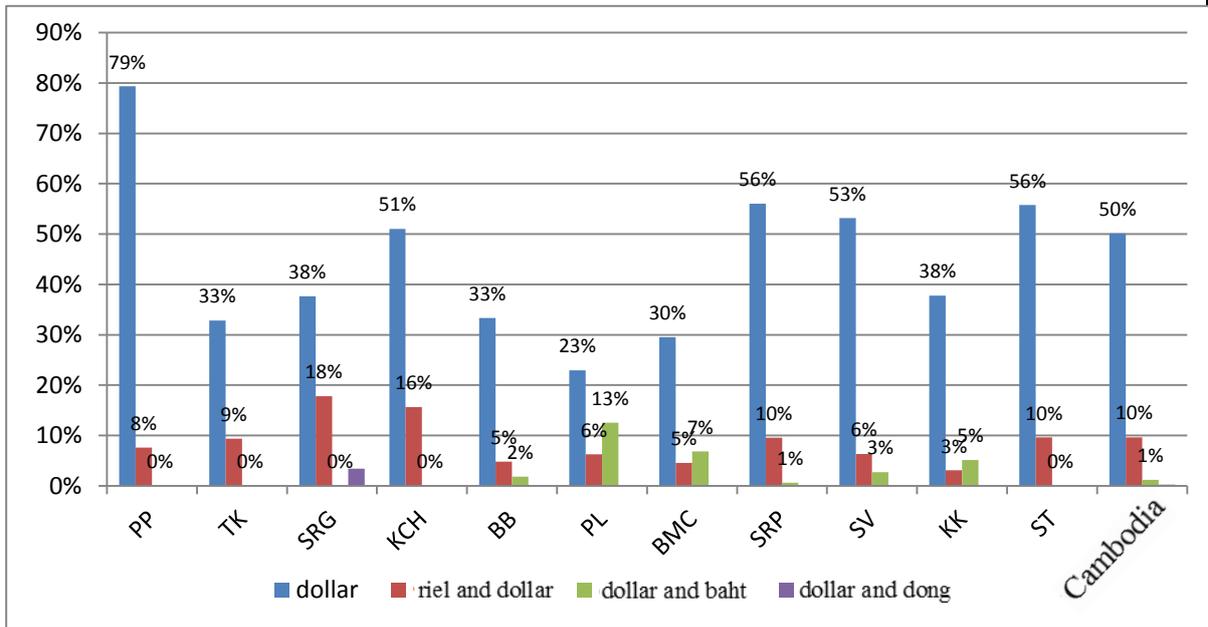
Regarding the expenses, people who use dollars the most for food purchases are in Phnom Penh. Twenty-six percent state that some or all of their purchases are in dollars, as opposed to 8 percent in SRP and 7 percent in SV. They represent only less than 5 percent in other provinces. A negligible proportion settle their food purchases in dollars in ST, only 1 percent in KK and BB, 2 percent in KCH and BMC and 3 percent in TK and SRG.

In Phnom Penh, SRP, SV, but also in ST and KCH, more than half of the population also makes their purchases of durable goods in dollars. This proportion rises to 79 percent for the inhabitants of Phnom Penh, 56 percent in SRP, 53 percent in SV, 56 percent in ST and 51 percent in KCH. When it comes to other provinces, this proportion drops to between 23 and 38 percent.

**Figure 6-12: Proportion of individuals claiming to spend in dollars**



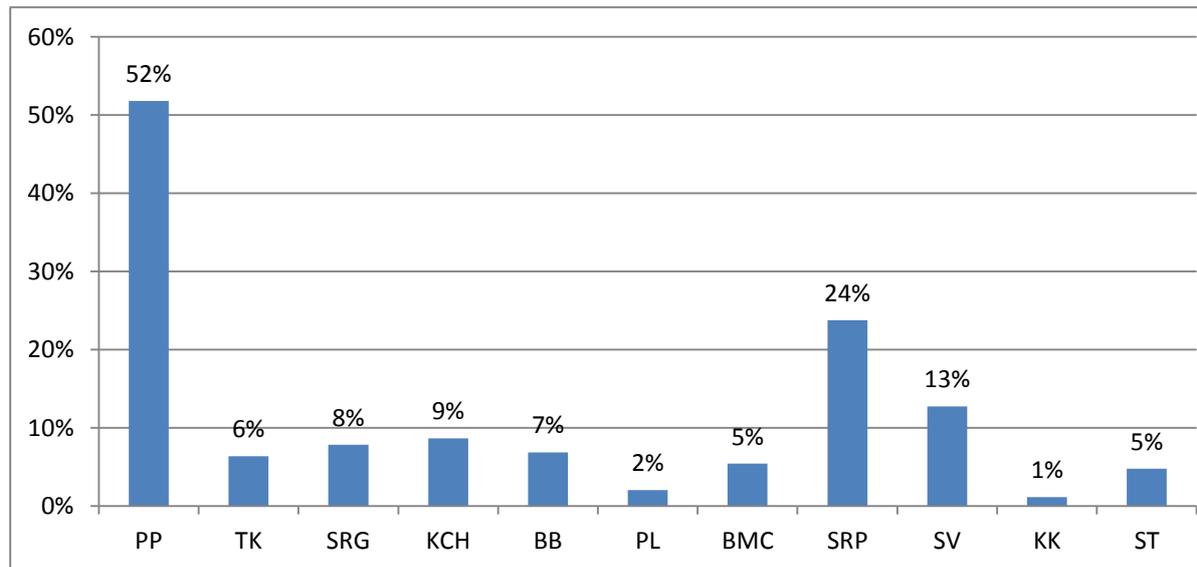
**Figure 6-13: Proportion of individuals claiming to pay for spending on durable goods and investments in dollars or in dollars and in other currencies**



**•Traders' Dollar Incomes**

Traders who are paid mainly in dollars are also in PP. Fifty-two percent of these individuals in PP get more than 75 percent of their income in dollars. In SRP and SV, they are 24 percent and 13 percent, respectively, who receive their income in dollars. Moreover, in other studied provinces, less than 10 percent of traders settle more than 75 percent in dollars. In the Thai border areas, such as KK, PL, BMC, a very small proportion of traders receive more than 75 percent of their income in dollars. This proportion is still very low in TK and ST.

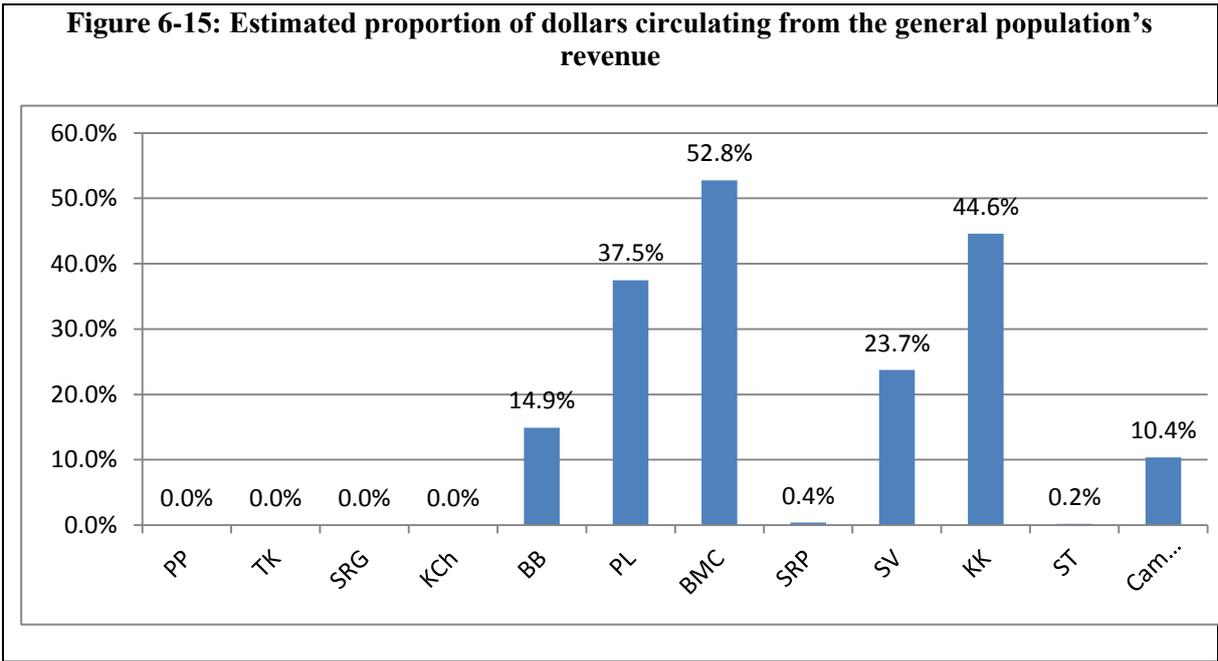
**Figure 6-14: Proportion of traders with more than 75 percent of incomes in USD**



**2.1.3. The Use of Baht**

The presence of bahts intensifies when approaching border areas with Thailand. This is not surprising as it is our hypothesis. Circulation of bahts appears mainly in five border provinces: BMC with the proportion of circulation of bahts estimated to be the highest (52.8 percent), followed by KK (44.6 percent), PL (37.5 percent), SV (23.7 percent), and BB (14.8 percent). In SRP and ST, the circulation of the bahts exists, but it is estimated to be negligible and represents less than 0.5 percent of the money supply. Baht circulation in BMC, KK, PL, BB, and SV is due to the trade links between the inhabitants of these provinces and those in Thailand.

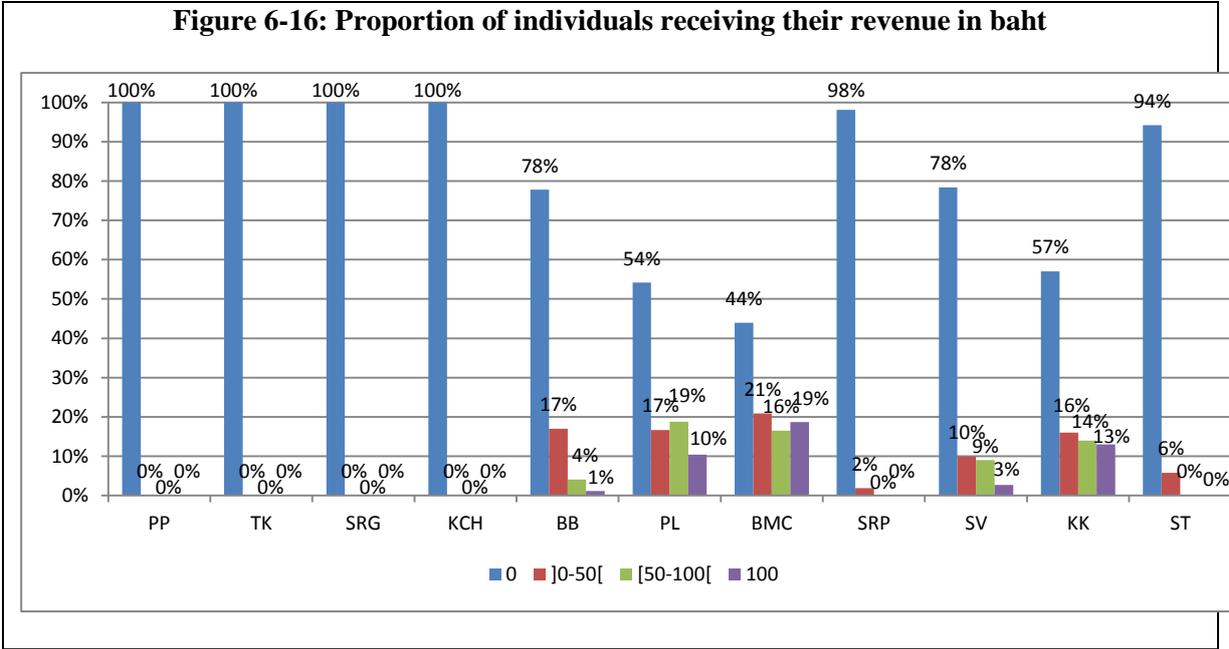
At BMC, PL, and BB, farmers mostly sell agricultural products to Thai traders and receive the income in bahts. Casinos, the activities of subcontractors, fund transfers of Cambodian migrant workers in Thailand are also sources of bahts in these provinces. At the same time, bahts are also sought after to import Thai products and pay for purchases of some Thai products (agricultural machinery and equipment, medicines, food for animal setc ...) in these provinces. In KK and SV, the revenues from fishing provide farmers bahts. Thai companies or Cambodian traders buy seafood from farmers directly in baht. In SRP, a small area (*Kralanh* district), near the province of BMC, farmers sell their agricultural products (rice, corn, roots, etc ...) in baht. In addition, in ST, the baht marginally circulates through trade between farmers of ST and those of Laos who use bahts to pay for their purchases.



**• Baht Revenues**

Provinces where individuals receive their revenues in baht the most are BMC, PL, and KK and to a lesser extent, BB, SK, and SR. In KK, PL, or BMC, more than 20 percent of the population receives more than three-quarters of their revenues in baht. The baht is thus the second currency after the constituent riel of revenues for the inhabitants of these three provinces. The dollar is in the third place. 35 percent, 29 percent, and 27 percent of people receive their revenue over 50 percent in baht in BMC, PL, and KK, compared with 21, 16, and 26 percent in dollar, respectively, in these provinces. Baht revenues come mainly from sales to Thailand, direct or by Cambodian intermediaries of agricultural products in BMC, PL, and BB, fisheries and agricultural products in KK and SV. In addition, trade with Thailand made farmers familiar in

using the baht as the unit of account and means of payment. Therefore, farmers also sell their products to Cambodian retailers in baht, even if they do not export to Thailand. For example, it is common for a “rice miller” to buy rice from Cambodian farmers in baht. Baht revenues also come from the transfers of Cambodian migrant workers in Thailand, denominated in baht, but also other commercial activities with Thailand (see Chapter 4: supply channels of currencies).

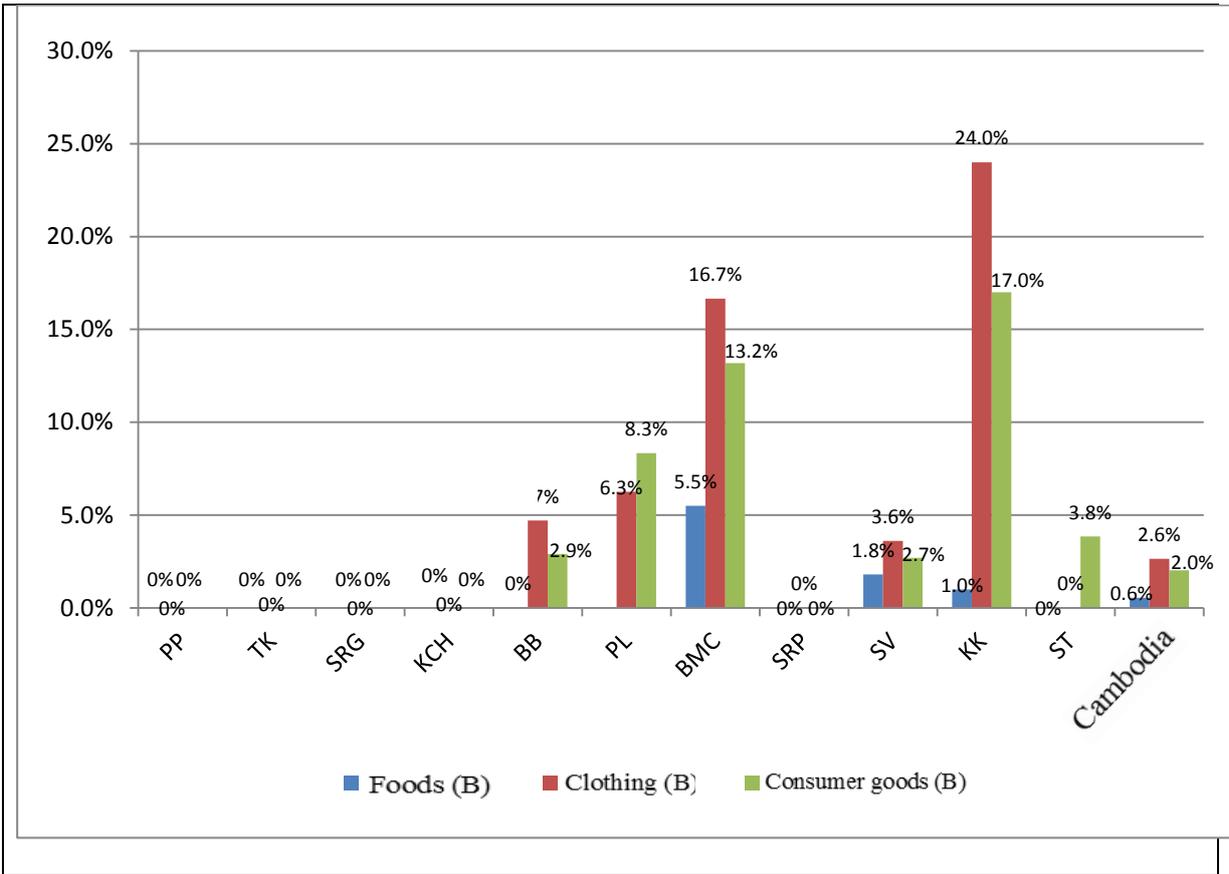


**• The Baht Expenditure**

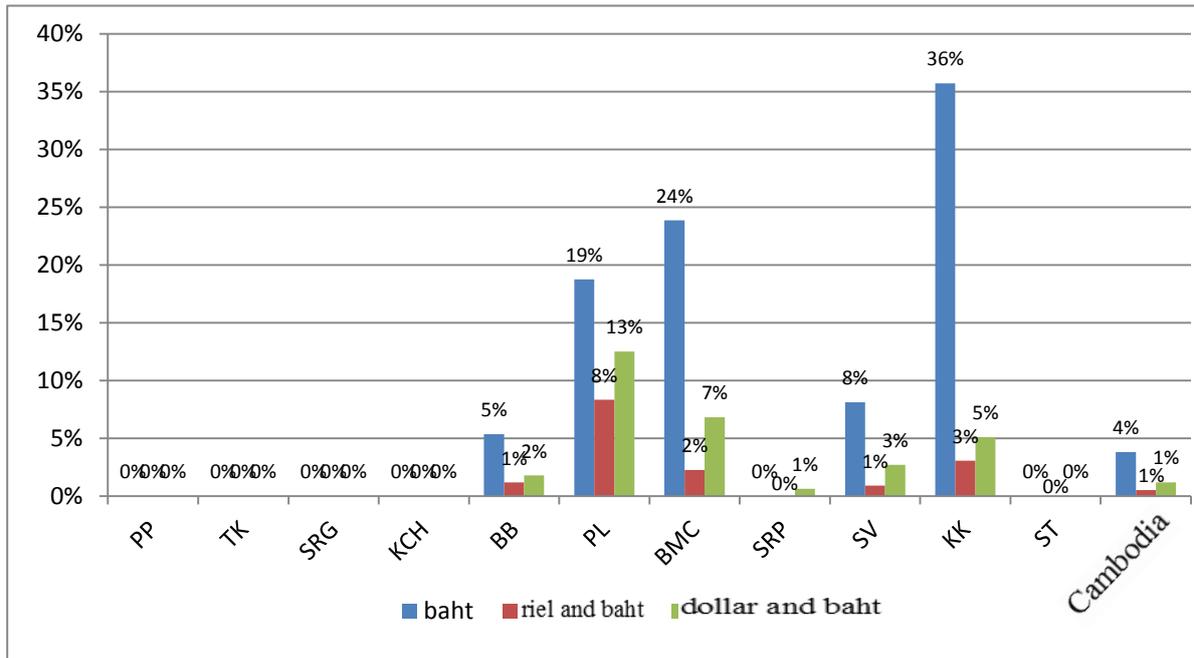
The expenses of the population made in baht follow the same logic of proximity with Thailand. Compared to revenues received in baht, expenses in baht are of lesser extent as part of the revenues is exchanged, especially into riel, to perform some common expenses. We thus find that food purchases are rarely made in baht. In BMC, 5.5 percent of people only do so, in SV 1.8 percent, and in KK 1 percent. In contrast, purchases of clothing and consumer goods are made more in baht than those related to food. However, the proportion of the population who makes these transactions in bahts remains low; it represents less than 25 percent of the total.

For purchases of durable goods and investment, the baht are also used in KK, BMC, and PL and to a lesser extent in SV and BB. In KK, 36 percent of people only use the baht for expenses on durable goods. They are 24 percent in BMC and 19 percent in PL. No more than 8 percent and 5 percent to do so in SV and BB, respectively.

**Figure 6-17: Proportion of individuals claiming to spend in baht**



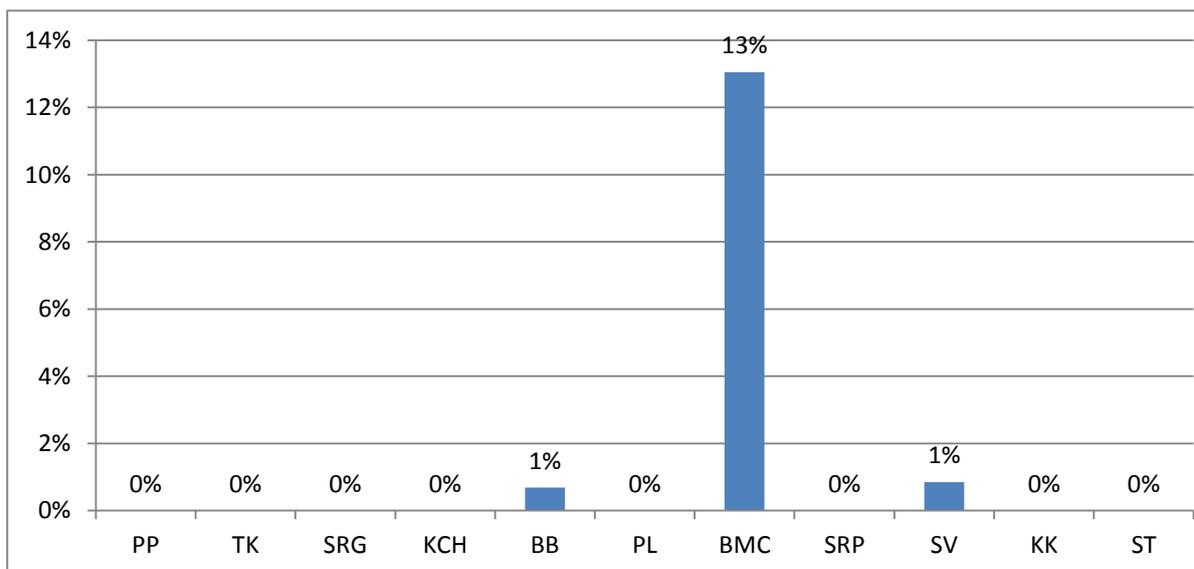
**Figure 6-18: Proportion of individuals claiming to pay for durable goods or investments in baht**



**• Traders' Baht Incomes**

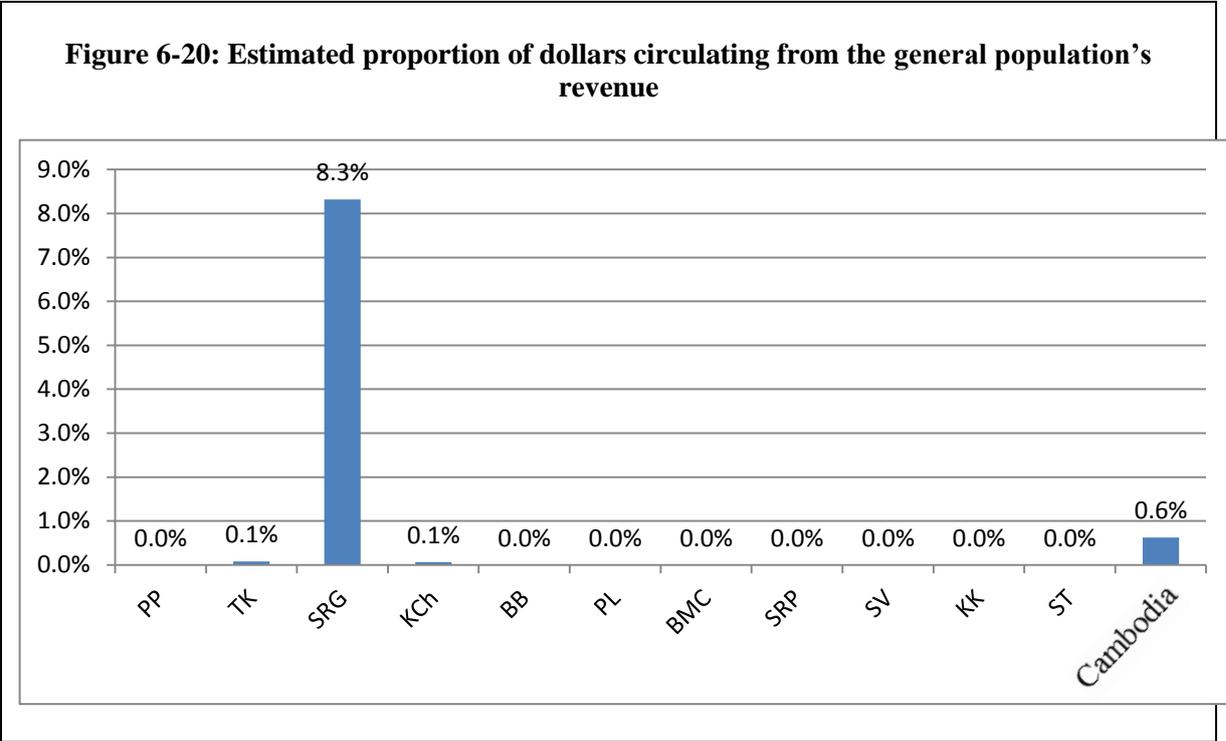
As stated by the previous results, the baht concentrates significantly only in BMC and to a much lesser extent in BB and SV. In BMC, 13 percent of traders are paid more than 75 percent in baht, while it is only 1 percent in BB and SV. In both small border provinces of Thailand (KK and PL), the baht are also used to pay for trade between traders, but they get only less than 75 percent of their income.

**Figure 6-19: Proportion of traders with more than 75 percent of income in baht**



**2.1.4. The Use of Dong**

The circulation of dongs is limited to areas near the Vietnamese border. Among the three border provinces studied (TK, KCH, and SRG), there is only one province, SRG, where dongs are significantly used. The estimated circulation is equivalent to 8.3 percent of the money supply in the province. In the other two provinces, the circulation of dongs appears negligible. The proportion of circulating dongs reaches only 0.1 percent of the money supply.

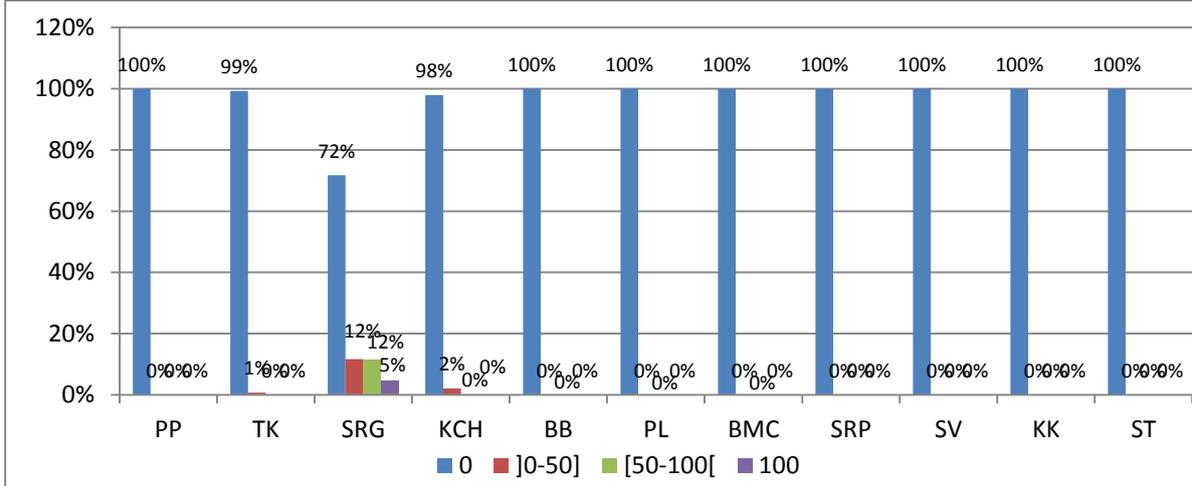


**• Dong Revenues**

Dong revenues primarily appear in SRG, where 17 percent of the population receives more than half of their revenues in that currency (including 5 percent who receive their revenues exclusively in dongs). Dong revenues mainly come from commercial activities of Cambodian farmers with the Vietnamese traders. Farmers sell their agricultural products (rice, corn, roots etc.) and their cattle to Vietnamese traders and are paid mostly in dong. In TK and KCH where we also identify commercial activities with the Vietnamese, people also receive dongs. However, these dong revenues represent only a very small portion of total revenues, and the proportion of people who receive dong represents only 2 percent in KCH and 1 percent in TK.

It is also observed that the more we are away from the Vietnamese border, the less the dong is used, but it should be noted that most traders of these provinces accept the dong if it is offered by their clients.

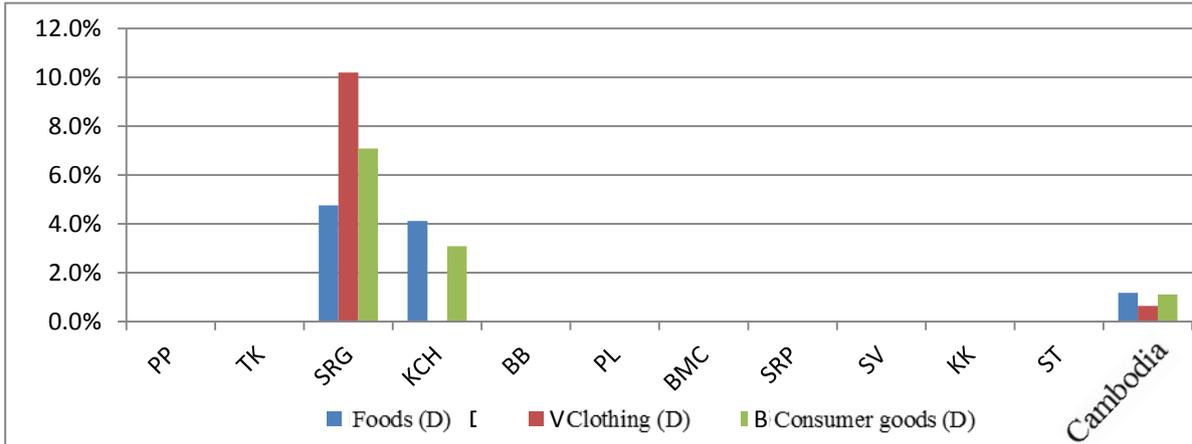
**Figure 6-21: Proportion of individuals reporting to receive their revenues in dong**



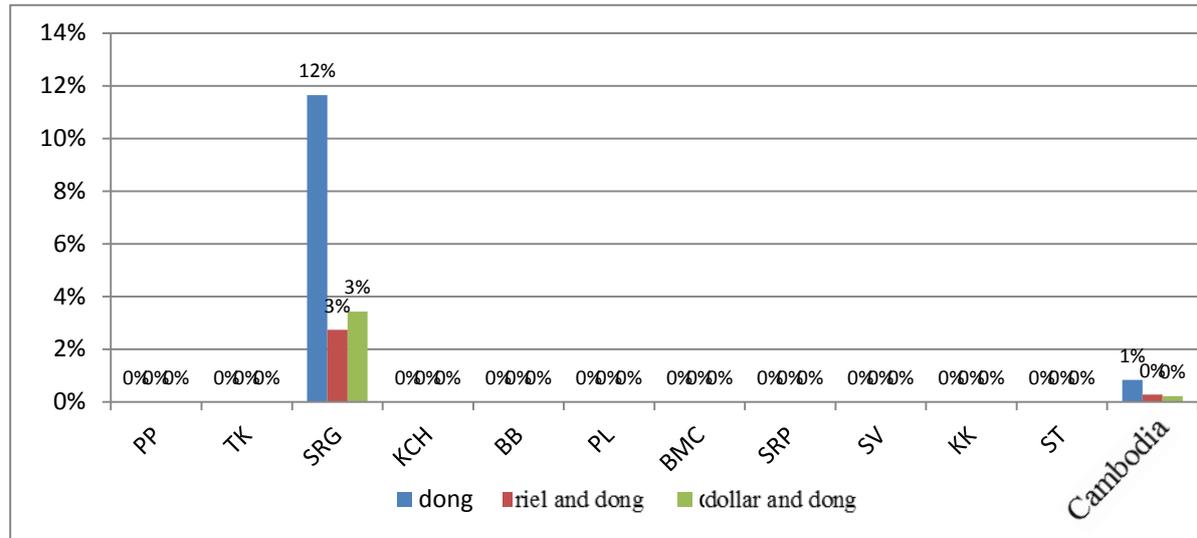
**• Dong Expenditure**

According to the results of our survey, dongs are rarely used in the economic life of the population that does not directly receive revenue in dong. They are used primarily because they are the source of revenue for some farmers. These farmers, in general, do not exchange dongs for their purchases, but use them directly. This is what we learned from the low volume of exchange of VND to KHR/USD or KHR/USD/THB to VND (see Chapter 5: The Operations of the Population). Moreover, regarding the spending on investment goods, only 12 percent of individuals in Svay Rieng make these purchases in dong. In general, these purchases are purchases of food for animal, fertilizer, pesticides ...; related to agricultural activity and directly imported from Vietnam.

**Figure 6-22: Proportion of individuals claiming to spend in dong**



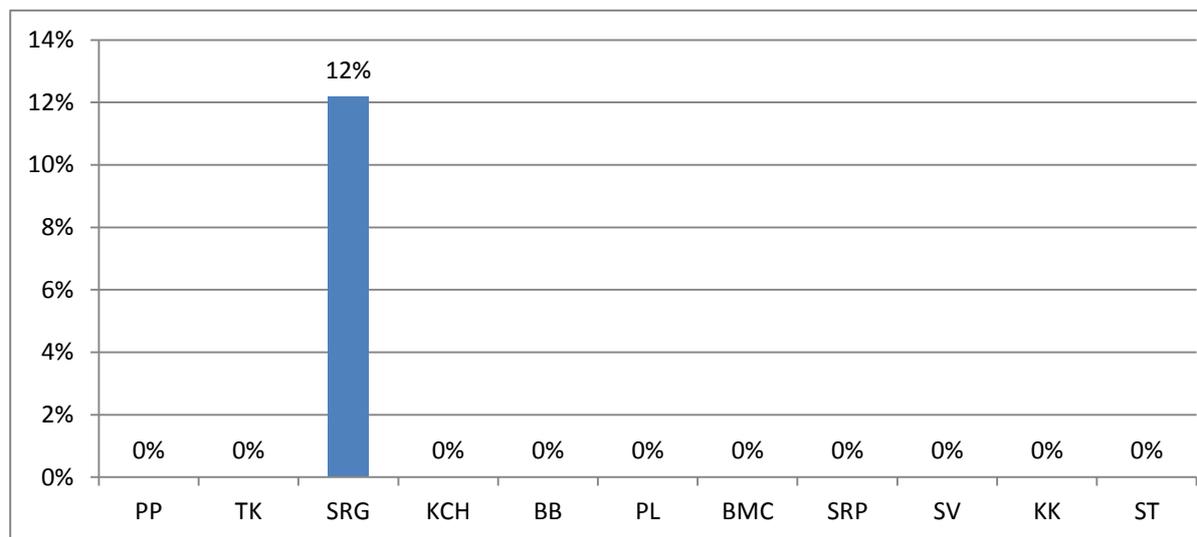
**Figure 6-23: Proportion of individuals claiming to pay for spending on durable goods and investment in dong, or in dong and other currencies**



**• Traders' Dong Incomes**

The obtained results for the traders do not differ from those of the general population. Among the three studied Vietnamese border provinces, the dong is mainly concentrated in SRG. Twelve percent of traders in SRG get more than 75 percent of their incomes in dong. We could not find any traders who receive dong incomes in TK and KCH. This is explained by the fact the inflows of dongs are marginal in these two provinces and the dongs are used only very little by the buyers.

**Figure 6-24: Proportion of traders with more than 75 percent of incomes in dong**



## 2.2. Functional Distribution

According to the instrumental approach, money fulfills three functions, called “triad” (Hick, 1967): intermediary of trade, unit of account, and store of value. Some economists have tried to prioritize these functions of money by giving them a relative importance to each other. For Menger (1892) and Polanyi (1974), the money occupies primarily a function of intermediary of trade and is primarily created to facilitate trade. In contrast, Hicks considered the store of value as a more important function of money. Keynes (1971), meanwhile, estimated the function of the unit of account as predominant among these three functions. Note, that the function of a store of value is dependent on the other two functions of money (Blanc, 2002): when money performs a unit of account and payment function, it is considered as the store of value. Therefore these rankings shed light on the ability to separate, to some extent, the functions of money, specifically between monetary practices (unit of account and means of payment) and financial practices (store of value).

However, note that the three functions of money are not separable in the context of exclusive monetary circulation. Indeed, these functions are all performed by a single currency (national currency). Nevertheless, the separation becomes possible when several currencies circulating in a single economic space. One might guess that this plurality complicates monetary and financial practice. Thus a function of money could be completed by several currencies; at the same time, a currency could complete partially or all the functions of money. In other words, it could specialize in one or more traditional functions of money.

Our survey echoed this dichotomous separation of functions of money: i. function of unit of account and means of payment and ii. function of store of value.

### 2.2.1. Function of Unit of Account and Payments

Some currencies are seen in Cambodia as currencies of payment and some as conservation of wealth. We also identified finer specializations of currency in the payment function. The use of one currency for payment thus seems to depend on the following factors:

- Payment amount (volume of trade);
- Origin of goods sold (domestic production against imports);
- Finality of trade, whether it is household consumption, trade, investment, offering or gifts.

Table 6-1: Currencies of payments for goods and investment by the general population\*

	Local products		Imported products		
	Agricultural	Crafts	Thailand	Vietnam	Other countries
Small amounts (less than 5 dollars)	KHR	KHR	KHR (THB)**	KHR (VND)**	KHR
Large amounts (more than 5 dollars)	KHR, THB, USD	KHR and USD	KHR and THB	USD	USD

\* (Made in traditional markets, they exclude supermarkets and markets reserved for foreigners where prices and payments are dominated by dollar)

\*\* : Rarely used

The riel currently circulates in ten different denominations: 100, 200, 500, 1m (thousand), 2m, 5m, 10m, 20m, 50m, and 100m<sup>169</sup>. At the same time, we can find in Cambodia the circulation all denominations of the dollar bills, except the metal coins. The results of our surveys show that riels and dollars are both complementary and competitive. Generally, for payments under 5 dollars (or 20m riels), the general population or traders use the riel more than the dollar. In contrast, when the payment amount is greater than 5 dollars, both agents prefer to use the dollar. More than 90 percent of the population, traders and money changers say they frequently hold riel bills for a value of less than 20m riels (about 5 dollars). The population uses, in contrast, less large riel bills (20m, 50m and 100m). Only 17 and 4 percent of those surveyed hold bills of 50m (equivalent to 12.5 dollars) and 100m riels (equivalent to 25 dollars), respectively. The proportion of traders and money changers that hold large bills in riel is higher than that of the population, but it remains low compared to dollar bills in equivalent amount. According to our surveys, the population tends to change large bills of riel to dollar or more often in small riel bills. The behavior is justified by the difficulty of finding traders willing to accept them.

We could therefore conclude that the riel is divisional money of dollar when the amount of the transaction is less than 5 dollars. Yet, there is also a degree of competition between the two currencies, mainly when it comes to payments of amounts equal to 5 dollars (or 20 m riels). Thus, the holding of 5 dollars and 20 m riel bills is closed for the *general population*. It is the same for money changers and traders. The one dollar bill is also widely circulated as well; about half of the three surveyed agents declare holding it. However, it seems less desirable than the riel bill of 5m riels (equivalent to 1.25 dollars). Large riel bills are in turn substituted by dollar bills (10 or 20 dollars). The bills of 50 and 100 dollars have a monopoly in the Cambodian monetary circulation; the largest value of a riel bill is equivalent to 25 dollars. However, these two bills (50 and 100 dollars) are not much used by most of the population because of the low level of revenue. The population used them to settle large amounts such as the purchase of real estate, cars or motorcycles, and etc. The population exchanges the 50 and 100 dollar bills in riel from the money changers before settling everyday purchases, which are mainly in riel and in low volume. Seventy-five and 70 percent of money changers say they hold bills of 50 and 100 dollars, respectively.

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<sup>169</sup> A bill of 50 riels is also in circulation, but it is not used by economic agents, probably because of its very low value.

**Table 6-2: KHR, USD bills held by the general population, traders and money changers**

KHR bill	<= 1mR*	2mR	5mR	10mR	20mR	50mR	100mR		
Population	90%	90%	95%	95%	56%	17%	4%		
Traders	80%	78%	95%	95%	77%	33%	7%		
Changers	75%	75%	93%	96%	83%	51%	20%		
USD bill			\$1 (4mR)**		\$5 (20mR)	\$10 (40mR)	\$20 (80mR)	\$50 (200mR)	\$100 (400mR)
Population			46%		52%	55%	46%	21%	20%
Traders			56%		53%	68%	57%	29%	24%
Changers			55%		78%	96%	94%	75%	70%

**Notes**

\* m = thousand

\*\* Suppose: Exchange rate: \$1 = 4,000 riels

R: represents KHR; \$: represents USD

**• The Use of Currencies Depending on the Types of Goods**

Our results indicate that the riel is the preferred currency for most of the population to settle payments to purchase food. At the national level, 95 percent of the surveyed population settles these purchases in riel three-quarters of the time (and 89 percent do so exclusively in riel). Only 1 percent settles this type of expense only in dollars.

For payments of consumer goods, the dollar, and to a lesser extent bahts and dong, are used. However, the use of the riel remains dominant. For the purchase of clothing, 60 percent of the population uses more than three-quarters of riel, 28 percent uses the dollar, 1 percent of baht and 0.1 percent the dong. The use of the dong and the baht is primarily used by farmers in border provinces. In addition, for other consumer goods, the population mainly uses the riel, 73 percent settle these purchases more than three-quarters in riels. Only 10 percent use dollars. The bahts and especially dong are rarely used in payment of these purchases.

For goods whose value is considered high by the population, such as durable goods and investment (vehicles, purchases of equipment, machinery or agricultural materials, etc.), even the use of dollars is predominant, while the riel and baht are also used. We also note that the higher the amount, the more likely that dollars are used. In addition, for goods imported from Thailand and sold in the border provinces, farmers generally settle in baht, mainly because the price display price is in baht. Dong are generally used by some farmers who obtain revenues in dong and are confined to a purchase of fertilizers or pesticides imported from Vietnam. Other farmers who do not have a significant share of their revenues in dollar, baht or dong, generally use riels for payments of these purchases. However, when the amounts of purchases are high (often more than 100 dollars), we note that the farmers firstly exchange their riels into dollars or bahts to pay for their purchases to avoid exchange loss.

Half of the population reports to using only dollars for purchasing high value goods. Approximately 33.1 percent settle them only in riel and 9.6 percent do so only in riels and dollars. For those who have baht revenue, 3.8 percent of those surveyed use only the baht to pay for their purchases. These individuals live in the border areas of Thailand. In addition, only 0.8 percent of individuals pay such purchases in dong.

**Table 6-3: Use of currencies based on the types of purchases (multiple responses)**

	Expenses $\geq$ 75% in			
	KHR	USD	THB	VND
Food	95%*	1%	0%	0%
Cloth	60.1%	28.2%	1.0%	0.1%
Other consumer goods	73.1%	10.8%	1.0%	0.5%

- **Reading of the table:** \* 95 percent of those surveyed make the expenses of food more than 75 percent in KHR.

**Table 6-4: Use of currency for payments on investments and durable goods (percentage)**

	KHR	USD	THB	VND	KHR and USD	KHR and THB	USD and THB	Total
Proportion of general population	33.1%*	50.3%	3.8%	0.8%	9.6%	0.5%	1.2%	100%

- **Reading of the table:** \* 33.1 percent of those interviewed make the expenses of durable goods or investment in KHR.

- **Expenses in social events**

We also find that the dollar and the riel are the most used currencies for social events. However, their use varies according to the types of events.

- **Travels within the country**

These expenses relate primarily to bill payment in restaurants, accommodation and tickets to access tourist sites. For travels within the country, the majority of people holds riels and essentially pays for expenses in riel. The results of the survey showed that when traveling 78.5 percent of individuals make their expenses in riel three-quarters of the time. Only 8.8 percent of other travelers do so in dollars. The bahts and dong are not held for this particular expense purpose.

- **Wedding gifts and offerings**

Wedding gifts are increasingly becoming an important household expense in Cambodian society, especially during the marriage season<sup>170</sup>. These gifts are more akin to financial aid than an actual gift itself because they are primarily in cash<sup>171</sup>. Moreover, it should be noted that several types of religious offerings (contribution to the construction of pagodas, donation to monks, settlements at funeral occasions etc ...) are a type of significant expense in Cambodia. The currencies used for these two types of expenses (wedding gifts and offerings), are different. The riels are mostly offered for wedding gifts. While 56.9 percent give wedding

<sup>170</sup> Traditionally, weddings are held between October and April, after the period of the dry season and before the Khmer New Year.

<sup>171</sup> It is observed that the average amount of the donation of a guest is about 20-50 dollars in PP 10-30 in urban areas in the province and 5-20 dollars in rural areas.

gifts in more than three-quarters in riel, there are only 30 percent who do so in dollars. In contrast, 81.2 percent make offerings in riel and only 9.8 percent who do so in dollars. Bahts and dong are used marginally for these two types of expenses.

**Table 6-5: Proportion of individuals claiming to use more than three-quarters of each currency, depending on the type of social expense (multiple responses)**

	Expenses $\geq$ 75% in			
	KHR	USD	THB	VND
Travel (within the country)	78.5%*	8.8%	0.2%	0.1%
Wedding gifts	56.9%	30.0%	0.5%	0.1%
Offerings	81.2%	9.8%	0.3%	0.2%

- **Reading of the table:** \*78.5 percent of those surveyed are spending inside the country in KHR.

- **Currencies of payment used by traders**

Traders mainly use riel, dollar and to a lesser extent the baht to settle for their purchases and get paid. According to our survey, riels are used in commercial networks for trade in agricultural products (rice, vegetables, roots etc.), fishing, handicrafts and other household products. For transactions of imported goods, dollars are generally used. The bahts are mainly reserved for trades of Thai goods in Thai border areas, but from time to time, traders in Phnom Penh pay and are often paid in bahts well with traders in these areas. In Phnom Penh, we identify traders (especially clothing) who regularly go to Thailand to get supplies (once or twice per month). These traders, who then sell to retail or wholesale, are paid mainly in dollars. They then exchange those dollars into baht to buy Thai products.

In domestic trade, we estimate that between 43.9 and 59.2 percent of traders make their purchases and sales more than 50 percent of the time in riel while between 45.4 and 50 percent do so in dollars. There are between 4.9 and 12.8 percent who do so in baht; most of these traders are in the provinces of BB, PL, BMC, SRP, and SV. 19 percent of traders in PP make their purchases in baht and 3.6 percent are paid in baht.

Our surveys also show that the proportion of traders trading in dollars to their partners in PP is higher than that of traders trading in dollars to their partners in other provinces, or 77% against 64.2%. Similarly, the proportion of traders in the border provinces of Thailand (BB, PL, BMC, SRP, SV) trading in baht, is also higher than that of traders trading in baht to their partners in other provinces (36.3%, 25%, 65.3%, 16.7%, 21.7%, 50% against 14.1%, 6.1%, 28.9%, 3.2%, 6.7% and 6.8%, respectively).

**Table 6-6: Proportion of traders who settle and are paid in each currency**

Entry of foreign currencies of more than 50% in each currency				Province	Exit of foreign currencies of more than 50% in each currency			
KHR	USD	THB	VND		KHR	USD	THB	VND
24.8*	77.0	3.6	0.0	PP	41.5**	64.2	1.9	0.0
63.6	39.4	0.0	0.0	TK	72.3	42.6	0.0	0.0
50.0	45.0	0.0	5.0	SVR	65.7	39.0	3.8	2.9
66.0	42.6	0.0	0.0	KCM	79.1	31.3	0.0	0.0
43.7	25.2	36.3	0.0	BB	58.7	37.0	14.1	0.0
70.0	12.5	25.0	0.0	PL	63.6	36.4	6.1	0.0
16.0	16.3	65.3	0.0	BMC	46.7	33.3	28.9	0.0
33.3	62.5	16.7	0.0	SRP	49.2	54.0	3.2	0.0
39.1	39.1	21.7	0.0	SV	53.3	53.3	6.7	0.0
60.0	0.0	50.0	0.0	KK	75.0	27.3	6.8	0.0
71.4	42.9	0.0	0.0	ST	85.4	22.9	0.0	0.0
43.9	50.0	12.8	0.0	Cambodia	59.2	45.5	4.9	0.2

- **Reading of the table:** \* 24.8 percent of traders of eleven studied provinces (including PP) pay their counterparts in Phnom Penh for more than 50 percent of their purchases in riel.

\*\* 41.5 percent of traders in Phnom Penh pay their counterparts in eleven provinces (including PP) for more than 50 percent of their purchases in riel.

### 2.2.2. Function of Store of Value

The function of store of value is essentially completed by the dollar, then by the riel and to a lesser extent by the baht. We also note that when the opportunity saving in dollars increases (increasing the level of dollar revenue), the population tries to save in dollars. In observing the proportion of savers in riel and in dollar, we do not notice any significant differences because those who have riel revenues also save more in riel.

According to the results, among those who save, 46 percent (of which 40 percent save outside the banks and 6 percent save in the banking system) are saving in riel against 51 percent in dollars (most of which is saving in the banking system). For baht savers, it represents only 2 percent of the surveyed population. We also see that in Phnom Penh, 84 percent of savers save in dollars, 56 percent do so in Siem Reap and 46 percent do so in Sihanoukville. In Thai border areas, savings are also made in baht, but it represents less than 15 percent; the majority of these savings is made outside the bank. The dong is not generally a currency of savings. Even in Vietnamese border areas we counted very few savers in dong.

Yet the picture is different when we talk about the proportion of currency saved depending on the revenue level. The currency choice of savings depends largely on the revenue level: the higher the revenue level, the higher savings are made in dollars. We estimate that dollar savings (in the banking system and outside the banks) largely exceeds the volume of riel savings. In fact, 83 percent of the population with revenues of more than 999 dollars per month says they save more than 50 percent of it in dollars against 17 percent in riel.

**Table 6-7: Proportion of individuals who save more than 75 percent in each currency**

	KHR	USD	THB	VND	Total
Phnom Penh	16*	84	0	0	100
Takeo	71	29	0	0	100
SvayRieng	75	25	0	0	100
Kampong Cham	58	42	0	0	100
Battanbang	64	40	6	0	100
Pailin	58	37	5	0	100
BanteayMeanchey	46	34	20	0	100
Siem Reap	42	58	0	0	100
Sihanoukville	50	48	2	0	100
Koh Kong	47	39	14	0	100
Stung Treng	56	44	0	0	100
Cambodia	46	51	2	0	100

- Reading of the table: \*In Phnom Penh, 16 percent of the individuals states that they save more than 75 percent in riel.

**Table 6-8: Proportion of individuals who save more than 75 percent in each currency at the banking system and outside the bank**

	KHR			USD			THB			VND		
	BQ	HBQ	Total	BQ	HBQ	Total	BQ	BHQ	Total	BQ	HBQ	Total
PP	25%*	75%	100%	95%	5%	100%	0	0	0	0	0	0
TK	11%	89%	100%	62%	38%	100%	0	0	0	0	0	0
SRG	13%	87%	100%	80%	20%	100%	0	0	0	0	0	0
KCM	0%	100%	100%	77%	23%	100%	0	0	0	0	0	0
BB	20%	80%	100%	87%	13%	100%	0%	100%	100%	0	0	0
PL	0%	100%	100%	100%	0%	100%	0%	100%	100%	0	0	0
BMC	0%	100%	100%	91%	9%	100%	30%	70%	100%		0	0
SRP	18%	94%	100%	82%	6%	100%	0%	0%	0		0	0
SV	18%	82%	100%	96%	4%	100%	0%	100%	100%		0	0
KK	6%	94%	100%	95%	5%	100%	0%	100%	100%		0	0
ST	0%	100%	100%	93%	7%	100%	0%	0%	0		0	0
Camb od.	12%	88%	100%	89%	11%	100%	0%	100%	100%		0	0

Note: BQ: savings in the banking system

HBQ: informal savings or hoarding

- Reading of the table: \* In Phnom Penh, 16 percent of the individuals say that they save in the banking system to more than 75 percent in riel.

**Table 6-9: Proportion of individuals who save more than 50 percent in each currency**

	KHR	USD	THB	VND	Total
<\$75	83%*	17%	0%	0%	100%
\$74<R<\$100	79%	19%	1%	1%	100%
\$99<R<\$200	55%	40%	3%	1%	100%
\$199<R<\$500	28%	70%	2%	0%	100%
\$499<R<\$1000	31%	65%	3%	1%	100%
R>\$999	14%	81%	6%	0%	100%

- **Reading of the table:** \*83 percent of those surveyed having revenues of less than 75 dollar per month, say they have saved more than 50 percent in riel.

**Table 6-10: Proportion of individuals who save more than 50% in each currency at the banking system and outside the bank**

	KHR			USD			THB			VND		
	BQ	HBQ	Total	BQ	HBQ	Total	BQ	HBQ	Total	BQ	HBQ	Total
<\$75	13%*	87%	100%	34%	66%	100%	0	0	0	0	0	0
\$74<R<\$100	13%	87%	100%	39%	61%	100%	0%	100%	100%	0	100%	100%
\$99<R<\$200	9%	91%	100%	43%	57%	100%	11%	89%	100%	0	100%	100%
\$199<R<\$500	14%	86%	100%	69%	31%	100%	15%	85%	100%	0	100%	100%
\$499<R<\$1000	22%	78%	100%	65%	35%	100%	25%	75%	100%	0	100%	100%
R>\$999	22%	78%	100%	65%	35%	100%	0%	100%	100%	0	0	0

**Reading of the table:** \*13 percent of those surveyed having revenues of less than 75 dollar per month, say they have saved more than 50 percent for the riel in the banking system (the commercial bank or microfinance institutions).

### 2.3. Social Distribution

Besides the three traditional functions of currency to facilitate economic activities, currency also has a social dimension. According to Cartelier, (1996)<sup>172</sup>, currency is a social institution shaped by different human societies. A currency could be implicitly reserved for some social categories. The use of a currency reflects the society owned by its holders. In the context of monetary plurality, each currency seems more or less restricted to a specific social group.

Our results show that the holding of monies is not really chosen by economic agents but they are instead encouraged to hold according to their profession and their revenue level.

<sup>172</sup> Cited by Dominique Plihon, 2004, pg. 114.

### 2.3.1. Currencies and Professions

Profession systematically determines the money in which the salary will be paid. It thus provides generally the revenues in a currency. In Cambodia where several currencies coexist, private companies generally pay their salaries in dollars. However, the general trend is not necessarily appropriate in some sectors; some might generate revenues in different currencies. This is what we observed for particular traders and agents in the tourism sector that obtain their revenues in several currencies. The State pays its employees exclusively in riel.

We focused our survey in seven major sectors of the Cambodian economy: agriculture, construction, industry, tourism, public administration, non-governmental organizations (NGOs) trade and other services. Sectors that appear mostly dollarized are the industrial sector, the tourism sector and NGOs, while the most rielized sectors are public administration and agriculture. For trades and other services, they mostly receive revenues in dollars, riels, and to a lesser extent in bahts. Moreover, agriculture is the sector where the baht circulates the most, followed by commercial activities. The dong also penetrates the agricultural sector and trade.

Among those who principally engage in agricultural activities, 70 percent of them receive more than 75 percent of their revenues in riels, 9.5 percent in dollars, and less than 10 percent in bahts or in dong. We also observe that farmers in rural areas far from the Thai and Vietnamese borders are paid almost exclusively in riels, while the majority of the farmers in the Thai border areas are paid in bahts. In a more measured pattern, the dong is used by farmers living in the Vietnamese border areas. It is the dollar that is mostly used for payments of large purchases by farmers. Civil servants are the majority who receive their revenues in riel, of which 79 percent who receive more than 75 percent of their revenues in riel. When it comes to the dollar, baht, and dong, the proportion amounted to respectively 9.9, 0.56 and 0.55 percent. The reason why 30 percent of civil servant revenues are in foreign currencies is that they have other sources of revenues from associated economic activities. For example, some civil servants engage in agricultural, trade, and service activities outside of their main occupation. In addition, workers in the construction sector are also among those with revenues mainly in riel. Seventy-seven percent of them get revenues more than 75 percent in riel against 23 percent in dollar. The bahts and dong are absent currencies for revenue sources of this sector.

For dollar revenues, it is clear that the majority of private companies (domestic or foreign) pay wages in dollars. Moreover, we note that 94 percent of NGO staffs receive their salaries more than 75 percent in dollar. The proportion increases to 90 and 76 percent for the employees in the industry sector and the workers in the tourism sector. These observations confirm the relationship between the “external” sectors and the use of the dollar. The more the Cambodian economy is dependent on external sectors, the more it uses dollars. The fourth sector that uses the dollar is that of commercial activities or other services; 40 percent of individuals belonging to it receive more than 75 percent of revenues in dollars. In contrast, these activities also provide 45 percent of revenues for over 75 percent in riel.

The bahts and the dong come mainly from agricultural or commercial activities. As already mentioned, they represent a small share of total revenues in these two sectors. In the agricultural sector, only 7.27 percent of farmers receive more than 75 percent of revenues in baht and only 0.8% in dong. In contrast, if one adopts a geographical perspective, at the provincial level, the bahts then occupy a relatively large part of the income for farmers and traders in the border areas with Thailand since this type of revenue is concentrated there. However, this is not the case of dong. The dong remains marginal as revenue for farmers and traders in the Khmer-Vietnamese border areas.

**Table 6-11: Currencies of revenue by sector**

	Revenues $\geq$ 75% in each currency			
	USD	KHR	THB	VND
Agriculture	9.5*	69.7	7.3	0.9
Construction	23.1	76.9	0	0
Industry	90.0	7.5	0	0
Tourism	76.5	20.6	0	0
Public administration	10	79.0	0.6	0.5
NGOs	94.1	4.8	1.2	0
Other services	40.9	44.8	2.4	0.7

- **Reading of the table:** \* 9.5 percent of farmers receive revenues to over 75 percent in dollar.

### 2.3.2. Currencies and revenue level

Another factor that segregates social groups in terms of monetary use is the revenue level. The latter is of course closely linked to the profession and therefore to activity sectors. The profession often determines the revenue level, but this is not always the case. The results of the survey show that most people with a low revenue level receive them in riel or for a small part in dong. We also notice that the higher the revenues, the more important the proportion of revenues in dollars become. The revenues whose share is high in baht are generally a level of average revenue.

Thus, 90 percent of individuals who receive revenues of less than 100 dollars per month receive more than 75 percent of this revenue in riel. This proportion gradually decreases as the revenue increases. It is observed that 49 percent of people who make more than 75 percent of their revenue in riel have monthly revenues between 99 and 200 dollars. About 40 percent receive between 199 and 500 dollars and 29.5 percent between 500 and 1,000 dollars.

In addition, 4.1 percent of individuals surveyed who have revenue of more than 75 percent in dollars earn less than 100 dollars per month. There are 34.7 percent between 99 and 200 dollars, 46.9 percent between 199 and 500 dollars and 53.7 percent between 499 and 1,000 dollars per month. This shows that the higher the revenue level, the more they are paid in dollars.

The baht affects all revenue groups, even though they represent a small proportion of revenues. The revenue group that receives the highest share of baht (more than 75% of revenues) is that of between 99 and 200 dollars (4.6 percent); and then between 499 and 1000 dollars (3.9 percent), more than 999 dollars (3.4 percent), and finally between 199-500 dollars (2.9 percent). Those who receive revenues of less than 100 dollars per month are those who receive less revenue in baht, which is only 1.4 percent.

Individuals receiving the dong revenues all belong to a revenue level of less than 1,000 dollars per month. The majority are part of individuals with revenues less than 100 dollars. But it remains marginal with only 1.02 percent of individuals who receive revenue less than 100 dollars per month to get over 75 percent in dong. This level shifts slightly to 0.92 percent for the group of 99-200 dollars, 0.22 percent between 199 and 500 dollars and 0.94 percent between 499 and 1,000 dollars per month.

Finally, there are unexpected results on the distribution of foreign currencies of individuals with revenues greater than 999 dollars a month. Indeed, the proportion of revenues in riel in this group is higher than the more modest group, between 499 and 1,000 dollars. Similarly, the proportion of people whose revenue is greater than 1,000 dollars and have dollars is lower than those with incomes in the other low-income group of 499 to 1000 dollars. This intuitive case is explained partly by the representation of farmers and traders and other services in our sample (farmers represent 26%, and traders and other services 45% of the total sample of the general population surveyed). These two professional categories receive their revenues primarily in riel. On the other hand, it is possible that confusion between turnovers and gross operating surplus (GOS or disposable income) has been committed by farmers and traders at the time of the survey. Farmers' revenues are not regular, but seasonal (alternating seasons of planting and harvest). Similarly, as account keeping is not compulsory, almost all traders do not care about them; so they do not know precisely their own GOS. When we asked about their disposable income to farmers and traders, we believe they have given us their turnover rather than their GOS, where it is possible there is an overstatement of revenues. It therefore introduces a possible bias in the proportion of individuals with revenue higher than 1,000 dollars in riel (overestimation) and that with revenues higher than 1,000 dollars in dollars (possible underestimation).

**Table 6-12: Range of revenues more than 75 percent in each currency**

Monthly revenues	Revenues $\geq 75\%$ in			
	USD	KHR	THB	VND
<\$100	4.1*	89.76	1.37	1.02
\$99<R<\$200	34.8	49.08	4.62	0.92
\$199<R<\$500	46.9	40.0	2.90	0.22
\$499<R<\$1000	53.7	29.5	3.88	0.94
R>\$999	44.9	32.6	3.41	0.00

- **Reading of the table:** \*4.1 percent of the individuals with revenues of less than 100 dollars per month receive them up to more than 75 percent in dollar.

**Table 6-13: Range of revenue by sector (in percentage)**

	\$100<R	\$99<R<\$200	\$199<R<\$500	\$499<R<\$1000	R>\$999	Total
Agriculture	38.6*	24.5	18.7	21.2	34.9	26.1
Construction	4.1	2.8	0.7	0	2.3	2.7
Industry	1.0	7.9	2.5	1.0	0	3.3
Tourism	1.4	1.5	3.8	5.8	2.3	2.7
Public administration	18.8	14.7	14.3	8.7	5.8	14.4
NGOs	0.0	1.2	12.7	13.5	8.1	6.5
Other services	36.2	47.4	47.4	49.0	47.1	44.9
Total	100%	100%	100%	100%	100%	100%

- **Reading of the table:** \* 38.6 percent of farmers have revenues of less than 100 dollars per month.

### 2.3.3. Social Groups based on the Use of Currencies

The plurality of money thus draws a mapping of population by their monetary use. We distinguish from our results seven relevant social groups.

**Table 6-14: Classification of social groups according to their revenues and use of currencies**

Currencies of revenues	Distinction of social groups, in term of the use of monies
Entirely in riel	1- Entirely in riel
	2- Use riels more than foreign currencies
In foreign currencies and in riel	3- Use riels more than foreign currencies
	4- Use riels less than foreign currencies
Entirely in foreign currencies	5- Use riels more than foreign currencies
	6- Use riels less than foreign currencies
	7- Entirely in foreign currencies

- **First Group:** Refers to the group of individuals who use only the riel: their revenues and expenses are made entirely in riel. They do not use foreign currency. The majority of the population of this group is characterized, on one hand, by a low level of revenue and/or on the other hand, by a low contact with the “outside sectors”. They may be civil servants, farmers, workers in the construction industry.... Their expenses on food occupy the largest share of their total expenses. The remaining revenues (generally low) are directly used for purchases of investment goods or durable goods. This group does not exchange money.

- **Second Group:** Refers to the group of individuals who receive revenues in riel, but also marginally makes expenses in foreign currencies. These expenses made in foreign currencies are obtained by currency exchange. Individuals in this group are typically holding a revenue level slightly higher than the first group. A characteristic point, linked to their revenue level is that they are able to buy the products, goods or services, or durable goods denominated in foreign currencies (whose value is generally somewhat higher than those shown in riel). They are civil servants, farmers and small traders. This group therefore exchanges money, from the riel to foreign currencies.

- **Third Group:** Refers to individuals with revenues in several currencies and making expenses mainly in riel but also in foreign currencies. This group is primarily characterized by the importance of food expenses as compared to the total revenue. Major expenses (investment goods or durable goods) may be partially made in foreign currencies or in riel. They do not need to exchange often. It may be individuals with a dual activity (civil servants and farmers with dual activity), retailers, workers linked to the tourism sector.

- **Fourth Group:** Refers to the group of individuals with revenues in foreign currencies and in riel and make expenses primarily in foreign currencies. Individuals in this social category typically have average revenue levels. Indeed, a relatively high proportion of their revenue is devoted to payments of purchases of goods and services denominated in foreign currencies. They have several professions (civil servants or farmers), are medium and large traders, or belong to the tourism sector. They exchange their revenues more often than the second group.

- **Fifth Group:** Refers to the group of individuals with revenues in foreign currencies and make expenses more frequently in riel at a higher volume, rather than in foreign currencies. This category of the population refers mainly to employees in the industrial sector, the tourism

sector, employees of private companies and NGO staffs. Their revenue levels are not high even if their revenues are entirely in foreign currencies. They spend more in riel (small transactions, particularly related to food) than in foreign currencies (large transactions or durable goods and investment goods). These individuals often exchange money.

- Sixth Group: Refers to the group of individuals with revenues in foreign currencies and making expenses mainly in foreign currencies. Individuals in this category are primarily characterized as having relatively high revenues. A smaller part of the revenue is devoted to expenses in riel, while much is reserved for payments of purchases of goods and services displayed in foreign currencies. We find in this group the workers are employed by private companies, NGOs, the tourism sector and the large traders. This group of individuals often exchanges money.

- Seventh Group: Refers to the group of individuals with revenues entirely in foreign currencies and make expenses almost entirely in foreign currencies. There is such a group of individuals whose economic life is reflected by the almost exclusive use of foreign currencies. These individuals are found mainly in urban areas. Observed cases involve individuals with very high revenues in dollars. These very high levels of revenues are executives in international organizations, large companies or commercial banks, technical assistant residents, expatriates. Their consumption focuses on relatively luxurious goods: goods sold in supermarkets, shops, where prices are almost always denominated in dollars. This category of people may marginally use the riels but the share of the latter is negligible in the volume of total expenses. Therefore they exchange very little, their riel is mainly provided to them by getting change in foreign currency transactions.

Thus, a relationship between intensity of monetary plurality and revenue levels can be established. It would have been interesting to deepen our analysis of these results to explore the possible link between monetary plurality and revenue inequality. Does monetary plurality participate to increase revenue inequality? Unfortunately, due to the limited time and data, we cannot address this point here. However, this can be a subject of interest in the extension study of this thesis.

## **Section III: Exchange among Currencies**

Our survey highlighted the active role of the exchange market to be a catalyst of circulation of several currencies in Cambodia. Without it, the Cambodian monetary system, the use of different currencies, would be much more difficult, expensive or even impossible. This market substantially reduces transaction costs and represents two important characteristics: uniform price on one hand (the exchange rates of practiced market are almost homogeneous over the whole territory) and omnipresence of moneychangers on the other hand (excellent geographical coverage of the service).

After obtaining and treating the results of our first survey, we felt that we needed to explore these primary data and thus we expanded our field of study to moneychangers and other key actors on the exchange market. This second survey was conducted between 15 and 30 July 2011 and was funded by the National Bank of Cambodia.

### **3.1. Objectives and Methodology of the Study**

#### **3.1.1. Objectives**

Beyond completing and deepening the understanding of the hypotheses derived from our initial survey, this study has four main objectives:

- Deeper understanding of the current organization of the exchange market and how it works, especially;
- Mechanisms and information systems that allow the fixation on the daily exchange;
- Identification of transactions conducted on the borders with Thailand and Vietnam and;
- Role of moneychangers, commercial banks and microfinance institutions (MFIs) in the exchange market.

#### **3.2.1. Methodology**

- Interviews: As in our first survey, we conducted our surveys by interviewing the actors of the exchange market.
- Studied provinces are:
  - Phnom Penh
  - Siem Reap
  - Sihanoukville
  - Battambang
  - Koh Kong
  - Banteay Meanchey
  - Svay Rieng
- Surveyed actors. We asked not only the money changers but also banks and MFIs:
  - Moneychangers: 9 large money changers in Phnom Penh were interviewed and 41 in other provinces;
  - Commercial Banks: 9 commercial banks in Phnom Penh were interviewed and 20 in other provinces;
  - Microfinance Institutions (MFIs): 7 major MFIs were interviewed and 25 in other provinces.

## 3.2. Main Results of the Studies

### 3.2.1. Particularities of the Exchange Market in Cambodia

The exchange market in Cambodia is first characterized as a very informal and unsupervised market. Although money changers are present throughout the country, only 27 are licensed for execution of exchange activities, of which 25 are in Phnom Penh, and 1,422 (of which 28 in Phnom Penh), got the certificate of authorization for execution of exchange operations<sup>173</sup>. In his note addressed to the Governor of the National Bank of Cambodia, Chaize (1997)<sup>174</sup> noted that “no exchange regulations, even minimal, is applied to the exchange market”. Bangratz (2011)<sup>175</sup>, estimates that the number of small changers in Cambodia would be around 5,000 and that exchange operations carried out by official or unofficial exchange agents are not yet subject to supervision by competent authorities. The revenues or profits of such operations are therefore not taxed.

Second, this market is not dominated by banks as is usually the case, but by individual changers. We estimate that they occupy more than 75 percent of the market share of exchange operations in Cambodia. These are the large changers that can influence exchange rates in the market. Indeed, it is clear that their exchange rates (KHR/USD) act as references (“*benchmark*”) not only for other changers of less scope, but also, and more surprisingly, by banks and MFIs or even the central bank who use them to fix the official exchange rate (KHR-USD). Similarly, although surveyed commercial banks offer exchange services, the volume of the transactions is much less than that of the “manual” changers. Therefore, the exchange market in Cambodia is essentially a physical market.

Third, the atomicity of this market “in detail” is strong. As discussed in Chapter 5, we can find small changers everywhere, especially around markets (physical) of goods and services. Traders themselves also offer this service. The presence of a large number of small changers, so the atomicity of the offer, makes it very competitive market and therefore reduces the gap between the exchange rates between changers themselves or between changers and traders engaged in these exchange activities.

Finally, the development of this market is driven by strong demand from a vast majority of all economic agents. Our survey thus shows that nearly 83 percent of the studied population states that they often exchange money. The type of client is a specific feature of the exchange market in Cambodia. Generally, this application consists mainly of importers/exporters, investors or international travelers who need to exchange their currencies. But this is not the case in Cambodia where currencies (especially the dollar) are freely used and widely accepted. The most important clients are individuals and traders that conduct exchange operations to pay for their purchases, especially in the interior of the country. Among those who get 100 percent of their revenues in dollars, there are 85 percent who perform exchange operations at least once a month. At the same time, for those receiving 100 percent in riel, there are 25 percent who exchange at least once a month.

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<sup>173</sup> The license and certificate of authorization for execution of exchange activities are issued by the National Bank of Cambodia.

<sup>174</sup> Residential Expert of the International Monetary Fund at National Bank of Cambodia from 1994 to 1997

<sup>175</sup> Residential Expert International Monetary Fund at the National Bank of Cambodia from 2008 to 2011, note # 815, annex 1.

This application consists of households and traders, but also private or even public enterprises as well as financial institutions that regularly call for this market; the objectives of this exchange are diverse, from payment to the suppliers, taxes, to offering credits.

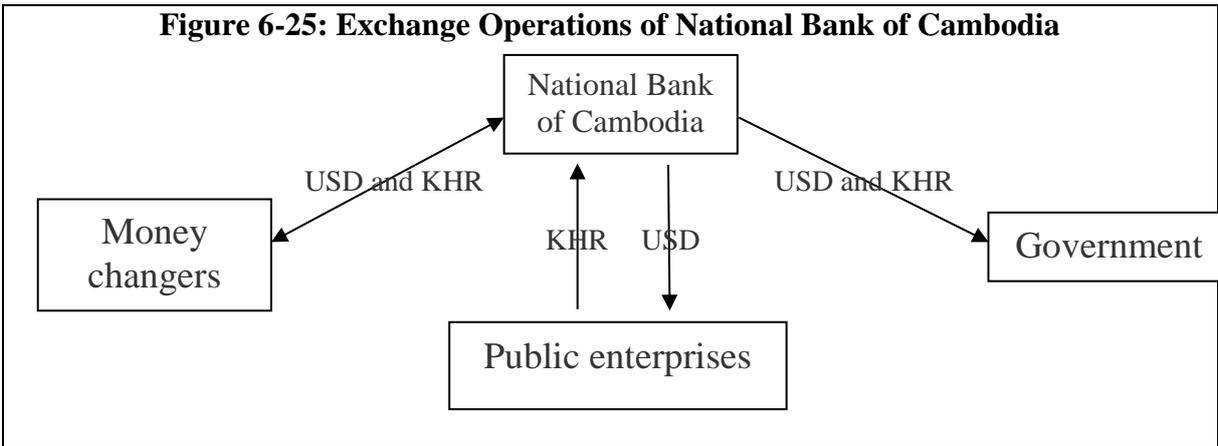
**3.2.2. Main Actors and Their Relationships**

There are five major actors in the exchange market in Cambodia: the central bank (NBC), money changers, commercial banks, MFIs, and traders.

- National Bank of Cambodia (NBC)

The NBC is one of the main actors of the exchange market. It is a client but also supplier of national currency and dollar. It intervenes in this market to maintain the stability of the exchange rate but also increase trust in the riel, which suffered a large deficit since the late 1960s and due to three decades of war. This is an essential point: the intervention on the exchange market is the main instrument of monetary policy in the context of a highly dollarized economy like Cambodia. It conducts operations of sales-auction of dollar against the riel when the latter depreciates and vice versa (so it buys the dollar against the riel when the latter is appreciated). These operations target only the large changers. In general, the central bank sells more dollars than it buys<sup>176</sup>.

In addition, the central bank also exchange monies for the government and public enterprises when they need national currencies or foreign currencies. As the government has revenues in foreign currencies (foreign aid, taxes in foreign currencies and other revenues excluding taxes in foreign currencies), it exchanges its dollars into riel when it needs riel to pay its expenses. The government conversely sometimes needs to exchange riel into foreign currencies, especially to pay for its expenses. Two public companies therefore often exchange riels into dollars via the central bank: the Electricity of Cambodia company (EDC) and the Water Authority. Indeed, the billing of these collective services (water and electricity) is only denominated in riel, while these public companies must pay for their expenses primarily in dollar s(gasoline, machinery and other materials). It is also worth noting that these companies operate these exchanges not only via the central bank but also through intermediary of moneychangers. The volume of exchange via the central bank is growing since the mid-2000s.



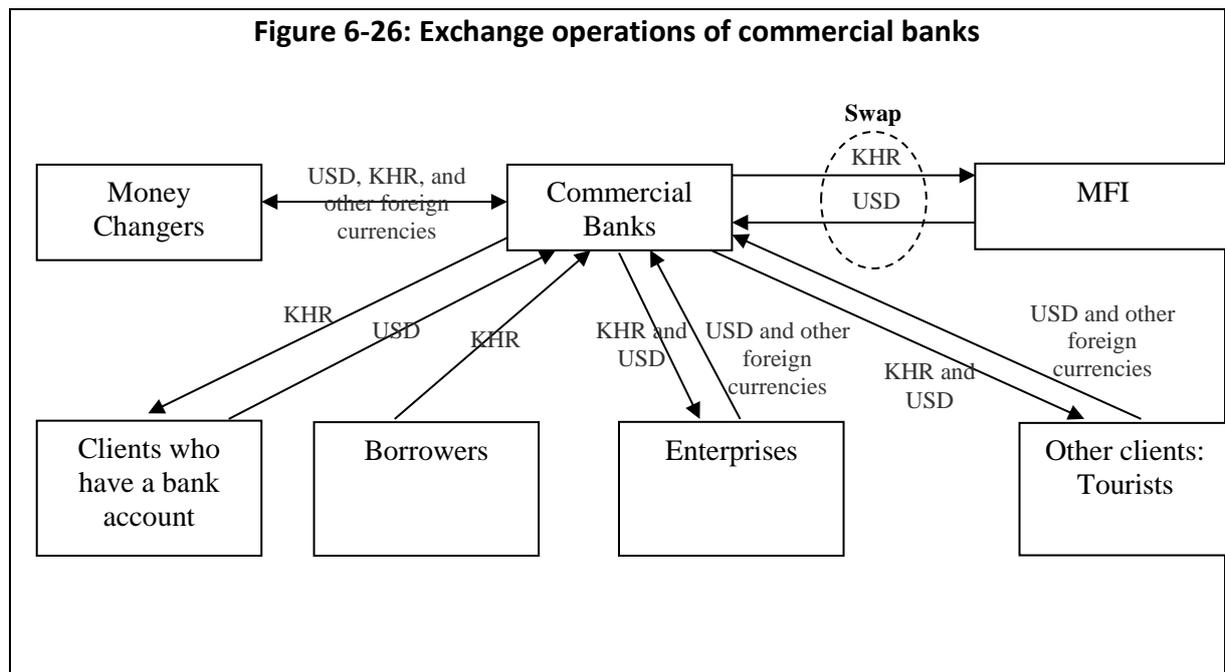
<sup>176</sup> See Chapter 2 for the amounts of these operations.

- **Commercial banks**

All surveyed commercial banks said they offered exchange services to their clients. Clients for these services include private enterprises, tourism, individuals, their debtors, and some money changers. The total volume of exchange transactions varies from 300,000 to 60 million dollars per month. The difference in the sale-purchase rate has an amplitude of 10 to 35 riels per exchanged dollar, or a variation of 0.2 to 0.4 percent, with the exception of ANZ Bank where the difference in exchange rates varies between 10 and 100 riels. Commercial banks set their exchange rate of KHR/USD based on the official exchange rates and the practice of large changers on the informal market. Regarding the exchange rates between other currencies, the commercial banks are based on the exchange rate issued by international financial press agencies such as Reuters, Bloomberg, and CNBC.

Although since early 2011, commercial banks are invited to participate in sales-auction organized by the NBC, they have not attended yet (Bangratz, 2011). Most banks do not buy riels from the central bank, but from large changers. Some banks say they are not even aware of the possibility of buying riels from the NBC. Some banks find it complicated to buy riels from the central bank.

Moreover, some banks that have riels make the *swap* operations with microfinance institutions. The latter whose sources of funds which are dominated by the dollar makes *swap* of dollars for the riel.



## • Money changers

As discussed in Chapter 5, money changers dominate the exchange market in Cambodia. This is due to several factors. First, the money changers have access to the sale and purchase of riels and dollars from the central bank<sup>177</sup>. Until now, only those large changers sell dollars for riel and buy dollars in sales-auction operations of the NBC. They have therefore easier access to riels than other exchange agents.

Second, the exchange rates of the money changers are more competitive than other agents (commercial banks, MFI, and central Bank). The difference of sale-purchase rate is very low and varies from 2 to 15 riels per USD, or from 2 to 5 times less than that of the banks and MFI.

Third, as these exchange operations are not subject to supervision by the competent authorities, the moneychangers are not dutiful to report the amounts of exchange transactions, flow of foreign currencies, identification of their client. These changers do not ask their clients to complete an information sheet, which is mandatory in most countries. This has the effect of making exchange transactions with these money changers very fast. This is mainly due to the informal nature that clients prefer the “manual” changers to commercial banks that they ask their clients to complete an information sheet and follow some prudential procedures.

Fourth, we can find money changers everywhere, especially around the markets. In addition, the opening hours of the money changers is often longer than that of the banks. The latter generally opens their counters from 8h:00 to 15h:45, while the money changers begin their work at 7h:00 or earlier depending on the province. They close in the evening, usually between 17:00 and 18:00.

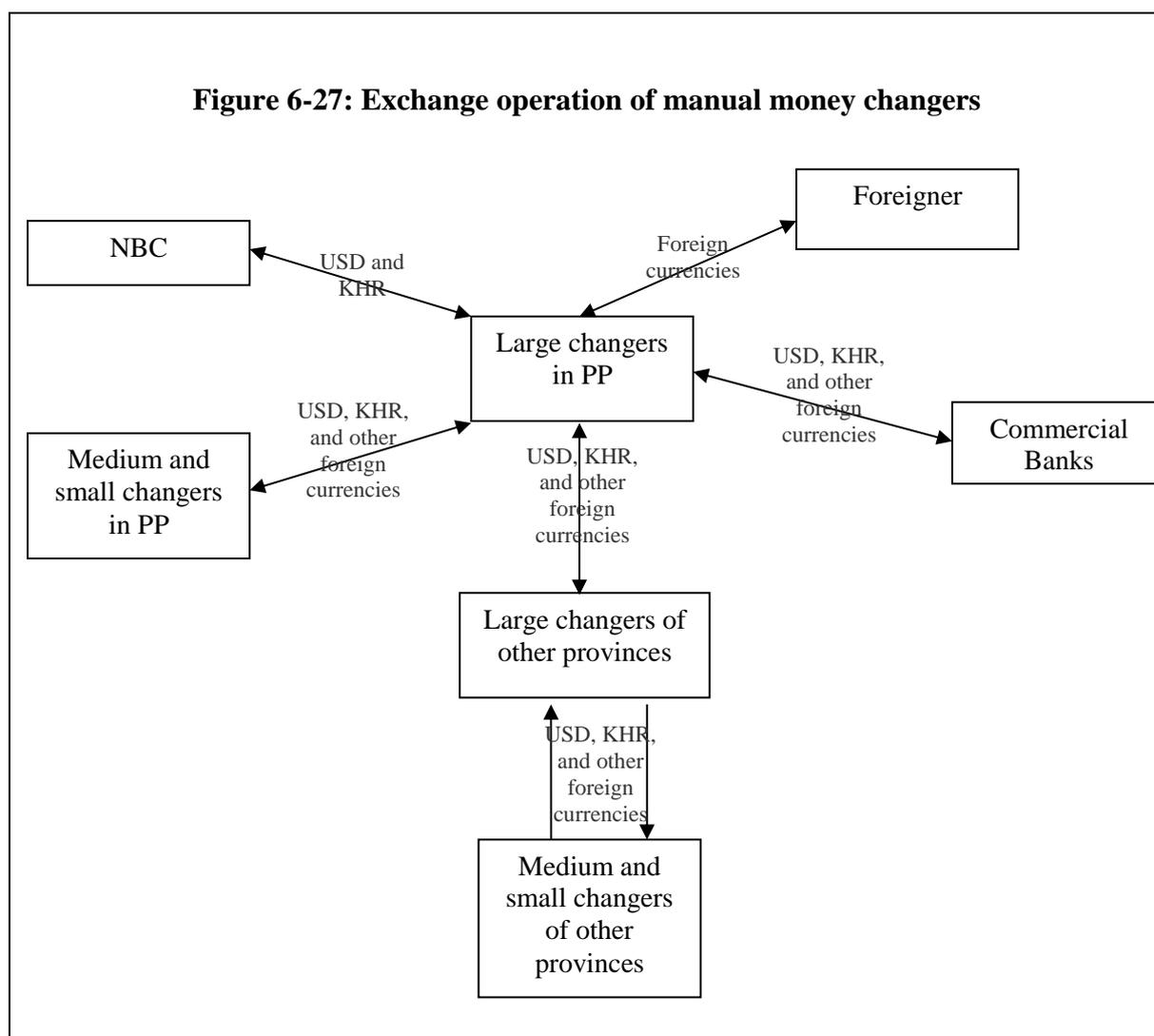
With their domination on the exchange market, the exchange rate (USD/KHR) set by the large changers influence the determination of the exchange rates of other exchange agents: medium and small changers, banks, MFI, traders, and even the central bank. According to our interviews, changers say that the maximum amount of transactions can be equivalent to one million dollars (large changers in PP). When they need extra cash, they are intended primarily to their peers, not to commercial banks, especially as large and medium changers usually have an account with commercial banks. The objectives of opening these accounts are various. It is thus seen that these accounts are used to store currencies for transfer activities. On one hand it is the fund transfers to their clients and also the transfer of surplus of foreign generated currencies, thus covering against the risks associated with exchange loss.

Similarly, the money changers located in areas near the borders (Thai or Vietnamese) do not transfer their surplus of foreign currencies generated from their exchange activities to the neighboring countries, even if these extra currencies are in baht or dong. Changers in Thailand or the Vietnamese border generally transfer the surplus to changers in Phnom Penh. The latter centralizes these surpluses of foreign currencies and sell them on the international market (especially to Singapore, Hong Kong) to “import” other foreign currencies, depending on the needs of their clients.

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<sup>177</sup> Some large changers (in PP or in province) have an account in KHR but also in USD at the NBC.

**Figure 6-27: Exchange operation of manual money changers**



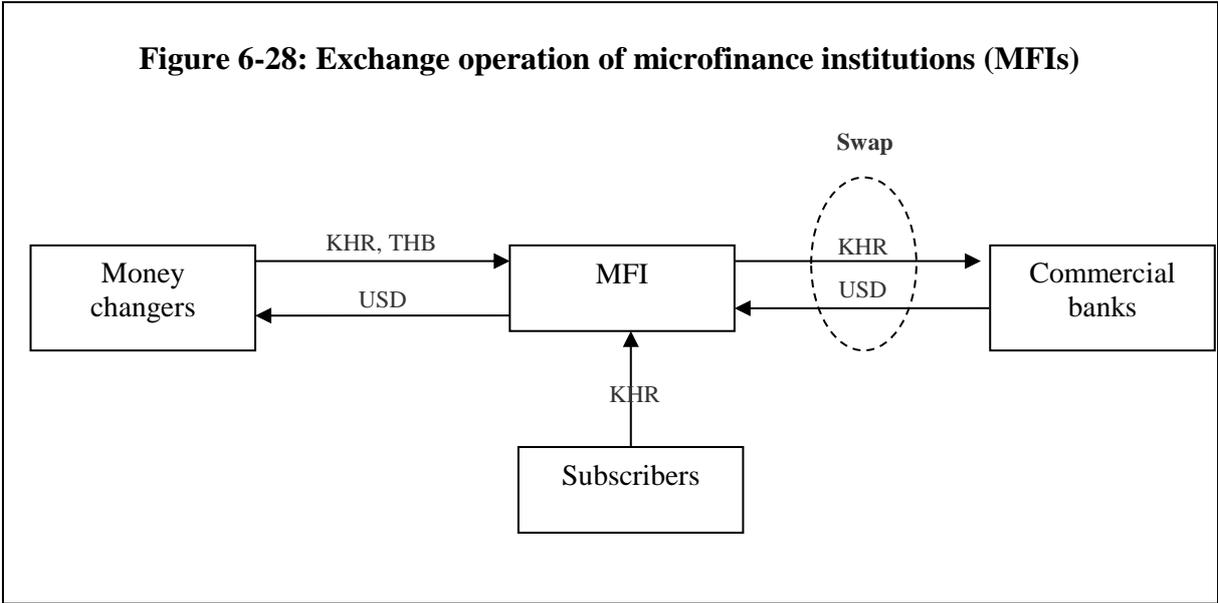
• **Microfinance Institutions**

Microfinance institutions (MFI) in general do not provide exchange service to the general public, they conduct these operations only when their borrowers repay in a different currency than that of the loan<sup>178</sup>. This is the case when the loans are in USD or THB, and when borrowers file KHR to repay the MFI. The latter therefore set their rates and operate the exchange for their borrowers. Thus, MFIs also participate in operations on the exchange market. According to the survey results, their exchange rates are set at the place whose rates are not significantly different from those set by the commercial banks. The sale-purchase difference of MFIs is between 10 and 35 riels per dollar. MFIs report that their exchange rates are set according to the official exchange rate, exchange rates of money changers, and those of commercial banks. Regarding the volume of exchange transaction, the maximum exchanged amounts are equivalent to 470,000 USD. Transactions are 85 percent from other currencies to the USD and 15 percent from other currencies to the riel (for their borrowers who repay their debts in currencies other than that in which the loan is denominated.)

The first source of riels of MFI is essentially *swap* operations (KHR/USD) with some commercial banks. Three of the seven studied MFIs reported having carried out such

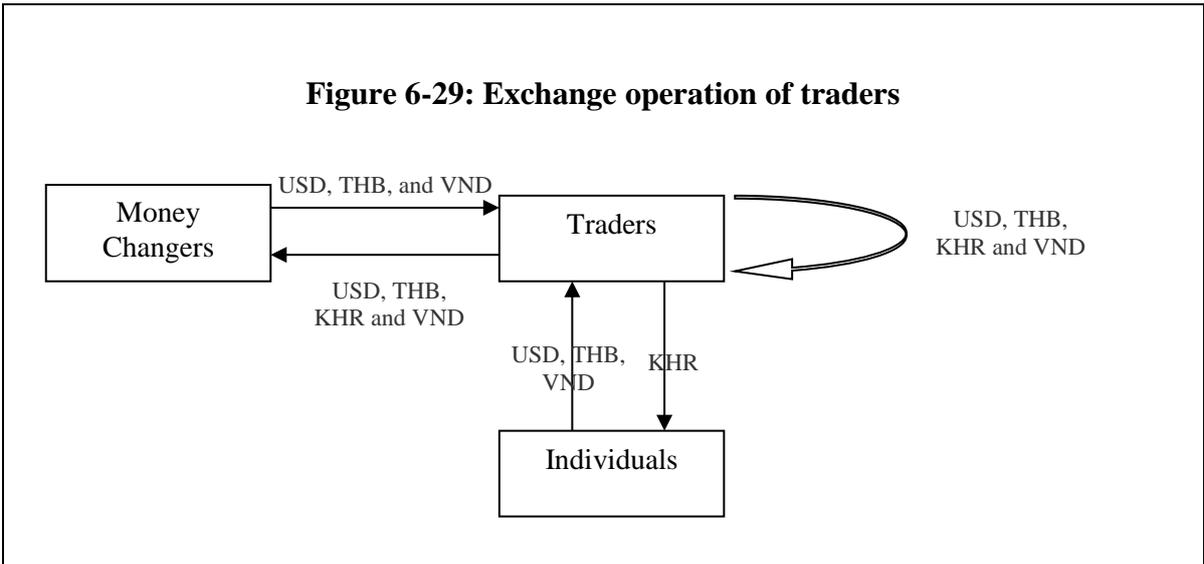
<sup>178</sup> Among 32 surveyed MFIs, only one state to engage in the exchange activities for the general public.

operations. The second source of riels comes from borrowing from the NBC. Finally, MFIs buy riels from the money changers.



**• Traders**

If we take the results of the first survey, we see that 35 percent of the traders say that they perform exchange operations for their clients. These exchange activities are a source of profits and are considered as complementary activities, but also provide them the foreign currencies (USD or THB) that they need to settle their purchases. Most clients exchange from dollars into riel, this type of operation represents 86 percent of total exchange transactions. Conversely, the exchange from riel into dollar represents only 38 percent of the volume of transactions. The amount of monthly transactions for this client can reach up to 10,000 USD. It varies widely among traders and period. Some traders are a network of exchange and operate directly between themselves, but it seems that the amounts of these exchanges are not significant.



## Conclusion of Chapter

Economic and financial development of Cambodia seems robust: high rates of growth, stability of key macroeconomic indicators, low and controlled inflation, increased trust in the national currency, the rapid development of the financial sector and etc. Monetary plurality is therefore not an indication of an economy in crisis; on the contrary, it seems that it has created an environment that supports stability and growth, especially if we compare the dynamics of development within the last decade to the situation where a single national money (the riel) circulated exclusively within the territory. In other words, it fits into a context where one national currency could not effectively perform the traditional functions: means of trades, unit of account and store of value.

The attractiveness of monetary plurality essentially translates into the fact that investors are able to realize their projects in the currency in which they trust the most. It should also be noted that regional trade has been greatly facilitated by the plurality: Thais and Cambodians naturally use their currency to pay for Cambodian farmers. To a lesser extent, tourists also find it more convenient to use foreign currencies (mainly dollars) in Cambodia. The strong use of foreign currencies is especially positive as it allows a low inflation rate, which is healthy for the economy as a whole.

The operation of the economy where several currencies coexist is found, nevertheless, more complicated than in the case of an exclusive monetary circulation. Cohabiting currencies are fragmented, although they specialize in one or more functions in complementary ways; nevertheless, they are sometimes in competition. An array of reading, proposed in this chapter, is drawn in this context: geographical, functional, and social distribution of different currencies.

Thus, the national currency is almost universally used as the means of payment for small transactions. This is the most sought after currency in rural areas where farmers and most inhabitants with low incomes live. The transactions are primarily dedicated to trade of agricultural products, domestic crafts and food products. It is rarely used to pay for durable goods and investment goods. The provinces where riels dominate are TK, BB, KCH, and ST.

The dollar, which seems to occupy the forefront of the monetary scene (in terms of monetary supply), is the most widely used currency in the economic and/or tourism areas. Indeed, it is the money of investors, tourists and most importers and exporters and large traders. In other areas (rural and some border areas), the circulation of dollars is very limited. The most dollarized province is PP, followed by SR, SRG, and SV.

The baht plays an important role in some Thai border areas through trade networks between Cambodian farmers and traders and the Thais. It constitutes an important share of revenue of the inhabitants of these areas. However, the baht is used more in commercial networks than in settlement of consumption of the population. BMC is the province with the most baht in circulation, followed by KK, PL, SV, and BB.

The dong also circulates in Cambodia, but in a niche market. Only the inhabitants in the Vietnam border provinces, SRG, use it for the settlement of domestic trade. In other provinces bordering Vietnam, the dongs circulate very marginally.

Finally, we note that the use of different currencies is a symptom of social discrimination of the population. Seven groups are revealed in a monetary spectrum ranging from the group of

individuals closely related to the riel to that being entirely “dollars”. These fragmentations suggest a possible link between monetary plurality and revenue inequality.

We also note that the dong and the baht do not belong to the same monetary sphere. These two currencies are exclusive of each other. In economic and/or tourist areas, beyond the border areas, the riel and the dollar make up the monetary use. In the border areas with Thailand, the baht, the riel, and the dollar coexist. In the border areas with Vietnam, they are the dollar, the riel, and the dong that cohabit. The coexistence of these currencies is greatly facilitated by a very active, omnipresent, competitive exchange market (low difference of sale-purchase rate), which significantly reduces the transaction costs of a plural holding of currencies and inherent exchange operations, both in terms of time and cost.

## General Conclusion

Cambodia has experienced the phenomenon of monetary plurality since the beginning of its history and the exclusivity of its monetary circulation for about twenty years (1954-1975), before plunging into a closed economy without money between 1975 and 1979. Monetary plurality reappeared in the early 1990s. The national currency circulates together with the dollar, the baht and the dong. Therefore, the phenomenon of monetary plurality is not exceptional, but normal, in Cambodia. The exclusivity of monetary circulation is a particularly different case in its history. The country has been able to build and develop the economy in a monetary plurality regime for over two decades. This interesting case shows the operation of an economy with several currencies. Its experience also helped to reveal the relevance of theories of monetary plurality, to the detriment of the theories of monetary uniqueness, which refers to the implicit norm, “*one nation/one money*” generally integrated by the economists.

We examined the origin of monetary plurality in Cambodia. The factors that led the Cambodian economy into a situation of monetary plurality are not really related to the phenomenon of currency substitution, that is, the substitution of foreign currencies to the national currency, which is usually explained by the hyperinflation and macroeconomic instability. Indeed, the monetary supply of riels gradually increased over the years, especially during the period of the sharp increase in dollarization<sup>179</sup> in the last ten years. Therefore, the reasons often cited for the emergence of dollarization cannot explain this phenomenon in Cambodia. Hyperinflation is also used to explain the emergence of the use of foreign currencies in an economy. Although the country experienced high inflation in the early 1990s, the maximum rate was 177 percent per year, which is well below the qualified hyperinflation rate (greater than 50 percent per month). The country was able to control inflation and stabilize the macroeconomic situation in the mid 1990s, which did not prevent the increase of the degree of dollarization.

Three factors appear to be responsible for this situation: the historical factor, the dependence toward the outside, and the trust in the national currency. Regarding the historical factor, the emergence of a wealth of dollars (equivalent to three quarters of GDP in 1993) in the Cambodian economy emerged with the presence of the United Nations Transitional Authority in Cambodia. Between 1992 and 1993 is the starting point of this phenomenon. When this phenomenon was triggered, the flow of foreign currencies from outside, such as foreign direct investment, tourism, trade, fund transfers by expatriates and Cambodian workers abroad, foreign aid, accelerated this phenomenon. Since these flows are likely to remain important, it is estimated that the degree of dollarization will remain stable or increase in the short and medium term, given the government’s policies towards these sectors, towards dollarization itself, and the economic evolution of partners in the country.

Finally, another factor that is often overlooked by the economists to explain the phenomenon of monetary plurality is trust. The trust in the national currency of Cambodia is very low. Money, to be requested by economic agents, assumes three forms of confidence: the methodical confidence, the hierarchical credibility and ethical trust. Individuals hold and use the money because they believe routinely that others do the same and accept it in trade. At the same time, the stability of the unit of account and the value of the money is guaranteed by a collective power, the capacity which economic agents trust. Moreover, the values and norms are guaranteed by the fact that the issuing, distribution, and circulation modes of money ensure the reproduction in society. These three forms of trust connect to each other. Methodical trust is guaranteed by the hierarchical trust and this trust by the ethical trust.

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<sup>179</sup> measured by the ratio of foreign currency deposits/M2

The dimensions of the environment that are favorable to monetary plurality are identified. They are institutional, financial and economic. First, the institutional environment, such as the extent of corruption, the rule of law under construction and mostly informal nature of the economy, is a fundamental element that enables the functioning of monetary plurality. Then, the underdevelopment of the banking system and the strong dependence of the latter (more than ninety percent of bank deposits and loans are in dollars) strengthen dependence on the economy of the dollar. Finally, the external opening also causes the demand and supply of foreign currencies in the Cambodian economy.

The use of these foreign currencies are translated, also by potential revenue losses from the issuance of currency, called “seigniorage”, but also the effectiveness of monetary policy especially useful in preventing crises and recovery policies to overcome the crisis. It may be noted to this subject a dialectical relationship between monetary plurality and growth. Monetary plurality appears to operate smoothly in Cambodia, probably because it is in a context of regional economic growth helping to drive Cambodian economic growth. In this context, it does not seem that the absence of monetary policy is harmful. Indeed, stimulus measures are not necessary. But monetary plurality is also a growth factor to the extent that the strong presence of the dollar reassures investors and facilitates foreign trade.

Thus, the use of different currencies provides various benefits to the economy: in the context of a stable riel against the dollar, this is an attractive factor of foreign direct investments; it generates a greater commercial and financial integration, regional and international; it promotes the control of inflation, etc. It is difficult to judge what prevails, disadvantages or advantages, of monetary plurality. According to our analysis, we say rather that monetary plurality over two decades was not an annoying factor in the growth and development of Cambodia’s economy; it even seems that it was one of the facilitating factors. Sectors such as FDI, international aid, the garment industry, tourism, which supply in foreign currencies, are also pillars of growth. The presence of monetary plurality does not reflect, therefore, the crisis of the concerned economy, but foreign currencies appear to be used because the national currency does not fulfill the traditional functions of money. To make the economy run, economic agents need currencies that are able to fulfill them.

Our survey has highlighted this phenomenon. In areas where economic activities are very dynamic and more open to the outside, foreign currencies are frequently employed. Phnom Penh, the capital of the country, is the most dollarized city, followed by Siem Reap (tourist province). The border areas are also affected by the circulation of neighboring currencies due to the development of border trades. The bahts are used in trade not only between Cambodians and Thais, but also among Cambodians inside the country. In rural, agricultural, and less developed areas, foreign currencies are less necessary and the national currency is predominant in this case. Important economic activities promote the circulation of foreign currencies and vice versa. At the same time, we also found that each currency performs the function of money differently. The dollar is predominant in the function of conservation of wealth, but also payments for large transactions while the riels are the money most used for payments of small transactions. They are also used for small hoarding. In areas where the dollar, the baht, and the riel coexist, payments of large transactions are shared between the dollar and the baht. The Thai products are sold in baht, while those from Phnom Penh and other *non-bahtized* (where baht circulates) provinces are sold in dollars, in these areas. Furthermore, in areas where the dollar, the dong, and the riel coexist, payments for small transactions are shared between the riel and the dong. The dong is rarely used. Monetary plurality therefore works in a system where the

various currencies circulate more in complementary than competitive situation and where the rural-agricultural space and urban-capitalist space are separate but interdependent spheres.

Besides the role of geographic concentration and functional specialization of the money, the monetary plurality exists because social groups are separated according to their use of currencies. There is the group of individuals who live entirely on the riel; they receive very seldom or never the foreign currencies because they have no access to channels in foreign currencies. Their revenues and expenses are entirely in riel. *Conversely*, there is the social group that is fully dollarized, that is, they collect and spend only foreign currencies. Between these two poles, there are:

- Groups obtaining revenues entirely in riel, but making higher expenses in foreign currencies than in riel and
- Groups receiving revenues entirely in one/several foreign currencies but making greater expenses in foreign currencies other than in riel.

The revenue level of individuals, which depends on the profession, co-determines the money of revenues. The more economically active the agents are and therefore their high revenue level, the higher the proportion of revenues or expenses in foreign currencies is. *Conversely*, the higher the proportion of revenues or expenses in foreign currencies, the more likely their income level is relatively high. Another social inequality could be due to differential holding of foreign currencies by groups of revenues. In the case of inflation in the national currency, the holders of higher revenues, more frequently the holders of foreign currencies will be more protected.

We observe a very active role of the exchange market in the context of monetary plurality. This market corresponds to all exchange operations by the thousands of decentralized changers, large and small, formal and informal. Exchange operations concern all economic agents and support a particular profession, the money changers. These provide three-quarters of total exchange transactions. This market not only facilitates the exchange of currencies but also greatly reduces the cost of holding foreign currencies. Indeed, it is largely informal and the money changers are everywhere. The schedule of services of the money changers is longer than that of commercial banks. They offer relatively homogeneous exchange rates and the difference of sale-purchase rate is very low. The money changers constitute the networks at regional and national level. The surplus of foreign currencies of exchange operations of one changer is transferred to others who lack them inside the country. Large changers determine the exchange rate (USD-KHR) through the interplay of supply and demand of the national money and foreign currencies; these rates do not generally track the evolution of the fundamentals. Their rates are reference rates (*benchmark*) for fixing the exchange rates of small and medium changers, commercial banks but also the central bank.

### **Reunification vs. Monetary Plurality**

Should Cambodia keep monetary plurality in the current form or gradually or quickly reunite circulation of national currency? Or should Cambodia replace the use of dollars by that of another currency, international or regional? Or are there any other solutions?

The results of our surveys have highlighted the importance of each currency in economic activities, but also the desire to have a single currency within the country (which corresponds to the exclusivity of the circulation of national currency) by the majority of the surveyed

population and traders, due to exchange loss and complexity of monetary plurality. We also find economic agents who are satisfied with the use of foreign currencies. These are expatriates, tourists, and people with high revenues, large traders, and some traders and farmers with contacts with border trades.

However, the Government has set a target of de-dollarization as long-term policy. Its policy in the short and medium term is the promotion of re-rielization (*the promotion of the use of riel*) (Royal Government of Cambodia, *Financial Sector Development Strategy 2001-2010, 2006-2015, and 2010-2020*). The latter is to strengthen the circulation of riels in the economy, rather than directly reducing or prohibiting the use of foreign currencies. Until now, few re-rielization measures were implemented and it was observed that the monetary supply in riel increased slightly, especially in the form of quantity of riels in circulation. But at the same time, as we talked about in Chapter 2 and 5, the degree of dollarization (measured by the ratio of foreign currency deposits/M2) also increased and more rapidly than the quantity of currency in circulation.

In addition, several solutions have been proposed to Cambodia by economists and experts regarding the current monetary regime.

Some economists and experts who argue primarily on significant loss of seigniorage, the role of lender of last resort and the risk of a new profound crisis proposed a policy of de-dollarization. Kiwon (2005) recommended that the Cambodian Government de-dollarize the country as quickly as possible. Indeed, dollarization causes significant losses in terms of seigniorage. These losses would far outweigh the benefits enjoyed by the country. Similarly, the recent financial crisis has made it significant or essential to have instruments of monetary policy. Therefore, de-dollarization would be necessary.

Some take into account the evolution of the international monetary system to set the direction of re-rielization policy. Théret (2011) identified four scenarios for re-rielization policy:

i. “United States” or “Hayekian” scenario. It corresponds to the maintenance of globalization in its current form with the extreme dependence toward the United States and its monetary policy that it arranges. According to him, Cambodia should provide a plan for emergency disconnection of riel toward the dollar to gradually re-rielize.

ii. “Emerging” or “Keynesian” scenario. It corresponds to an important change in the way of globalization including the creation of a truly international currency (supranational). The riel could be anchored to an international currency while keeping the floating exchange rate regime administered to stabilize the exchange rate. If the international currency of anchorage is stable, this anchorage facilitates gradual eviction of dollars from domestic circulation.

iii. European or “Mundelein” scenario. Considered more likely, this scenario corresponds to the splitting and re-prioritization of the global space on the consolidated base of continental blocks constituting own monetary spaces. In this scenario, the riel could be anchored on a common regional currency. Disconnecting of the dollar would allow the economy to gradually de-dollarize.

iv. “Protectionist” or “Tobin” scenario. Considered less likely, if not impossible and contrary to current trends in globalization, this scenario corresponds to a greater degree of closure of their borders from the States wishing to retain their sovereignty. According to him,

Cambodia could unify the type of means of payments (national currency) and have the duality (or plurality) of units of account.

Moreover, if we take into account the development of regional commercial and financial integration, another image is obtained. Since the dollar's role in the global economy tends to decrease<sup>180</sup> for one part, and that intra-ASEAN trades increase (and will increase even more after 2015, expected year of entry into the ASEAN Economic Community) for another part, members of ASEAN+3, which use dollars to settle more than eighty percent of their regional trades, studied the possibility of using one/more local currencies<sup>181</sup> for payment of interstate trades (*Using local currencies for the Regional Trade Settlement*). According studies by the Central Bank of Indonesia and the Ministry of Finance of Thailand, two local currencies are potential candidates for use in regional trade; they are the Chinese Renmenbi (CHR) and the Japanese Yen (JPY). Of these two currencies, the CHR would be the most suitable currency for payments of regional trade, taking into account the size of China's trade with countries in the region. In case one or both of these currencies are chosen for payment in regional trade, it would be a great advantage for Cambodia to replace the dollar by the CHR or JPY. Because the country would be well integrated into regional trade.

Several choices have been proposed by different scenarios. Their objectives are the de-dollarization or re-rielization. However, our research can advance a proposal for monetary policy regime in Cambodia. Our first observation is that Cambodia is not yet in a state of emergency to de-dollarize its economy. Indeed, monetary plurality, as we discussed, is not a prohibitive factor of growth and development. In the current phase of economic development (takeoff), the country desperately needs foreign direct investments, financial sector development, good commercial and financial integration, which are more dependent on the dollar than the national currency. There is no other currency that could play the role of the dollar in Cambodia for short, medium, or even long term. Replacing the dollar with an international or regional common currency would not be possible because they are far from being created.

At the same time, there are other priorities that the country should carry out before starting the policy of de-dollarization or re-rielization. These priorities are: institutional and structural reforms and the restoration of trust in the riel. As noted by the IMF (2010) and Menon (2009), Cambodia has already initiated several reforms since the early 1990s, but there are still many reforms to continue to support growth and development. These reforms focus primarily on strengthening public institutions and governance in order to enhance citizen's trust in the Government's ability to ensure macroeconomic stability and the stability of the national currency. In this context, corruption should be gradually reduced and the rule of law must be strengthened. Then, the financial system, especially the banking system, should be developed in areas and sectors where the riel is dominant (rural areas and agricultural sector) as the geographic and sector concentration of the banking sector is very high. At the same time, the exchange market, largely informal, should also be seriously monitored in view, first, to frame and legalize informal exchange activities, and secondly to raise the transaction costs of foreign currencies to encourage the use of riel.

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<sup>180</sup> The dollar became unstable since the 2007-2008 crisis. We also note that the proportion of dollars in international reserves currencies experienced a downward trend.

<sup>181</sup> Studies of ASEAN+3 have shown that the common currency of ASEAN is far from being achieved. They seek the possibility of using existing local currencies for regional trades, rather than creating a common currency. According to a study by the Bank of Indonesia (2012): *Common currency needs a long way to go. Lessons from Eurozone crisis has taught us that creating common currency is complicated and we should be careful about fiscal policy and domestic financial imbalances.*

Moreover, the fiscal system and public budget should be reformed to not only strengthen the Government’s capacity in economic policy but also to gradually expand both the demand and supply of the national currency. The amount of fiscal income of Cambodia is the lowest in the region, these incomes come from imports, yet very low; and the salaries of civil servants are also the lowest in the region. In broadening the fiscal base to increase the State’s revenues, the latter could increase the level of salaries of civil servants. Therefore, riels gradually gain to the detriment of foreign currencies.

Finally, measures or policies in favor of dollarization should not be added to the existing ones. The Government should avoid all political encouragement of the use of foreign currencies in commercial transactions and the financial system, especially in rural areas and the agricultural sector. The development of the de-dollarization policy in the long term should take into account the concentration of foreign currencies, in terms of geographical, functional, and social. Therefore, specific measures or policies for regions, sectors and revenue levels of the population, should be considered. Indeed, the needs of de-dollarization in Phnom Penh are not the same as in Siem Reap or in other areas. Individuals with high level of revenues are not dollarized in the same degree or in the same way as those with low levels of revenues. All these factors call for appropriate policy measures. Such a topic therefore provides opportunities for reflection and future research.

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## Annexe 1 : Political and Economic Events

### 1.1. Political Regimes

- Funan Era : 1<sup>th</sup>-6<sup>th</sup> century
- Chenla Era : 6<sup>th</sup>-8<sup>th</sup> century
- Angkor Era : 9<sup>th</sup>-15<sup>th</sup> century
- Chaktomuk Era : Middle of 15<sup>th</sup> - Middle of 16<sup>th</sup> century
- Longvek Era : Middle of 16<sup>th</sup> - End of 16<sup>th</sup> century
- Udong Era : 17<sup>th</sup>-19<sup>th</sup> century
- French Protectorate : 1863-1953
- Kingdom of Cambodia : 1953-1970 (Reachia Niyum)
- Khmer Republic : 1970-1975 (LON Nol Regime)
- Democracy of Kampuchea : 1975-1979 (Pol Pot Regime)
- People's Republic of Kampuchea: 1979-1989
- State of Cambodia : 1989-1993
- Kingdom of Cambodia : Since 1993

### 1.2. Main Chronology of Cambodia's Political and Economic History

- 9<sup>th</sup> November 1953 : Gain independence from France
- 23<sup>rd</sup> December 1954 : Establishment of National Bank of Cambodia
- 18<sup>th</sup> March 1970 : Coup d'Etat of LON Nol
- 17<sup>th</sup> April 1975 : Phnom Penh captured by Khmer rouges and the evacuation of population to rural areas
- 7<sup>th</sup> January 1979 : Vietnameses armies entered Phnom Penh and established a new government
- 10<sup>th</sup> October 1979 : Reestablishment of the National Bank of Cambodia
- 20<sup>th</sup> March 1980 : Reintroduction of the national currency « Riel »
- October 1989 : Retreat of Vietnamese armies from Cambodia.
- End of 1989 : The Government implemented the policy of transformation of planned economy to market economy. Private properties were reinforced.
- 23<sup>th</sup> October 1991 : Paris Peace Accords
- Mid 1992-Mid 1993 : Arrival of the UN forces for peace and the arrangement of the first national legislative election
- 23<sup>rd</sup> May 1993 : Cambodian Election under UN supervision

- July 1993 Formation of national government
- 6<sup>th</sup> May 1994 International Monetary Fund (IMF) applied aid program « *Structural Adjustment Facility* » (*ESAFI*) in Cambodia
- 5<sup>th</sup> August 1994 Law on Investment
- 26<sup>th</sup> January 1996 Law on the Organization and Conduct of National Bank of Cambodia
- 5<sup>th</sup>-6<sup>th</sup> July 1997 Fight between factions in Phnom Penh
- 22<sup>nd</sup> August 1997 Law on Foreign Exchange
- 1997-1998 Intergration of Khmer rouges with the government
- 26<sup>th</sup> July 1998 Second legislative election
- 23<sup>rd</sup> November 1998 Formation of coalition government
- 1<sup>st</sup> January 1999 Introduction of Value-Added Tax (VAT)
- 22<sup>nd</sup> October 1999 The IMF applied the aid programs « *Structural Adjustment Facility* » (*ESAFII*) and « *Poverty Reduction Growth Facility* » (*PRGF*) in Cambodia
- 18<sup>th</sup> November 1999 Law on Banking and Financial Institutions
- 1998-2002 Banking reform: new licenses and other prudential criteria (such as minimum capital etc.) were put in place for strengthening the banking sector in Cambodia.
- July 2003 Third legislative election
- 31<sup>st</sup> March 2003 Amendment of the Law on Investment
- 19<sup>th</sup> June 2005 Law on Commercial Enterprises
- 24<sup>th</sup> October 2005 Law on Negotiable Instruments and Payment Transactions
- 26<sup>th</sup> November 2006 Law on Government Securities
- 24<sup>th</sup> May 2007 Law on Secured Transaction
- 24<sup>th</sup> June 2007 Law on Anti-Money Laundering and Combating the Financing of Terrorism
- October 2007 Law on the Issuance and Trading of Non-Government Securities.
- 8<sup>th</sup> December 2007 Law on Insolvency
- October 2008 A border conflict between Cambodia and Thailand happened near Preah Vihear temple due to internal political tension in Thailand.
- 27<sup>th</sup> July 2008 Fourth legislative election
- 20<sup>th</sup> June 2009 Law on Financial Lease
- March 2010 Law Anti-Corruption
- 31<sup>st</sup> December 2010 Expiration date for recapitalisation of banks (for commercial bank, the minimum capital must pass 13 millions to 37.5 millions dollars.

- 18<sup>th</sup> April 2012

Launching the first Cambodia Securities Exchange:  
The first quotation of stock exchange of Phnom Penh.  
The share price of stock quotations are in Riel only.

## Annexe 2: Economic Performances

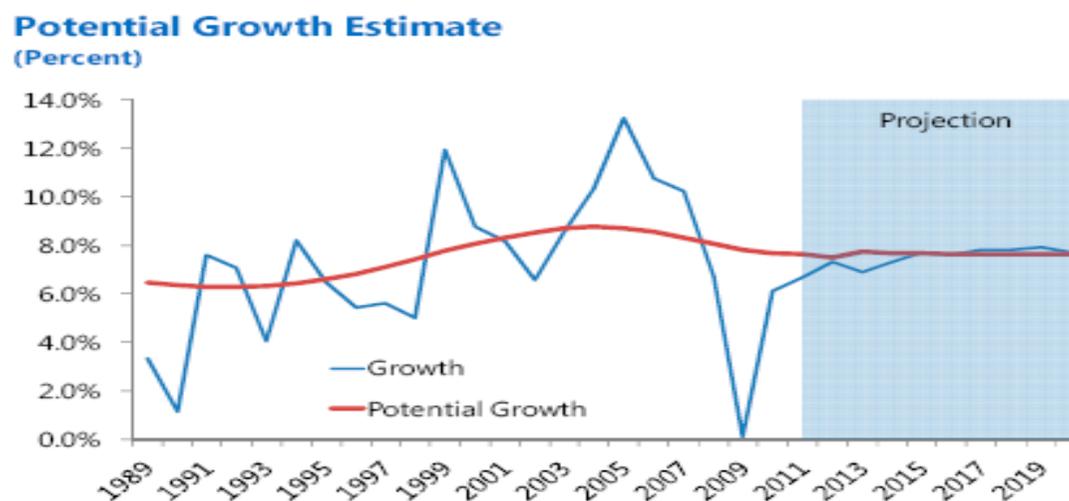
### 2.1. Macroeconomic Indicators

	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011e	2012p	2013p	2014p	2015p
GDP at current price (Billion Riels)	6,813	8,434	10,145	13,376	15,633	18,535	25,754	35,042	43,057	52,254	57,767	63,520	69,843	76,635
GDP at current price (Million US\$)	2,480	3,419	3,392	3,507	3,984	4,663	6,293	8,631	10,400	12,937	14,283	15,915	17,499	18,922
GDP per capita (US\$)	229	297	281	281	319	367	487	656	753	909	988	1,084	1,174	1,250
Real GDP (% increase)		6.4%	5.6%	11.9%	8.1%	8.5%	13.3%	10.2%	0.1%	6.9%	7.0%	7.0%	7.0%	7.0%
GDP deflator in Riel (% increase)		11.5%	4.4%	2.0%	2.6%	1.8%	6.1%	6.5%	2.5%	3.9%	3.3%	2.8%	2.8%	2.5%
Inflation in Riel (% increase, year avg)		7.8%	8.1%	4.0%	-0.9%	1.2%	5.8%	5.9%	-0.6%	5.5%	5.0%	4.0%	4.0%	3.5%
Inflation in Riel (% increase, Q4/Q4)		3.5%	9.1%	0.0%	-0.5%	0.5%	6.8%	9.7%	6.0%	5.3%	5.0%	4.0%	4.0%	3.5%
Inflation in Riel (% increase, Y o Y)	31.0%	-0.1%	9.2%	1.0%	0.7%	0.5%	6.7%	10.8%	5.3%	4.9%	5.0%	4.0%	4.0%	3.5%
Riel/US\$ parity (year average)	2,814	2,462	3,000	3,820	3,924	3,984	4,118	4,060	4,148	4,076	4,050	4,050	4,050	4,050
Riel/US\$ parity (end of period)	2,350	2,560	3,400	3,672	3,910	3,983	4,127	4,003	4,180	4,039	4,050	4,050	4,050	4,070
Total investment (% GDP)	21.8%	23.0%	20.2%	21.9%	21.3%	19.3%	21.6%	26.6%	25.7%	24.7%	24.9%	24.7%	24.7%	25.0%
Public investment (% GDP)	3.5%	6.1%	4.5%	5.4%	7.1%	6.5%	5.3%	6.2%	9.1%	8.1%	8.0%	7.9%	7.9%	7.8%
Private investment (% GDP)	18.3%	16.9%	15.7%	16.5%	14.2%	12.8%	16.3%	20.4%	16.6%	16.7%	16.9%	16.8%	16.9%	17.2%
National saving (% GDP)	20.1%	20.6%	20.8%	16.5%	20.2%	16.3%	17.4%	24.7%	21.1%	23.0%	24.1%	24.9%	26.1%	27.7%
Foreign saving (% GDP)	1.6%	2.4%	-0.6%	5.4%	1.1%	2.9%	4.2%	1.9%	4.5%	1.7%	0.8%	-0.2%	-1.3%	-2.7%
Budget revenue (% GDP)	4.3%	7.6%	8.3%	9.9%	10.0%	9.8%	10.6%	12.1%	11.9%	12.6%	13.3%	13.8%	14.3%	14.8%
Budget expenditure (% GDP)	8.9%	14.8%	12.5%	13.6%	16.4%	16.2%	13.2%	14.7%	20.5%	19.3%	18.5%	18.9%	18.6%	18.4%
Current deficit/suplus (% GDP)	-1.2%	-1.2%	0.2%	1.6%	0.9%	0.8%	1.7%	3.2%	2.2%	1.5%	1.4%	2.3%	3.2%	3.6%
Overall deficit/suplus (% GDP)	-4.7%	-6.7%	-4.1%	-3.8%	-6.0%	-5.4%	-2.7%	-2.8%	-6.4%	-6.8%	-5.1%	-5.1%	-4.3%	-3.6%

Exports of goods (% GDP)	11.4%	25.0%	25.4%	32.2%	39.4%	43.5%	46.2%	37.6%	28.8%	36.8%	38.9%	40.5%	42.7%	46.0%
Imports of goods (% GDP)	19.6%	33.9%	32.2%	45.4%	52.6%	54.9%	62.4%	52.3%	43.2%	47.8%	48.4%	48.5%	49.3%	51.0%
Trade balance (% GDP)	-8.2%	-8.9%	-6.8%	-13.2%	-13.1%	-11.4%	-16.2%	-14.7%	-14.4%	-10.9%	-9.5%	-8.0%	-6.6%	-5.0%
Current account balance (% GDP)	-7.6%	-12.2%	-7.9%	-13.2%	-8.7%	-9.7%	-9.4%	-7.4%	-10.2%	-7.3%	-6.0%	-4.5%	-3.1%	-1.5%
Total liquidity (Billion riel)	333	650	1,063	1,442	2,240	3,329	5,025	11,311	16,228	23,280	28,497	34,900	42,584	51,963
Total liquidity (% increase)		44.3%	16.6%	17.2%	22.3%	15.3%	16.1%	62.9%	36.9%	19.5%	22.4%	22.5%	22.0%	22.0%
Total liquidity (% GDP)	4.9%	7.7%	10.5%	10.8%	14.3%	18.0%	19.5%	32.3%	37.7%	44.6%	49.3%	54.9%	61.0%	67.8%
Gross foreign reserves (Million US\$)	71	182	262	422	548	737	915	1,616	2,367	2,970	2,582	2,863	3,180	3,531
Gross foreign reserves (Months of imports G&S)	2.3	5.7	5.5	2.8	2.8	3.1	2.5	3.7	5.5	5.1	4.0	4.0	4.0	4.0
<b>Population (Million)</b>	<b>10.8</b>	<b>11.5</b>	<b>12.1</b>	<b>12.5</b>	<b>12.5</b>	<b>12.7</b>	<b>12.9</b>	<b>13.2</b>	<b>13.8</b>	<b>14.2</b>	<b>14.5</b>	<b>14.7</b>	<b>14.9</b>	<b>15.1</b>

Source: Cambodia's Ministry of Economy and Finance

## 2.2. Estimation of growth rate from 2012 to 2019



Source: Phurichai Rungcharoenkitkl, 2012, "Modeling with Limited Data: Estimating Potential Growth in Cambodia", International Monetary Fund, WP/12/96

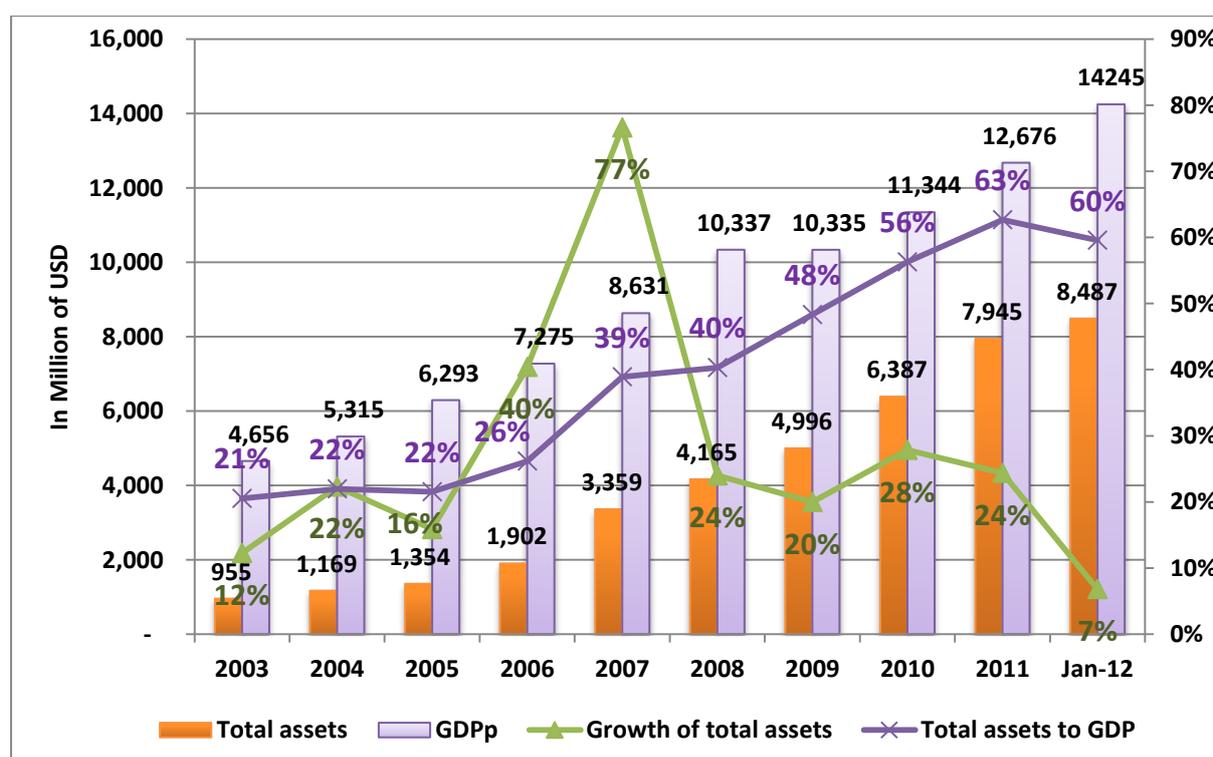
### 3. The Development of Banking Sector

(Source: National Bank of Cambodia)

#### 3.1. The Key Indicators of Banking Sector

	2005	2006	2007	2008	2009	2010	2011	2012
	Dec.	Jan.						
Total number of all banks	18	20	24	30	33	35	35	38
Total Assets	1,354.49	1,901.91	3,358.76	4,164.78	4,996.49	6,387.31	7,945.27	8,486.66
Total Loans to Customers	578.85	855.84	1,563.75	2,387.63	2,510.60	3,240.89	4,326.41	4,431.05
Total Customers' Deposits	968.01	1,401.78	2,478.76	2,520.71	3,320.12	4,312.66	5,192.83	5,347.18
Total Assets (growth)	15.90%	40.42%	76.60%	24.00%	19.97%	27.84%	24.39%	6.81%
Total Loans (growth)	28.52%	47.85%	82.72%	52.69%	5.15%	29.09%	33.49%	2.42%
Total Deposits (growth)	17.14%	44.81%	76.83%	1.69%	31.71%	29.89%	20.41%	2.97%
Assets Percentage of GDP	21.87%	26.00%	41.91%	47.38%	46.96%	54.63%	62.68%	59.58%
Deposit Percentage of GDP	15.63%	19.16%	30.93%	28.67%	31.20%	36.89%	40.97%	37.54%
Loans Percentage of GDP	9.34%	11.70%	19.51%	27.16%	23.59%	27.72%	34.13%	31.11%
Loan-deposit ratio	59.80%	61.05%	63.09%	94.72%	75.62%	75.15%	83.32%	82.87%
Paid-up Capital to GDP	3.81%	3.80%	4.75%	6.71%	7.09%	8.81%	9.85%	9.98%
Exchange Rate	4,112	4,057	4,003	4,081	4,169	4,053	4,039	4,064

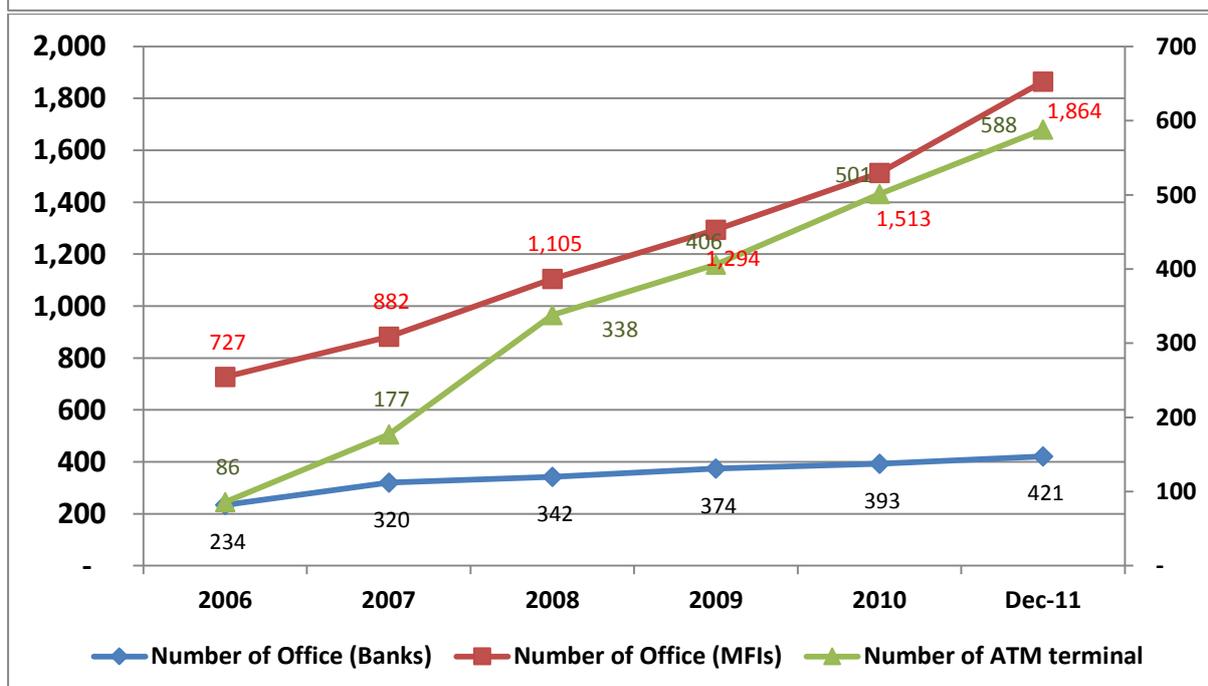
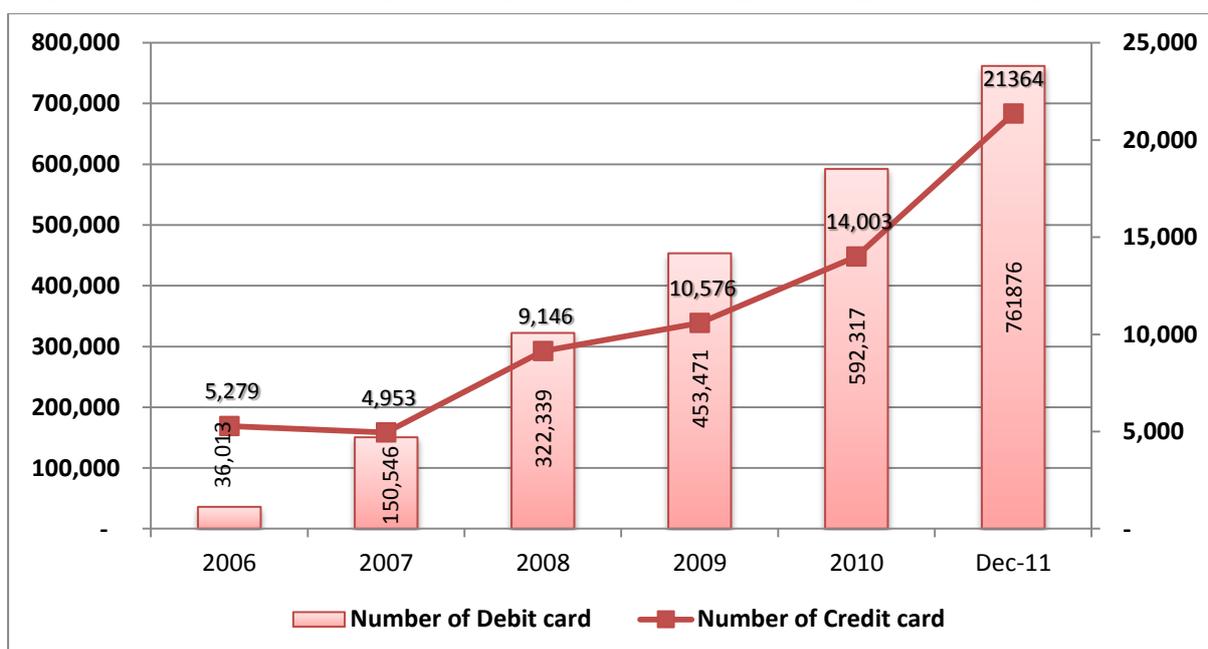
#### 3.2. Total Assets of Banking Sector in Percentage of GDP



### 3.3. Number of Bank Agents and Microfinance Institutions and Electronic Banking

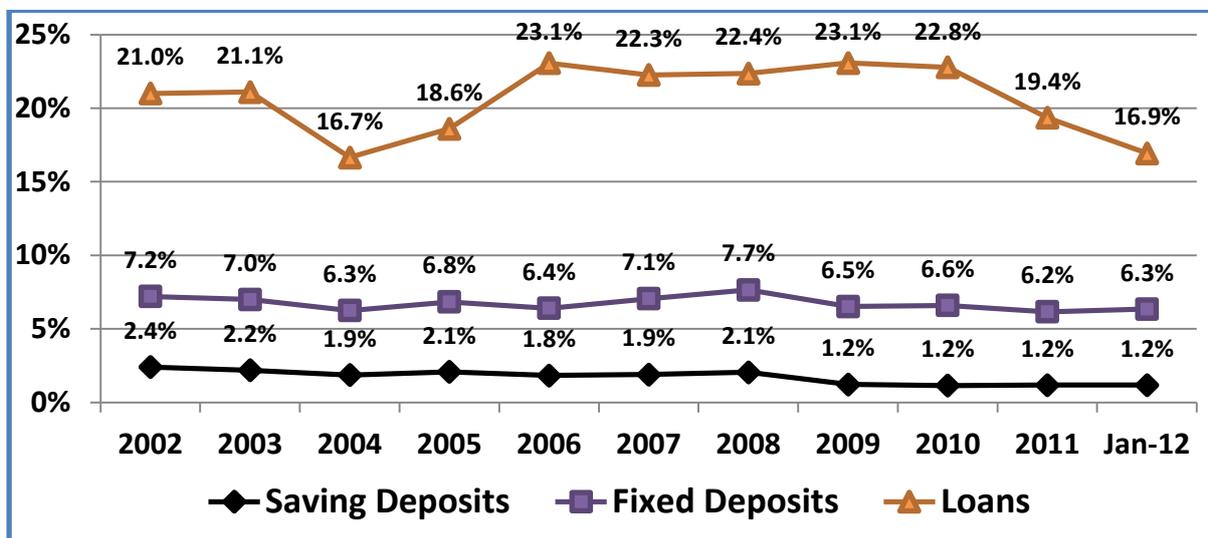
	Descriptions	2008	2009	2010	Dec-11	%Δ (2009-2010)	%Δ (2010-2011)
1	Number of Bank branches & Services	342	374	393	421	5.1%	7.1%
2	Number of Licensed MFI branches*	1,105	1,294	1,513	1,864	16.9%	23.2%
3	Number of ATM terminal	338	406	501	588	23.4%	17.4%
4	Number of Debit card	322,339	453,471	592,317	761,876	30.6%	28.6%
5	Number of Credit card	9,146	10,576	14,003	21,364	32.4%	52.6%
6	WING is introduced by ANZ Australia to offer new mobile banking service in Cambodia to rural area						

\*Including head offices, Updated quarterly



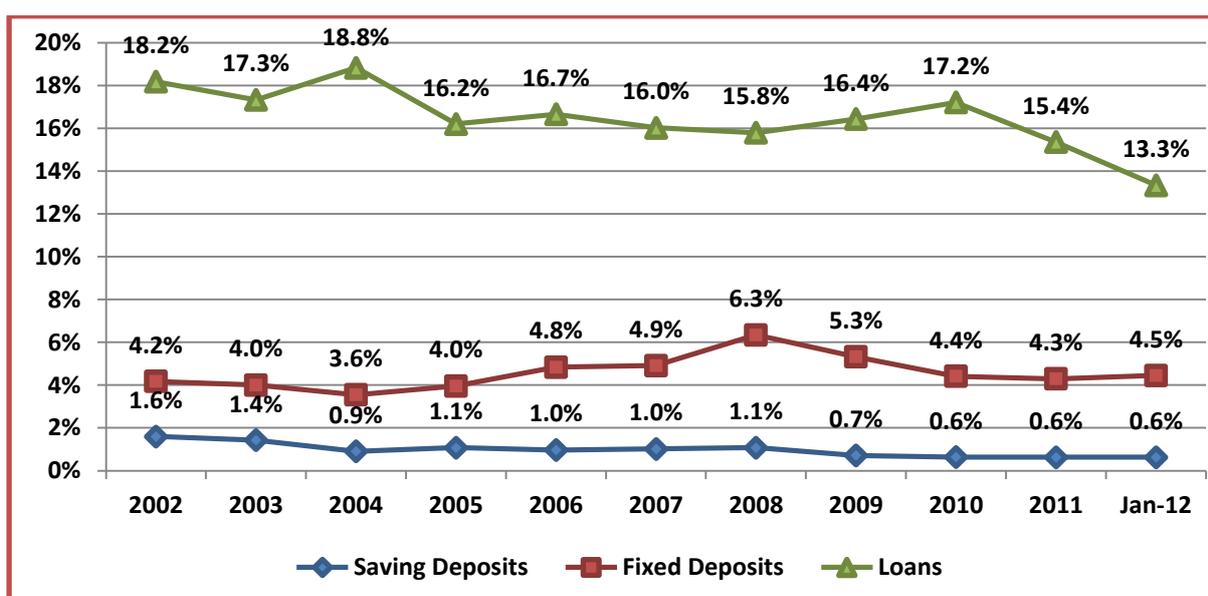
### 3.4. Interest Rates of Loan in KHR: 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Jan-12
Saving Deposit	2.4%	2.2%	1.9%	2.1%	1.8%	1.9%	2.1%	1.2%	1.2%	1.2%	1.2%
Fixed Deposits	7.2%	7.0%	6.3%	6.8%	6.4%	7.1%	7.7%	6.5%	6.6%	6.2%	6.3%
Loans	21.0%	21.1%	16.7%	18.6%	23.1%	22.3%	22.4%	23.1%	22.8%	19.4%	16.9%

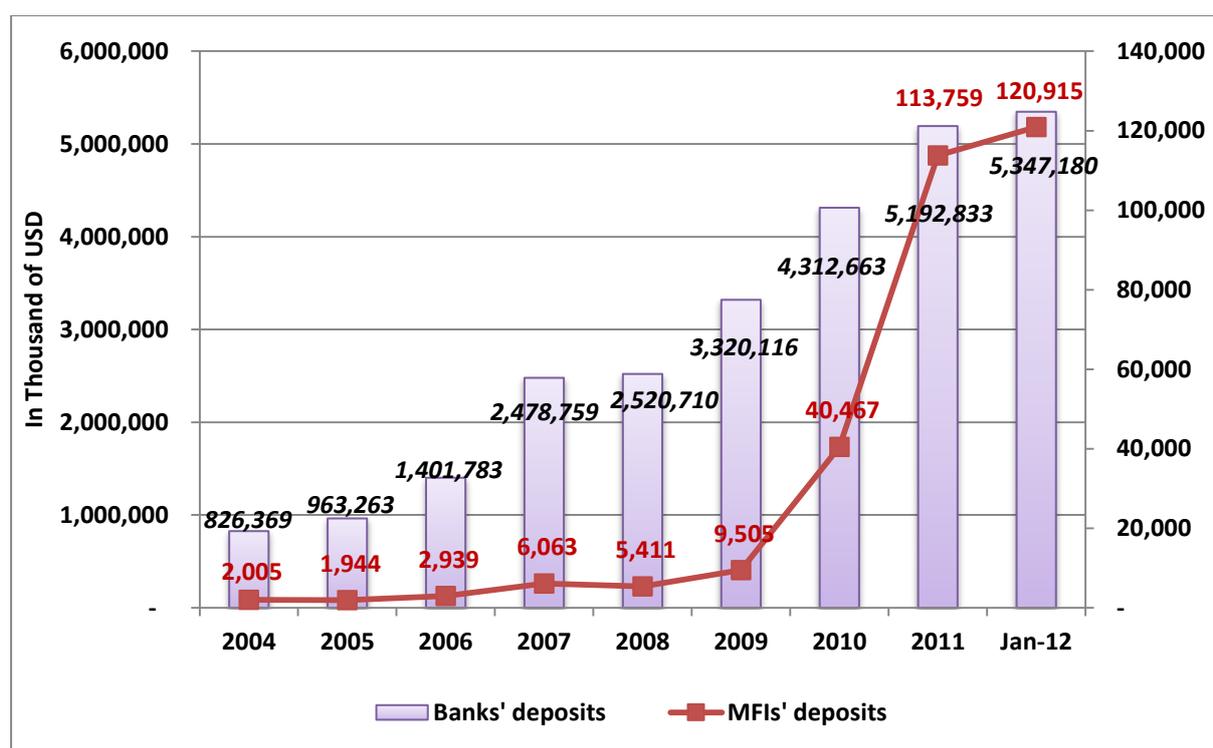


### 3.5. Interest Rates of Loan in USD : 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Jan-12
Saving Deposits	1.6%	1.4%	0.9%	1.1%	1.0%	1.0%	1.1%	0.7%	0.6%	0.6%	0.6%
Fixed Deposits	4.2%	4.0%	3.6%	3.9%	4.8%	4.9%	6.3%	5.3%	4.4%	4.3%	4.5%
Loans	18.2%	17.3%	18.8%	16.2%	16.7%	16.0%	15.8%	16.4%	17.2%	15.4%	13.3%



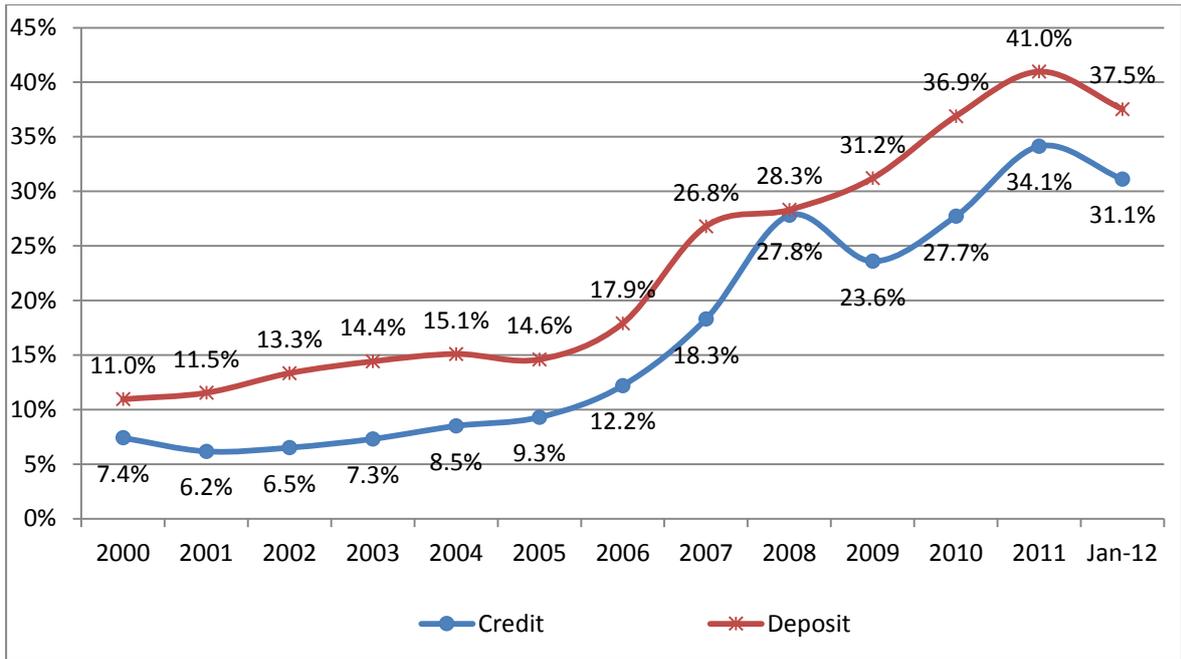
### 3.6. Bank Deposits in Microfinance Institutions



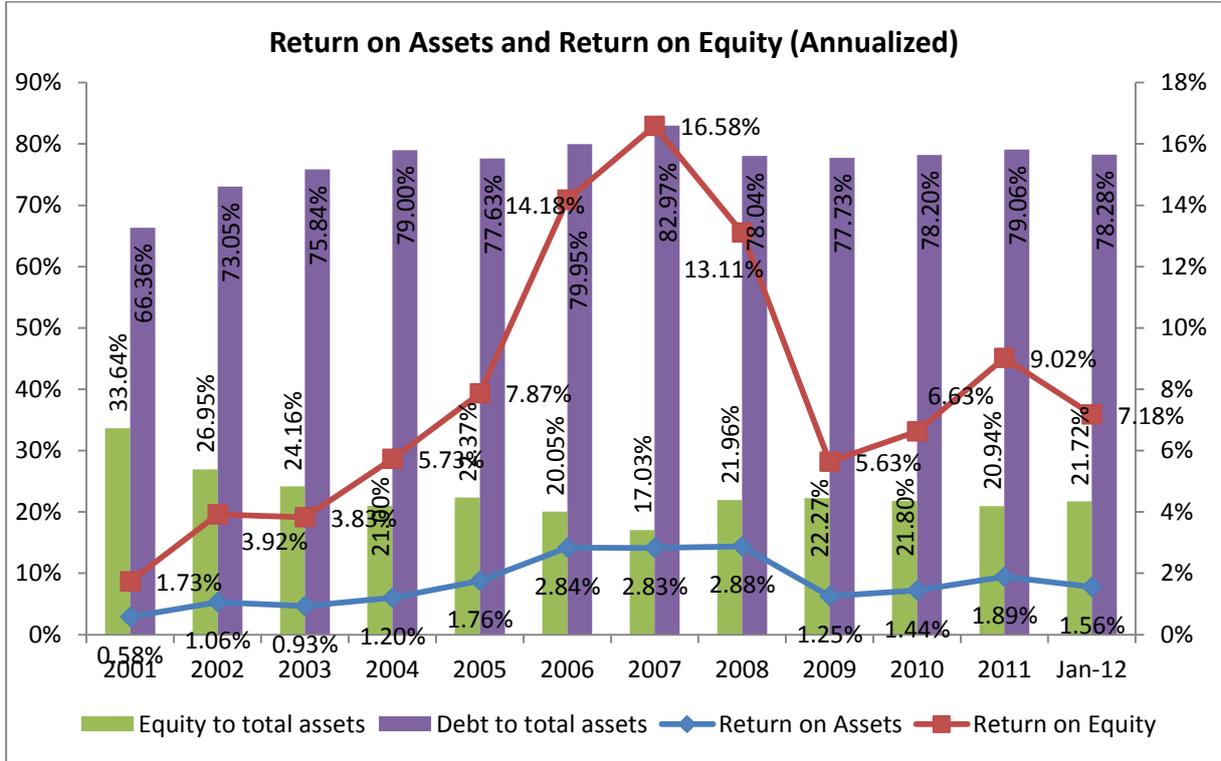
### 3.7. Loans by Sector

	2009	2010	2011	Jan-2012
Retail Trade	18.2%	17.9%	18.0%	17.9%
Wholesale Trade	12.8%	17.5%	14.4%	14.1%
Hotels and Restaurants	12.0%	9.7%	7.4%	7.3%
Manufacturing	8.7%	8.7%	9.2%	9.3%
Other Non-Financial Services	8.3%	9.9%	9.2%	10.0%
Construction	8.6%	7.0%	7.4%	6.6%
Personal Lending	7.1%	5.2%	4.9%	4.9%
Agriculture, Forestry and Fishing	6.7%	6.7%	8.9%	9.3%
Real Estate Activities	6.3%	4.6%	3.2%	3.1%
Information Media and Telecommunications	2.9%	2.7%	3.0%	3.2%
Owner-Occupied Housing only	3.6%	3.6%	6.2%	6.2%
Other Lending	0.4%	1.3%	1.5%	1.6%
Financial Institutions	1.4%	1.3%	1.8%	1.7%
Utilities	0.5%	0.6%	1.2%	1.1%
Transport and Storage	1.7%	1.9%	1.7%	1.6%
Rental and Operational Leasing Activities	0.4%	0.7%	1.7%	1.6%
Credit Cards	0.2%	0.2%	0.2%	0.2%

### 3.8. Loan Trend and Bank Deposits : 2000-2012



### 3.9. Profitability of Banking Sector (Compared to Assets and Equity)



## 4 : Questionnaires

### 4.1. Questionnaire « General Population »

**QGP 1- Age :** .....

**QGP 2- Gender:**            Male             Female

**QGP 3- In which sector do you work? Where?**

Agricultural Sector	<input type="checkbox"/>	.....
Construction Sector	<input type="checkbox"/>	.....
Industrial Sector	<input type="checkbox"/>	.....
Tourism	<input type="checkbox"/>	.....
Trade and other services	<input type="checkbox"/>	.....
Others	<input type="checkbox"/>	.....

**QGP 4- In which currency do you receive your revenue? In which proportion?**

	0%	1/4	1/2	3/4	100%
Dollar					
Riel					
Baht					
Dong					
Other.....					

**QGP 5- In which currency do you pay your daily expenses?**

Riel       Dollar       Baht       Dong       Other.....

**QGP 6- In which currency do you pay your large expenses?**

Riel       Dollar       Baht       Dong       Other.....

**QGP 7- What is your average revenue per month?**

Revenue in Riel	<input type="checkbox"/>
0	
< = 200 000 riels	
]200 000 – 400 000]	
]400 000 – 600 000]	
]600 000 – 800 000]	
]800 000 – 1 000 000]	
]1 000 000 – 1 200 000]	
]1 200 000 – 1 400 000]	
>1 400 000	

Revenue in dollar	<input type="checkbox"/>
0	
< = 100 \$	
]100 – 300]	
]300 – 500]	
]500 – 1000]	
]1000- 5000] \$	
>5000 \$	

Revenue in .....	<input type="checkbox"/>
0	

**QGP 8- Distribution of your financial income:**

	Riel	Dollar	Baht	Dong	Others .....
Employer					
Market					
Family					
Bank					
MFIs					
Informal borrowing					
Others.....					

**QGP 9- Do you receive financial aid from your relatives abroad?**

No  Yes

If yes,

**QGP 9-1- In which currency is it?**

Dollar  Baht  Dong  Others.....

**QGP 9-2- How?**

Transferred by bank/transfer agency	<input type="checkbox"/>
Transferred by informal agency	<input type="checkbox"/>
Transferred by family/friends	<input type="checkbox"/>
Others .....	<input type="checkbox"/>

**QGP 9-3- How often?**

- Monthly	<input type="checkbox"/>
- Quarterly	<input type="checkbox"/>
- Semi-annually	<input type="checkbox"/>
- Annually	<input type="checkbox"/>
- > 1 year	<input type="checkbox"/>

**QGP 10- In which currency do you use for your current expenditures?**

	0%	1/4	1/2	3/4	100%
Dollar					
Riel					
Baht					
Dong					
Others.....					

**QGP 11-Which types of note do you mostly hold?**

**QGP 11-1- Dollar**

	Never	Sometimes	Often	Very Often
1\$				
5\$				
10\$				
20\$				
50\$				
100\$				

**QGP 11-2- Riel**

	Never	Sometimes	Often	Very Often
<=1000 ₰				
2000 ₰				
5000 ₰				
10 000 ₰				
20 000 ₰				
50 000 ₰				
100 000 ₰				

**QGP 11-3- Baht**

	Never	Sometimes	Often	Very Often
<=20฿				
50฿				
100฿				
500฿				
1000฿				

**QGP 11-4- Dong**

	Never	Sometimes	Often	Very Often
<=10 000đ				
20 000đ				
50 000đ				
100 000đ				
200 000đ				
500 000đ				

**QGP 11-5- Other currencies**

	Never	Sometimes	Often	Very Often
.....				
.....				
.....				
.....				
.....				

**QGP 12- In which currency do you use for payment?**

Note: In case you use multiple currencies for the same expenses or types of expenses, please indicate the approximate proportion

	Riel	Dollar	Others, please specify .....
Food			
Clothes			
Cosmetics			
Consumer goods			
Transportation Expenses			
Entertainment			
Mariage/Ceremony			
Other expenses.....			
Other expenses.....			

**QGP 13- In which proportion are the currency in your pocket?**

	Proportion
Riel	
Dollar	
.....	
.....	

**QGP 14- Other than your purchases above, to whom do you tranfer the currencies?**

	Riel	Dollar	Others...
Family			
Bank (settle the debts or deposits)			
MFIs (settle the debts or deposits)			
Informal lender (tongtin, others)			
Others.....			

**QGP 15- Do you have a bank account?**

No

Yes

**If yes, in which currency?**

	Proportion 0, 1/4, 1/2, 3/4, 100%
Dollar	
Riel	
.....	

**QGP 16- Do you save money?**

No  Yes

**If yes, in which currency do you save? Within the banking system?**

	Proportion 0, 1/4, 1/2, 3/4, 100%	In Bank	Outside Bank
Dollar			
Riel			
.....			

**QGP 17- Do you exchange your money?**

No  Yes

**If yes,**

**QGP 17-1- In which direction do you exchange your money?**

		Frequency				
		Never	~ 3-4 times per year	~ once per month	~ twice per month	~/>3 time per month
From Dollar to Riel	<input type="checkbox"/>					
From Riel to Dollar	<input type="checkbox"/>					
From.....to.....	<input type="checkbox"/>					

**QGP 17-2- With which types of money changer do you exchange?**

	Market	Outside Market	Frequency			
			Never	Rarely	Often	Very Often
Money Changers						
Merchants						
Others.....						

**QGP 18- How is the proportion of the followings if your income increases?**

	Will increase in Riel	Will increase in dollar	Will increase in other currencies .....
Expenditures			
Saving			

**QGP 19- You prefer using:**

	Riel	Dollar	Dong	Baht	Other.....
Source of your revenue					
National Currency					
Travel in the country					
Familiarity					
More practical					
Currency of my purchase					
Price Stability					
Prestige					
To pay taxes					
Refund					
Avoid the loss of exchange rate					

## 4.2. Questionnaire « Traders »

**QTRA 1- Types of activities.....**

**QTRA 2- Where do you buy your goods? In which currency do you pay for your purchases?**

		Payment				
		Riels	Dollars	Bahts	Dongs	Others....
Purchase in Cambodia	in Phnom Penh					
	.....					
	.....					
Purchase from abroad	in Vietnam					
	in Thailand					
	.....					
	.....					

**QTRA 3- In which currency do you calculate your purchase?**

Riel  Dollar  Baht  Dong  Others.....

**QTRA 4- In which currency do you quote the price of goods?**

Riel  Dollar  Baht  Dong  Others.....

**QTRA 4-1- In case you quote the price in only one currency, please specify the reasons:**

Custom	
More practical	
Same as my competitors	
Easy to calculate	
More convenient for customers	
The price of goods are low/high	

**QTRA 4-2- In case you quote the price of your goods in many currencies, please specify the reasons:**

Custom	
More practical	
Same as my competitors	
Easy to calculate	
More convenient for customers	
Sales in the same currency as the purchase	
The price of goods are low and high	

**QTRA 5- In which currency do you set aside your money for the purchase of goods?**

Riel  Dollar  Baht  Dong  Others.....

**QTRA 6- What are the currencies you get from sale? Please specify the proportion.**

**QTRA 6-1- Retail**

	0	1/4	1/2	3/4	100%
Dollar					
Riel					
Baht					
Dong					
Others.....					

**QTRA 6-1- Wholesale**

	Destination	Proportion of obtained currency				
		0	1/4	1/2	3/4	100%
Dollar	.....					
Riel	.....					
Baht	.....					
Dong	.....					
Others.....	.....					

**QTRA 7- What types of notes do you normally hold?**

**QTRA 7-1- Dollar**

	Never	Rarely	Often	Very often
1\$				
5\$				
10\$				
20\$				
50\$				
100\$				

**QTRA 7-2- Riel**

	Never	Rarely	Often	Very often
<=1000 ₰				
2000 ₰				
5000 ₰				
10 000 ₰				
20 000 ₰				
50 000 ₰				
100 000 ₰				

**QTRA 7-3- Baht**

	Never	Rarely	Often	Very often
<=20฿				
50฿				
100฿				
500฿				
1000฿				

**QTRA 7-4- Dong**

	Never	Rarely	Often	Very often
<=10 000₫				
20 000₫				
50 000₫				
100 000₫				
200 000₫				
500 000₫				

**QTRA 7-5- Other currencies**

	Never	Rarely	Often	Very often
.....				
.....				
.....				
.....				
.....				

**QTRA 8- Do you do money exchange in your business operation?**

No       Yes

**If yes**

**QTRA 8-1-In which direction do you exchange your money?**

		Frequency			
		Never	Rarely	Often	Very often
From Dollar to Riel					
From Riel to Dollar					
From.....to.....					
From.....to.....					

**QTRA 8-2- Where do you exchange your money?**

	In the market	Outside market	Frequency			
			Never	Rarely	Often	Very Often
Money changers						
Merchants						
Others.....						

**QTRA 9- Do you exchange different currencies with your clients?**

- No       Yes

**If yes**

**QTRA 9-1- In which direction do you exchange your money?**

		Frequency			
		Never	Rarely	Often	Very often
From dollar to riel					
From riel to dollar					
From.....to.....					

**QTRA 9-2-Where do you get the information regarding the exchange rate?**

Others told you	
Newspaper	
Television	
Money changer	
Internet	

**QTRA 9-3- Who are your clients? Please specify in percentage.**

	Riel	Dollar	Baht	Dong	Others %...
Individual	₭→ .....	\$→ .....	฿→... .....	d→ .....	...→... .....
Merchants	₭→ .....	\$→ .....	฿→... .....	d→ .....	...→... .....
Foreigners (tourists/expatriates)	₭→ .....	\$→ .....	฿→... .....	d→ .....	...→... .....
Entreprises	₭→ .....	\$→ .....	฿→... .....	d→ .....	...→... .....
Money changers	₭→ .....	\$→ .....	฿→... .....	d→ .....	...→... .....

Others .....	₣ → .....	\$ → .....	₭ → ...	d → .....	... → ...
-----------------	--------------	---------------	---------	--------------	-----------

**QTRA 9-4- What is the total average amount of money you exchange daily? (In Dollar)**

<=100	
]100-500]	
]500-1000]	
]1000-2000]	
>2000	

**QTRA 10- Do you borrow money?**

- No       Yes

**If yes, in which currency do you borrow the money, and from where?**

	Riel	Dollar	Others.....
Bank			
MFI			
Informal borrowing			
Others.....			

### 4.3. Questionnaire « Manual Money changers »

#### QCHG 1-What are the currencies that you exchange?

Dollar	Baht	Dong	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....

Others.....

#### QCHG 2- In what direction do you exchange your money? How often?

		<input checked="" type="checkbox"/>	Never	Rarely	Often	Very Often
Dollar	→Riel					
	→Baht					
	→Dong					
	→.....					
Baht	→Riel					
	→Dollar					
	→Dong					
	→.....					
Dong	→Riel					
	→Dollar					
	→.....					
Riel	→Riel					
	→Dollar					
	→Baht					
	→.....					
Others.....	→Riel					
	→Dollar					
	→Baht					
	→Dong					
Others.....	→.....					
	→Riel					
	→Dollar					
	→Baht					
Others.....	→Dong					
	→.....					
	→.....					

#### QCHG 3- Which sources of the money do you exchange? Please specify them in percentage.

Source		Riel	Dollar	Baht	Dong	Others.....
NBC	City/Provincial Branches					
	Head Office (Phnom Penh)					
Commercial Bank						
MFIs						
Money Changers	In the region					
	In town					
	In Phnom Penh					
	Others .....					
Customers						
Others .....						

**QCHG 4- Who are your clients? Please specify them in percentage.**

Source	Riel	Dollar	Baht	Dong	Others % .....
Individuals	₭→ .....	\$→ ...	฿→...	d→ ...	...→ ...
Merchants	₭→ .....	\$→ ...	฿→...	d→ ...	...→ ...
Foreigner (tourists/expatriates)	₭→ .....	\$→ ...	฿→...	d→ ...	...→ ...
Entreprises	₭→ .....	\$→ ...	฿→...	d→ ...	...→ ...
Changers	₭→ .....	\$→ ...	฿→...	d→ ...	...→ ...
Others .....	₭→ .....	\$→ ...	฿→...	d→ ...	...→ ...

**QCHG 5- What is the total average amount of money you exchange daily (in Dollar)**

<=100	
]100-500]	
]500-1000]	
]1000-2000]	
>2000	

**QCHG 6- What types of notes do you receive from the exchange operation? Please specify in percentage.**

**QCHG 6-1- Dollar**

	Never	Rarely	Often	Very often
1\$				
5\$				
10\$				
20\$				
50\$				
100\$				

**QCHG 6-2- Riel**

	Never	Rarely	Often	Very often
<=1000₭				
2000 ₭				
5000₭				
10 000 ₭				
50 000₭				
100 000₭				

**QCHG 6-3- Baht**

	Never	Rarely	Often	Very often
<=20฿				
50฿				
100฿				
500฿				
1000฿				

**QCHG 6-4- Dong**

	Never	Rarely	Often	Very often
<=20đ				
50đ				
100đ				
500đ				
1000đ				

**QCHG 6-5- Other currencies**

	Never	Rarely	Often	Very often
.....				
.....				
.....				
.....				
.....				

**QCHG 7- Where do you get the information from the exchange rate?**

From the National Bank of Cambodia		
From the Commercial Bank		
From Microfinance Institution		
Other changeurs	In town	
	In Phnom Penh	
	Other provinces.....	
	Other provinces.....	
Foreigner		
Others.....		

**QCHG 8- Do you have any other operation besides money exchange?**

No  Yes

If yes, what operation do you do?

**QCHG 8-1- Do you have any activities of informal loans?**

No  Yes

If yes, in which  
currency?

Dollar	.....%
Riel	.....%
Others.....	.....%

**QCHG 8-2- Do you have the operation of money transfer?**

No  Yes

- If yes, in which currency do you transfer out? Which destination?

Destination	Riel	Dollar	Baht	Dong	Others.....
In the region					
Phnom Penh					
Other provinces.....					
Abroad					
.....					

- In which currency do you transfer in? Which provenance?

Provenance	Riel	Dollar	Baht	Dong	Others.....
In the region					
Phnom Penh					
Other provinces...					
Abroad					

**QCHG 8-3- Do you have any activities buy-sell of precious metal?**

No  Yes

If yes, in which currency?

Dollar	.....%
Riel	.....%
Others.....	.....%

**QCHG 8-4- Others activities.....**

In which currency?

Dollar	.....%
Riel	.....%
Others.....	.....%

**QCHG 9- Where do you get the information regarding the exchange rate?**

National Bank of Cambodia		
Bank		
Money changers	In town	
	In Phnom Penh	
	.....	
	.....	
Newspaper.....		
Television.....		
Internet.....		
Others.....		

#### 4.4. Questionnaire « Expatriates »

**QEXP 1- Country:** ..... **QEXP 2- Period of stay:**.....

**QEXP 3- Your profession in Cambodia:**.....

**QEXP 4- What is your type of accomodation?**

Hotel	
Villa	
Finished Appartment/House	
Non-finished Appartment/House	
Studio	
Room	
Others.....	

**QEXP 5- In which currency do you get your revenue? Please specify in percentage**

	0%	~1/4	~1/2	~3/4	100%
Dollar					
Riel					
Baht					
Dong					
Others.....					

**QEXP 6-What is your means of payment? Which currency?**

	Riel	Dollar	Others...
Cash			
Debit/Credit Card			
Check			
Others.....			

**QEXP 7- In which currency do you usually hold with you? What is its proportion?**

	0%	~1/4	~1/2	~3/4	100%
Dollar					
Riel					
Baht					
Dong					
Others.....					

**QEXP 8- In which currency do you use for your expenditures?**

Note: In case that you use more than one currency for the same spending, please specify it in percentage.

		Riels	Dollars	Others....
Lodge				
Restaurants	Restaurants usually for foreigner			
	Restaurants usually for Cambodians			
Transports	Own Transports			
	Taxi			
	Motobike Taxi			
	Tuk Tuk			
Leisure				
Shopping	Foods	Markets		
		Shops and store outside the markets		
		Supermarkets		
	Others	Markets		
		Shops and store outside the markets		
		Supermarkets		
Other spendings				

**QEXP 9- Do you change your money?**

No  Yes

**QEXP 9-1- If yes, how often?**

- Daily
- Weekly
- Monthly
- Rarely

**How many times?**

.....  
 .....  
 .....

**QEXP 9-2- In which direction do you exchange your money?**

- From dollar to riel
- From riel to dollar
- From.....to.....
- From.....to.....

**QEXP 9-3- Where do you exchange your money?**

		Never	Sometimes	Often	Very Often
Airport					
Hotel					
Bank					
Traders	In the market				
	Outside the market				
Changers	In the market				
	Outside the market				
ATMs					

**QEXP 10- The importance of the dollar in circulation prevent the monetary authorities from conducting economic and monetary policy. Do you think it is necessary for Cambodia to have such economic policy?**

Yes  No  Don't know

**Why:** .....

.....

**QEXP 11-1- Foreign investors in Cambodia often appreciate that they could pay and trade freely in US Dollar. Do you think that this is the reason for staying in a dollarized system?**

Dollarized  Less dollarized  Non-dollarized

**QEXP 11-2- Other foreign investors complain about operating partly in Riel and partly in US Dollar or baht. Do you think that this is the reason for staying in a dollarization system?**

Dollarized  Less dollarized  Non-dollarized

**QEXP 12- Cambodia is an Asian country where most of the major investors and most importer are from Asia, do you think the current situation should evolve in the direction of dollarization?**

Higher  Less  Null

**QEXP 13- In case of gradual re-realization of the economy, would you favor?**

A Riel at the current denomination

A new Riel equal to 10 or  100 or  1000 times of the current Riel

Notes with higher denomination

**4.5. Questionnaire « Foreign Tourists »**

**QTOU 1- Country:** ..... **QTOU 2-Period of stay:** .....

**QTOU 3- What types of payment have you used during your stay in Cambodia?**

	Riel	Dollar	Others...
Cash			
Debit/Credit Card			
Check			
Others.....			

**QTOU 4- Have you changed your money?**

No  Yes

**If yes,**

**QTOU 4-1- In what direction do you exchange your money?**

From dollar to riel	<input type="checkbox"/>
From riel to dollar	<input type="checkbox"/>
From.....to.....	<input type="checkbox"/>
From.....to.....	<input type="checkbox"/>
From.....to.....	<input type="checkbox"/>

**QTOU 4-2- Where do you exchange your money?**

		Never	Sometimes	Often	Very often
Airport					
Hotel					
Bank					
Traders	In the market				
	Outside the market				
Changers	In the market				
	Outside the market				
ATMs					

**QTOU 5- In which currency do you use for your expenditures?**

Note: In case that you use more than one currency for the same spending, please specify it in percentage.

			Riels	Dollars	Others...
Hotel					
Restaurants	Restaurant usually for foreigner				
	Restaurant usually for Cambodians				
Transportation	Car/Motobike/Bicycle (rent)				
	Taxi				
	Motobike Taxi				
	Tuk Tuk				
	Boat				
Guide					
Leisure					
Site access					
Shopping	Food	Markets			
		Shop and Store outside the market			
		Supermarkets			
	Souvenirs, tourist products	Markets			
		Shop and Store outside the markets			
		Supermarkets			
	Others	Markets			
		Shop and Store outside the market			
		Supermarkets			
Other spending					

**QTOU 6- In what percentage of your expense did you pay in Riel/**

- Less than 5% in riel
- Between 5 and 20% in riel
- More than 20% in riel

**QTOU 7- Do you find it convenient to pay in US Dollar?**

- All your expenses
- A part of your expenditures
- Don't know

**QTOU 8- Do you find it convenient to pay in another currencies (dong, baht, etc.) Which one?**

.....

**QTOU 9- Woud you like to pay in national currency?**

- Strengthen national identity
- Facilitate economic policy of the country
- Transaction is easier to understand
- Other reason.....


## **4.6. Questionnaire of Exchange Market Study**

### **A. Questions for commercial banks**

- 1- Provision of money changing services to customers?
- 2- Which currencies? Most traded? Indications of volumes?
- 3- Major trends observed in money changing business?
- 4- Information sources for pricing?
- 5- Width of spreads?
- 6- Business relationships with money changers? (accounts opened to money changers?)
- 7- How many money changers? Average size of total balances held by money changers holding accounts with the banks? Which currencies?
- 8- If a customer came with the equivalent of USD 1,000,000 and wanted KHR equivalent amount for a transfer to another customer of another bank in Cambodia, how would this transaction be transacted? Would the bank transact it? If not, why? Has this question been considered notably with regard to the soon to operate Stock Exchange Market?
- 9- Would such a transaction be backed with money changers? Would the transaction be settled in cash (banknotes) or in account?
- 10- When banks need KHR (cash in vault, balances with the NBC, FX-risk management purposes ... or whatever) in bigger amounts, how do they purchase these KHR? Does it necessarily go through transactions with money changers and in banknotes? If not, how are the transactions settled? Which are the counterparts? Are there banking counterparts that could be traded with – on a wider scale and without passing through banknotes-based transactions – for FX-transactions KHR-USD, buy and sell?
- 11- Why don't commercial banks participate in the NBC's auctions?

### **B. Questions for Microfinance Institutions**

- 1- Provision of money changing services to customers?
- 2- Which currencies? Most traded? Indications of volumes?
- 3- Information sources for pricing?
- 4- Width of spreads?
- 5- Business relationships with money changers? (accounts opened to money changers?)
- 6- Which currencies are used for lending activities?

- 7- Are there transfer services in FX-currency (other than USD) offered to customers? How is it organized?

### **C. Changers**

- 1- Information sources for pricing?
- 2- How the currencies are priced (mid market) and which are the information systems / networks / frequency of exchanges with price sources are used
- 3- For bigger money changers – in the border areas mainly but not only – identification if they make use of correspondent accounts held in the border countries to purchase the necessary foreign currency (and, in this case, what would be the usual settlement currency USD or domestic currency of the border country?)
- 4- Width of spreads?
- 5- Do the spreads vary or are they rather stable? Which are the factors / reasons for the width of spreads to increase / decrease?
- 6- Are the FX-rates for currencies other than USD quoted as such or are they derived from the cross-rates vs. USD? Which are the sources for the prices of currencies such as THB, Vietnamese Dong, Laotian Kip, Euro...? Which are the pricing sources / information providers used? What is the frequency over a day for checking the “source quotations” and, if applicable, adjusting the quotations displayed to the customers?
- 7- Collect information on daily turnovers in a given currency for all transactions and breakdown for each of the currencies traded (averages)
- 8- Identified which are the currencies actually traded on a regular or more exceptional basis (the full range)
- 9- Would money changers cooperate / co-transact in case a major transaction would have to be transacted at customers’ request? Or would the customers have to shop with different money changers until they can finally complete the amount to be transacted?
- 10- Do the money changers have business relationships with:
  - i. Microfinance institutions?
  - ii. Commercial banks / branches (in the provinces)?
  - iii. Money transfer services provider (MoneyGram, Western Union, WING (ANZ), ACLEDA’s network, MOBITEL)?
- 11- Of which nature are these business relationships? And are the money changers involved in the provision of transfer services to customers?

- 12- Do the money changers themselves use transfer services? (notably with regard to retail/wholesale transactions). If not, how are the transactions between wholesalers and retailers organized and settled in practice?
- 13- Identification of the money changers that play, locally, the wholesalers' role and for such wholesalers, identification, if any, of possible interconnections with wholesalers in Phnom Penh (to assess level of centralization or decentralization of the money changers' networks)
- 14- Identification of possible "services brokers" transacting with money changers:
- i. Payment of taxes to the Government
  - ii. Payment of duties to the Tax and Excise Administration (Customs)
  - iii. Payment of salaries (payroll management)
  - iv. Tourism sector
- For farming / cooperatives or informal cooperation bases among farmers / producers or seeds' / fertilizers' ... sellers or whatever (to be described)

## Bibliography

- Abadillah Kaid Naji Swindi, 2009, « Is there a Relationship Between the Openness of Economy and Economic Growth?: A Descriptive Study on the ASEAN 10 », Business e-Bulletin, Vol. 1, Issue 1.
- Admémair Leclère, 1914, "Histoire du Cambodge", éd. Paul Geuthner, Paris.
- Agence Française du Développement (AFD), 2010, "Analyzing the Impact of Remittances from Cambodian Migrant Workers in Thailand on Local Communities in Cambodia", Publisher: International Organization for Migration
- Aglietta Michel et André Orléan, 1998, "La Monnaie Souveraine", Paris, Odile Jacob
- Aglietta Michel et André Orléan, 2002, "La Monnaie : Entre Viloence et Confiance", Paris, Odile Jacob
- Aglietta Michel et Jean Cartelier, 1998, "Ordre Monétaire des Économies de Marché", dans Aglietta Michel et Orléan André, 1998, "La Monnaie Souveraine", Paris, Oldile
- Aglietta, M., Orléan, A., 1982, "La Viloence de la Monnaie", PUF, Paris
- Allais Maurice, 1975, "Le Concept de Monnaie, la Création de Monnaie et de Pouvoir et de Pourvoir d'Achat par le Mécanisme de Crédit et ses Implications", in P. Coubois (Ed.), Essais en l'Honneur de Jean Marchal, tome ii : La monnaie, Paris, Cujas, Pages 106-145
- Allan G. Issac, 1989, "Exchange Rate Volatility and Currency Substitution", Journal of International Money and Finance, Volume 8, Issue 4, Pages 277-284
- Asian Development Bank (ABD), 2006, "The Mekong Region: Foreign Direct Investment"
- Ayamonier Étienne, 1900-1904, "Le Cambodge", Paris, Réédité par Valéase, Phnom Penh, 2007
- Bahmani-Oskooee Mohsen et Domac Ilker, 2002, "On the Link Between Dollarization and Inflation: Evidence from Turkey", the Croatian National Bank
- Baily Peter, 2007, "Cambodia Small and Medium sized Entreprises: Constraints, Policies and Proposals for their Development", Economic Research Institute for ASEAN and East Asia.
- Balino, T., Bennet, A., and Borensztein, E., 1999, "Monetary Policy in dollarized economies, Occasional Paper 171, IMF.
- Bank Indonesia, 2012, "East Asia Cooperation for Regional Trade Settlement : Indonesia", The Annual ASEAN Finance Minister Meeting and related Meeting 26-30 Avril 2012, Phnom Penh
- Banque Mondiale, 2004, « Cambodia: Seizing the Global Opportunity: Investment Climat Assessment and Reform Strategy for Cambodia » Report No. 27925-KH.

- Banque Mondiale, 2006, "Cambodia: Halving Poverty by 2015? Poverty Assessment 2006", World Bank Report No. 35213-KH, Phnom Penh.
- Banque Mondiale, 2007, *Sharing Growth: Equity and Development in Cambodia*, World Bank, Phnom Penh, Cambodia.
- Banque Mondiale, 2009, "Poverty Profile and Trends in Cambodia: Findings from the 2007 Cambodia Socio-Economic Survey (CSES)", World Bank Report No. 48618-KH, Phnom Penh.
- Banque Mondiale, 2011, "Cambodia: Recent Economic Developments", Seventh edition
- Banque Nationale du Cambodge, 2010, "Rapport Trimestriel de Avril-Juin, 2010"
- Banque Nationale du Cambodge, 2010 et 2011, "Rapports des Enquêtes des Échanges frontaliers Thailandais et Vietnamiens", Département des Statistiques, Rapports Internes
- Banque Nationale du Cambodge, 2011, "Promoting the use of Riel in Cambodia", Rapport de la BNC
- Banque Nationale du Cambodge, 2011, "Rapports Trimestriel et Annuels des activités des Succursales Provinciales de la Banque Nationale du Cambodge", Rapports non-publiés
- Banque Nationale du Cambodge, 2012, "Finacial Système in Cambodge", Rapport non-publié
- Barrett Charles A., Avril 2010, "Some Observations on the Lessons of the North American and European Experiences for "Ways to Promote Foreign Trade Settlement Denominated in Local Currencies in East Asia", in "Ways to Promote Trade Settlement Denominated in Local Currencies in East Asia: Case Studies of Thailand, Singapore, EU and NAFTA, the ASEAN Secretariat, 2010
- Beresford et al., 2004, "The Macroeconomics of the Poverty Reduction in Cambodia", UNDP.
- Berg Andrew et Borensztein Eduardo, 2000, "The Dollarization Debate", *Finance and Development*. A quaterly magazine of IMF, 37(1)
- Berg Andrew, March 2002, "Dollarization", *IMF Research Bulletin*, Volume 3, Number 1. AB2002DO.
- Blanc Jérôme, "Fongibilités et Cloisonnements de la Monnaie », in : E. Baumann, L. Bazin, P. Ould-Ahmed, P. Phélinas, M. Selim, R. Sobel (dir.), *L'argent des anthropologues, la monnaie des économistes*, Paris : L'Harmattan (Questions contemporaines), 2008, pp. 29-54.
- Blanc Jérôme, 1998, "Les Monnaies Parallèles. Approches Historiques et Théoriques", Thèse doctorat, Université Lumière Lyon 2
- Blanc Jérôme, 2000, "Les Monnaies Parallèles. Unité et Diversité du Fait Monétaire", Paris: L'Harmattan

- Blanc Jérôme, 2002, "Invariants et Variantes de la Souveraineté Monétaire. Réflexions sur un Cadre Conceptuel Compréhensif, Journal Economies et Sociétés - série Monnaie ME, 4 (2002) 193-213, Version 1-17 Avril 2007
- Blanc Jérôme, 2006, "L'Articulation des Monnaies : Questions sur la Fongibilité et la Convertibilité", Texte Présenté lors de la Journée d'Étude "Souveraineté et Espaces Monétaires dans les Améririque", CEPSE/LEPII, Université Pierre Mondès-France Grenoble 2 et MSH
- Blanc Jérôme, dir. 2006, "Exclusion et Liens Financiers : Monnaies Sociales", Rapport 2005-2006. Paris : Economica\
- Blanc Jérôme, Lucdovic Desmedt, Laurent Le Maux, Jaime Marques-Pireira, Peita Ould-Ahmed, Bruno Thérêt, 2011, "La Pluralité Monétaire dans la Théorie Économique"
- Boismery Hervé, 1996, "Substitution Monétaire et Dollarisation : Aspects Socio-Économiques", Economies et Sociétés, Relations Économiques Internationales, Série P. N° 33. HB1996SM
- Buch Claudia M. et Kuckulenz Anja, 2004, "Worker Remittances and Capital Flows to Developing Countries", Centre for European Economic Research Discussion Paper No. 04-31
- Calavan, M., Briguets, S. D., & O'Brien, J., 2004, "Cambodia Corruption Assessment", US: Casals and Associates/USAID.
- Calvo Guillermon A., 1999, "On Dollarization", University of Maryland
- Calvo Guillermon A., et Végh C.A., 1992, "Currency Substitution in Developing Countries", Fonds Monétaire International Working Paper, N. 92/40
- Cambodia Development Resource Institute (CDRI) et ANZ Bank, 2010, "Cambodia Outlook Brief", CDRI N.05
- Cambodia Development Resource Institute (CDRI), 2005, "The Cross Border Economies of Cambodia, Laos, Thailand and Vietnam"
- Cambodia Development Resource Institute (CDRI), 2009, "The Impact of the Global Financial and Economic Crisis on the Poor and Vulnerable in Cambodia", Vol. 13, Issue 3
- Cambodia Development Resource Institute (CDRI), 2010, "Annual Development Review"
- Cambodia Economic Forum (CEF), January 2006, «A SWOT Analysis of the Cambodian Economy», UNDP Funded Discussion Paper.
- Cambodian Development Research Institute (CDRI) and ANZ Royal Bank, 2009, "Cambodia outlook Brief".
- Cambodian Rehabilitation and Development Board (CRDB) of the Council for the Development of Cambodia (CDC), 2007, "Cambodia Aide Effectiveness Reports 2007"

- Cambodian Rehabilitation and Development Board (CRDB) of the Council for the Development of Cambodia (CDC), 2008, "Cambodia Aide Effectiveness Reports 2008"
- Cambodian Rehabilitation and Development Board (CRDB) of the Council for the Development of Cambodia (CDC), 2010, "Cambodia Aide Effectiveness Reports 2010"
- Cambodian Development Cooperation Forum (CDCF), 2010, "Third Cambodia Development", Cambodian Rehabilitation and Development Board (CRDB) of the Council for the Development of Cambodia (CDC)
- Cambodian Rehabilitation and Development Board (CRDB) of the Council for the Development of Cambodia (CDC), 2011, "Cambodia Aide Effectiveness Reports 2011"
- Canto Victor A., Décembre 1985, "Monetary Policy, Dollarization, and Parallel Exchange Rate: the case of the Dominican Republic, *Journal of International Money and Finance*, Volume 4, Issue 4, Pages 507-521
- Capannelli Giovanni et Menon Jayant, 2010, "Dealing with Multiple Currencies in Transitional Economics. The Scope for Regional Cooperation in Cambodia, the Lao People's Democratic Republic, and Vietnam", Asian Development Bank
- Caroline Freund et Nikola Spatafora, 2008, "Remittances, transaction costs, and informality", *Journal of Development Economics* 86 (2008) 356–366
- Cartelier Jean, 1996, "Monnaie", Flammarion, Paris
- Cartelier Jean, 2001, "Monnaie et Marché. Un Point de Vue Critique sur les Mondèles de Prospection", *Revue économique*, 52, N. 5, Pages 993-1011
- Cambodian Development Research Institute, 2010, "Annual development review 2009-2010".
- Chaize, L. 1994, 1996, "La Dédollarisation", Banque Nationale du Cambodge
- Chaize, L., 1995, "Échange de Billets, Dédollarisation, Incidences sur la Masse Monétaire", Banque Nationale du Cambodge
- Chaize, L., 1996, "La Politique Monétaire au Cambodge Face à la Dollarization de l'Économie", Banque Nationale du Cambodge
- Chaize, L., Janvier 1997, "La Circulation de Cash-Dollar au Cambodge", Banque Nationale du Cambodge
- Chan Sophal, 2009, "Costs and Benefits of Cross-Country Labour Migration in the GMS: Cambodia Country Study", CDRI Working Paper Series No. 44
- Chap Satharith, 2010, « Trade, FDI, and ODA between Cambodia and China/Japan/Korea” dans *Economic relations of China, Japan and Korea with Mekong River Basin Countries*, BRC Research N.3, Bangkok Research Center.
- Coe David T., Lee Il Houng, et al., 2006, "Cambodia : Rebuilding for a Challenging Future", IMF HC442.C35

- Cohen Benjamin J., 1998, "The Geography of Money, Ithaca, London: Cornell University Press
- Cohen Benjamin J., 2002, "Monetary Instability : Are National Currencies Becoming Obsolete?", Center for Globalization and Policy Research School of Public Policy and Social Research UCLA Working Paper N.5
- Cohen Benjamin J., 2004, "The future of Money", Princeton: Princeton University Press
- Cuyvers Ludo, Joseph Plasmans, Reth Soeng, Daniel Van den Bulcke, 2008, "Determinants of Foreign Direct Investment in Cambodia: country-specific factor differentials", Centre for ASEAN Studies Discussion paper No 61
- De Carné Louis, 1872, "Voyages sur le Mékong (1866-68)", Paris, Dentu Ed.; Réédité par White Lotus, Bangkok, 2000
- De Freitas Miguel Lebré, 2003, "Revising Dollarization Hysteresis: Evidence from Bolivia, Turkey and Indonesia", Universidade de Aveiro and NIPE
- Depaugne B., 1987, "Les maîtres du Fer et du Feu", Thèse Doctorat EHESS
- Dilip Ratha, 2003, "Workers' Remittances: An Important and Stable Source of External Development Finance", Global Development Finance
- Duchêne Gérard et Goujon Michaël, 2006, « La dé-dollarisation : les expériences du Vietnam, de l'Ukraine et de la Roumanie », Revu d'études comparatives Est-Ouest, 2006, Vol. 37, N.1.
- Duma, 2011, «Dollarization in Cambodia: causes and policy implications», Fonds Monétaire International, Working Paper N. 11/49.
- Ear Sophal, 2006, "The Political Economy of Aid, Governance, and Policy-Making: Cambodia in Global, National, and Sectoral Perspectives", Thèse de Doctorat, UNIVERSITY OF CALIFORNIA, BERKELEY
- Economic Institute of Cambodia (EIC), 2005, "Cambodia Economy Watch", Phnom Penh.
- Economic Institute of Cambodia (EIC), 2006, "Assessment of Corruption in Cambodia's Private Sector, Economic", Phnom Penh.
- Economic Institute of Cambodia (EIC), 2007, "Cambodia Economy Watch", Phnom Penh.
- Economic Institute of Cambodia (EIC), 2008, "Cambodia Economy Watch", Phnom Penh.
- Ek Chanboreth et Sok Hach, 2008, "Aid Effectiveness in Cambodia", Wolfensohn Center for Development Working Paper 7
- Feige Edgar L., 2002, "The Dynamics of Currency Substitution, Asset Substitution and De Facto Dollarization and Euroization in Transition Countries", the Croatian National Bank
- Feige Edgar L., Faulend Michel, Sonje Velimir et Sosic Vedran, 2000, "Currency Substitution, Unofficial Dollarization and Estimates of Foreign Currency Held Abroad : THE Case of

Croatia", Paper prepared for the Sixth Dubrovnik Economic Conference, Dubrovnik 28-29 June 2000

Fischer Stanley, 1982, "Seingorage and the Case for a National Money", Journal of Political Economy, Vol. 90, N.2

Fleming Mark, Duflos Eric, Latortue Alexia, Nayar Nina et Roth Jimm, 2005, "Country-Level: effectiveness and accountability review", Consultative Group to assist the poor.

Fonds Monétaire International (FMI), 1998, "Cambodia: Recent Economic Developments", IMF Staff Report N. 98/54

Fonds Monétaire International (FMI), 2003, "Cambodia: Selected Issues and Statistical Appendix", IMF Country Report N. 03/59

Fonds Monétaire International (FMI), 2004, "Cambodia: Selected Issues", IMF Staff Report N. 04/331

Fonds Monétaire International (FMI), 2007, "Cambodia: Selected Issues and Statistical Appendix", IMF Country Report N. 07/291

Fonds Monétaire International (FMI), 2009, "Cambodia: 2009 Article IV Consultation-Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion; and Statement by the Exective Director", IMF Country Report N. 09/325

Fonds Monétaire International (FMI), 2011, "Cambodia: 2010 Article IV Consultation-Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion; and Statement by the Exective Director", IMF Country Report N. 011/45

Fonds Monétaire International (FMI), Mars 1997, "Cambodge-Recent Economic Developments", FMI Staff Country Report, N. 97/9

Fonds Monétaire International (FMI), Octobre 2000, "Cambodia : Selected Issues", IMF Staff Country Report N. 00/135

Fonds Monétaire Internationale (FMI) et Banque Mondiale (BM), 2010, "Financial Soundness Assessment Program (FSAP) : Cambodia", Rapport non-publié

Food and Agriculture Organization of the United Nations, 2010, "GLOBAL FOREST RESOURCES ASSESSMENT 2010", Country Report N. FRA2010/034

Forest Alain et Mak Phoeun, 1994, "Le temps d'Angkor dans les Chroniques Royales Khmères", L'Harmanttan

French Lindsay, 2002, "From Politics to Economics at the Thai-Cambodian Border: Plus Ça Change...", International Journal of Politics, Culture and Society, Vol. 15, N. 2 Spring 2002

- Gardère Jean-Daniel et Schwerer Alban, 2006, "DOSSIER SPÉCIAL TOURISME : LE CAMBODGE, ANGKOR ET LE TOURISME", LA LETTRE DU CAMBODGE, N.1, DÉCEMBRE 2006
- Gardère Jean-Daniel, 2009, "Monnaie et Souveraineté. Éléments pour une histoire économique, politique et monétaire du Cambodge", Banque Nationale du Cambodge,
- Giovannini, Alberto et Bart Turtelboom, 1994, "Currency Substitution," in F. Van der Plog, ed., *The Handbook of International Macroeconomics* (Cambridge, Massachusetts: Blackwell), Pages 390-436
- Gouvernement Royal du Cambodge, 2001, "Financial Sector Blue Print for 2001-2010"
- Gouvernement Royal du Cambodge, 2006, "Financial Sector Development Strategy for 2006-2015"
- Gouvernement Royal du Cambodge, 2006, "Financial Sector Development Strategy for 2010-2020"
- Gouvernement Royal du Cambodge, 2010, "Policy on Labour Migration for Cambodia"
- Grand Margaux, 2007, "Tourisme", la Lettre du Cambodge N. 9
- Groslier Bernard-Philippe, 1956. "*Angkor, hommes et Pierres*", Arthaud, Paris
- Groslier Bernard-Philippe, 1958, "Angkor et le Cambodge au XVIème siècle d'après les Sources Portugaises et Espagnoles", *Annales du Musée Guimet*, PUF, Paris
- Groslier Bernard-Philippe, 1979, "Pour une géographie historique du Cambodge", *Cahiers de l'Outre-Mer*, Bordeaux
- Groslier Georges, 1921, « Recherches sur les Cambodgiens d'après les textes et les monuments depuis les premiers siècles de notre ère » compléter la référence et la placer en bibliographie (de même pour les autres références)
- Guidotti P.E. et Rodriguez C.A., 1992, "Dollarization in Latin America, Gresham's Law in Reverse?", *Fonds Monétaire International Staff Papers*, 39,3
- Guonan Ma, 2012, "Regional Currencies for Trade Settlements in East Asia", in "Seminar on Using Local Currencies for the Regional Trade Settlement, 4 March 2012", Siem Reap
- Hang, Chuon Naron, 2010, "L'Économie du Cambodge: Nouvelles Frontières du Développement Socio-Économique», Phnom Penh.
- Hayek Friedrich, 1978, "Denationalisation of Money. The Argument Refined. An Analysis of the Theory and Practice of Concurrent Currencies". ?
- Hayek Friedrich, 1979, "Toward a Free Market Monetary System", *Journal of libertarian Studies*

- Hee-Ryang Ra, 2011, « Two economic crisis and dollarization for Cambodia, Laos and Vietnam », Department of International Trade, College of Commerce & Business, Pusan University of Foreign Studies (PUFS).
- Helleiner Eric, 1997, "One nation, one Money", Arena Working Paper, WP97/17
- Helleiner Eric, 1999, "Historicizing Territorial Currencies: Monetary Space and the Nation-State in North America", *Journal Political Geography* 18, 309-339
- Helleiner Eric, 2003, "The Making of National Money. Territorial Currencies in Historical Perspective", Ithaca, London: Cornell University Press
- Hirohata Nobuo, 2002, "Cambodian Economy", in "The Kingdom of Cambodia : From Reconstruction to Sustainable Development", Country Study for Japan's ODA to the Kingdom of Cambodia 2002
- Homi Kharas, 2007, "Trend and Issue in Development Aid", Wolfarsohn Center for Development Working Paper 1
- Honohan Patrick, 2007, "Dollarisation and Exchange Rate fluctuations", Banque Mondiale Research Working Paper N. 4172
- Hossein Jalilian and Glenda Reyes, 2010, "Global Financial Crisis Series, Paper 14 : Cambodia phase II", Cambodia Development Resource Institute (CDRI)
- Houng Lee, 2004, « Exchange Rate Policy and De-Dollarisation » in « Cambodia : Selected Issues », in "Cambodia: Selected Issues", IMF Staff Report N. 04/331, 2004
- Huot Kosenara, July 2002, « Research Essay on Dollarization in Cambodia », The Australian National University.
- Huot Pum, 2008, « la dollarisation et ses conséquences économique : le Cas du Cambodge », thèse de doctorat, Université Lumière Lyon 2
- Im, Dabadie et Nguon, 2007, "Dollarization in Cambodia", Banque Nationale du Cambodge Review
- Institut National de Statistiques du Ministère Cambodgien du Plan, 2009, « General Population census of Cambodia 2008 ».
- Institut National de Statistiques du Ministère Cambodgien du Plan, 2010, "The Socio-Economic Survey 2010"
- International Organization for the Migration (IOM), 2006, "Review of Labor Migration Dynamics in Cambodia"
- Ishi Kotaro, 2009, "Essay II: Money Demand, Dollarization, and High Inflation in Cambodia", in "Three Essays on Empirical Macroeconomics", Thèse de Doctorat, 2009, The George Washington University

- Ize Alain et Levy-Yeyati E., 1998, "Dollarization of Financial Intermediation: Causes and Policy Implication", Fonds Monétaire International Working Paper, 98/28
- Ize Alain et Powell Andrew, 2004, "Prudential Responses to De Facto Dollarization", Fonds Monétaire International, IMF Working Paper 04/66
- Ize Alain, Nicolo Gianni de et Honohan Patrick, "Dollarization of the Banking System: Good or Bad?", Fonds Monétaire International IMF Working Paper 03/146
- Ize, Alain et Levy-Yeyati E., 2005, dans son article, « Financial De-Dollarization : It is for Real ? », Fonds Monétaire International, IMF Working Paper N. 187,
- Jelen, Janos et Gabor Hegyi , 1991, "Angkor and the Khmers", Budapest; Gutenberg.
- Jin Sato, Hiroaki Shiga, et al., 2011, "“Emerging Donors” from a Recipient Perspective: An Institutional Analysis of Foreign Aid in Cambodia", World Development Vol. 39, No. 12, pp. 2091–2104, 2011
- Kaid, A. and N. Swindi (2009), "Is There a Relationship between the Openness of an Economy and Economic Growth? A Descriptive Study on the ASEAN 10", Business e-Bulletin, 1(1), 15-24.
- Kang Chandarot et Liv Dannet, 2009, "Living Wage Survey for Cambodia's Garment Industry", Cambodia Institute of Development Study
- Keam Reat Viseth, 2001, «Currency Substitution and Financial Sector Developments in Cambodia, The Australian National University Working Papers 01-4.
- Kem Reat Viseth, 2002, "Currency Substitution and Exchange Rate Volatility in Cambodia", Thèse de Doctorat, Australian National University
- Kessy Panteleo, 2011, "Dollarization in Tanzania: Empirical Evidence and Cross Country Experience", International Growth Center Working Paper 11/0251
- Keynes John Maynard, "Essais sur la Monnaie et l'Économie", Traduction et présentation de Michel Panoff, 1971, Éditions Payot
- Keynes John Mynard, 1930, "ATreatise on Money: The Pure Theory of Money", dans "The Collected Writings of John Maynard Keynes, MacMillan, Londres, T.V., 1971
- Khieu Samphan, "L'Économie du Cambodge et ses Problèmes d'Industrialisation", Thèse de Droit Paris
- Khin Maung Nyunt, Avril 2010, "Way to Promote Trade Settlement Denominated in Local Currencies in East Asia : Case Study of Thailand", in "Ways to Promote Trade Settlement Denominated in Local Currencies in East Asia: Case Studies of Thailand, Singapore, EU and NAFTA, the ASEAN Secretariat, 2010
- Khou Vouthy et Paul Jean-Jacques, Mars 2011, "La Circulation Monétaire au Cambodge", Colloque Francophone International Le Cambodge : Un pays, des Monnaies, Université Royale de Droit et des Sciences Économiques, Phnom Penh

- Kim Chung-Han et Lim Hyoung-Seok, 2012, "Developing Regional Trade Settlement System in ASEAN+3", in "Seminar on Using Local Currencies for the Regional Trade Settlement, 4 March 2012", Siem Reap
- Kim Vada (Directeur Général Adjoint, de la Banque Nationale du Cambodge), 2010, « Cambodia Microfinance : Development and Challenges », Country Paper
- Kinwon Kang, 2005, « Is Dollarization Good for Cambodia? », Issue 1, Cambodian Economic Review.
- Knapp Georg Friedrich, 1924, "The state Theory of Money", Londres, Macmillan
- Kokennyne, A., J. Ley, et R. Veyrune, 2010, « Dedollarization, » Fonds Monétaire International, IMF Working Paper N. 188
- Kuroda, A., 2005, "Complementarity among Monies from Asian Historical Viewpoints: Nature of Currency as Vicous, Non-Uniform, and Separabl Streams", International Conference "What Makes Money? Projects of Complementary Currencies in Past and Present", Boccono University, Malano, 22-23 Novembre 2005
- L'Organisation des Nations-Unis pour l'Alimentation et l'Agriculture, 2010, Rapport Principal sur "Evaluation des Ressources Forestières Mondiales"
- Land Anthony et Morgan Peter, 2008, "Technical Cooperation for Capacity Development in Cambodia. Making the System Work Better", the Cambodian Development of Cambodia (CRDB/CDC)
- Lee, Abdelati, Munoz, Nakamura et Rendak, 2004, « Camboia : Selected issues », in "Cambodia: Selected Issues", IMF Staff Report N. 04/331, 2004
- Levine Ross et Maria Carkovic, 2001, "How Much Bang For The Buck? Mexico and Dollarization", Journal of Money, Credit and Banking, Vol. 33, N. 2, Part 2 : Global Monetary Integration (May 2001), 339-363
- Liang, Hong, Th. Rumbaugh, K. Ishi, et A. Masuda, 2000, "Cambodia: Selected Issues", IMF Staff Country Report N°00/135
- Lim Hank et Tay Yi Xu Kester, Avril 2010, "Currency Invoicing of Foreign Trade : Case Study of Singapore", in "Ways to Promote Trade Settlement Denominated in Local Currencies in East Asia: Case Studies of Thailand, Singapore, EU and NAFTA, the ASEAN Secretariat, 2010
- Mak Phoeun, 1981, "Chroniques royales du Cambodge (de 1594 à 1677)", l'École Française d'Extrême-Orient (EFEO)
- Mak Phoeun, 1995, "Histoire du Cambodge de la fin du 16ème au début du 18ème siècle", Presses de l'École Française d'Extrême-Orient
- Marciniak et Sa, 2002, "Cambodia: Integration and Competitiveness Study; Part, Macroeconomic Assesment", Ministry of Commerce, pp. 1-24.

- Margaet Slocomb, 2003, "The People's Republic of Kampuchea", Silkwork Books, Chiang Mai
- Margaret Slocomb, 2010, "An Economic History of Cambodia in the Twentieth Century", NUS Press,
- Mark, K., 1859, "Critique de l'Économie Politique", in Oeuvres I, Économie I, Paris, Gallimard (La Pléïde), 1963 : 277-452
- Matt Davies, Ntamatungiro et Luengnaruemitchai, P., 2007, « Cambodia: Selected issues and statistiques Appendix », Fonds Monétaire International, IMF country report N. 07/291.
- May Tola , Dec. 1, 1995, "Dedollarization", Banque Nationale du Cambodge
- May Tola, Nov. 22, 2004, "The National Bank of Cambodia: My Experience in Building an Institution", Banque Nationale du Cambodge
- Melvin M., 1998, "The Dollarization of Latin American as a Market-Enforced Monetary Reform: Evidence and Implication", Economic Development and Cultural Change, Vol. 36, N. 3
- Menon Jayant, 2008, "Cambodia's Peristent Dollarization : Causes and Policy Option", Woring Paper Series on Regional Economic Integration, N. 19, Asian Development Bank
- Menon, Jayant, 1998, "De-Dollarizing Cambodia", Cambodia Development Review, Volume 2, Issue 2
- Michel Dabadie, 2006, « La Dollarisation de l'Économie Cambodgienne », Texte présenté à la Conférence "Dollariation au Cambodge" à l'Université Royale de Droit et des Sciences Économiques de Phnom Penh
- Ministère Cambodgien du Tourisme, "Tourism Statistics Annual Report Book 2007"
- Ministère Cambodgien du Tourisme, "Tourism Statistics Annual Report Book 2008"
- Ministère Cambodgien du Tourisme, "Tourism Statistics Annual Report Book 2009"
- Ministère Cambodgien du Tourisme, "Tourism Statistics Annual Report Book 2010"
- Ministère Cambodgien du Tourisme, "Tourism Statistics Annual Report Book 2011"
- Ministère Cambodgien du Traivail et de la Formation Professionnelle, 2008, "L'Annonce du Changement du Niveau du Salaire Minimum des Ouvrier du Secteur de Confection du Cambodge"
- Ministère Cambodgien du Traivail et de la Formation Professionnelle, 2010, "L'Annonce du Changement du Niveau du Salaire Minimum des Ouvrier du Secteur de Confection du Cambodge"

- Moura Jean, 1883, "Le Royaume du Cambodge", 3 tomes, Éd. Ernest Leroux, Paris; Réédité par Valéase, Phnom Penh, 2007
- Mourmouras Alex et Russell Steven H., 2000, "Smugling, Currency Substitution and Unofficial Dollarization : A Crime Theoric Approach", IMF Working Paper WP/00/176
- Mundel, Robert A., 1961, "A Theory of Optimal Currency Areas", American Economic Review, Vol. 51, Pages 657-665
- Naomi Hatsukano, 2010, "L'Industrial Location in Cambodia - Industrial Policy and Economic Statistics", Kuroiwa ed., Special Statistics and Industrial Location in CLMV: An Interim Report, Chosakankyu Hokokusho, IDE-JETRO, 2010
- Hang Chuon Naron, 2005, "L'Économie du Cambodge", Le Ministère Cambodgien de l'Économie et des Finances, Phnom Penh
- Hang Chuon Naron, 2008, "Le Système Monétaire et le Cadre Général de la Politique Monétaire au Cambodge", Le Ministère Cambodgien de l'Économie et des Finances, Phnom Penh.
- Hang Chuon Naron, 2010, "Macroéconomie du Cambodge", Le Ministère Cambodgien de l'Économie et des Finances
- Natsuda Kaoru, Goto Kenta et Thoburn John, 2009, "Challenges to the Cambodian Garment Industry", Ritsumeikan Center for Asia Pacific Studies (RCAPS) Working Paper No. 09-3
- Nomura Research Institute (NRI), Novembre 2009, "Assistance for Developing Bond Markets : Phase V for Cambodia", Discussion for Drafting Recommendations, Phnom Penh
- Nomura Research Institute (NRI), 2011, "Les Rapports de Missions (1er, 2ème et 3ème) dans le Projet « The ASEAN Secretariat's Technical Assistance » pour « Developing Bond Market in Cambodia », 2011
- OCDE, 2006, "International Migrant Remittances and their Role in Development", International Migration Outlook: SOPEMI 2006 EDITION
- Oh John Junggun, 2012, "Ways to Enhance the Role of Regional Currency for Trade Settlement in East Asia", in "Seminar on Using Local Currencies for the Regional Trade Settlement, 4 March 2012", Siem Reap
- Olaf Unteroberdoerster, 2004, "Banking Reform in the Lower Mekong Countries", IMF Policy Discussion Paper PDP/04/5
- Oomes N., 2003, "Network Externalities and Dollarization Hysteresis: The case of Russia", Fonds Monétaire International Working Paper, 03/96
- Organisation Internationale pour les Immigrés (IOM), 2006, "Review of Labour Migration Dynamics in Cambodia".

- Ponsot Jean-Francois, 2002, 2003, "La Dollarization : Une Interprétation Institutionnaliste et Macroéconomique", Forum de la Régulation 2003
- Prasso, S., 2001, "The Riel Value of Money : How the World's Only Attempt to Abolish Money Has Hindered Cambodia's Economic Development," Asia Pacific Issues N. 49, East-West Center
- Prud'homme Rémy, 1969, "L'Économie du Cambodge", Collection "Tiers Monde" PUF, Paris
- Quarles Brownes, "The trade of the English East India in Cambodia 1651-1656", Journal of the Royal Asiatic Society, Londres, 1962.
- Rennhack Robert and Nozaki Masahiro, 2006, "Financial Dollarization in Latin America", IMF Working Paper WP/06/7
- Rumbaugh, Ishi, Liang et Masuda, 2000, «Dollarization and the Monetary Regime», in "Cambodia : Selected Issues", Fonds Monétaire International, IMF Staff Country Paper N. 00/135
- Rungcharoenkitkul Phurichai, 2012, "Modeling with Limited Data : Estimating Potential Growth in Cambodia", IMF Working Paper, WP/12/96
- Sahay R. et Végh C., 1995, "Dollarization in Transition Economies: Evidence and Policy Implications", IMF Working Paper, 95/96
- Salama Pierre, 1989, "La Dollarisation", Paris, La Découverte
- Schneider, F., 2004, "The Size of the Shadow Economies of 145 Countries all over the World: First Results over the Period 1999 to 2003," IZA Discussion paper N. 1431.
- Servet Jean Michel, Théret Bruno et Yildirim Zeynep, 2008, "Universalité du Fait Monétaire et Pluralité des monnaies: de la Confrontation Coloniale à la rencontre des Sciences Sociales", dans : Eveline Baumann, Laurent Bazin, Pepita Ould-Ahmed et al. (Eds.), "L'argent des Anthropologues, la Monnaie des Économistes, Collection : Questions Contemporaines", Série "Globalisation et Sciences", Paris: L'Harmattan
- Shinichi Watanabe, 2007, "De Facto Dollarization and Its Effects on Financial Development and Economic Growth of Cambodia, Lao PDR and Vietnam", the Conference: "Policy Options and Challenges for Developing Asia—Perspective from the IMF and ASia", the International Monetary Fund (IMF) and Japan Bank for International Cooperation (JBIC)
- Sompop Manarungsan, 2010, "Thailand's Trade Relations with GMS and CLMV." Dans "Japan and Korea with Mekong River Basin Countries", édité par Mitsuhiro Kagami, Bangkok Research Center, Research Report N. 3
- Takeshi Kurihara, 2012, "Using Japanese Yen for Trade Settlements; Japan's Experiences for Capital Account Liberalization", in "Seminar on Using Local Currencies for the Regional Trade Settlement, 4 March 2012", Siem Reap

- Tang Xingyu, 2012, "Cross-Border Use of Renmenbi (RMB)", in "Seminar on Using Local Currencies for the Regional Trade Settlement, 4 March 2012", Siem Reap
- Théret Bruno, 2007, "La Monnaie Dévoilée par ses Crises, Crises Monétaire d'hier et d'aujourd'hui", Volume 1 et 2, Paris : Éditions de l'EHESS
- Théret Bruno, Avril 2003, "La Dollarisation : Polysémie et Enflure d'une Notion", Critique Internationale N. 19
- Théret Bruno, Mars 2011, "Table Ronde : Quelle Route pour la Rerielisation?", Colloque Francophone International Le Cambodge : Un pays, des Monnaies, Université Royale de Droit et des Sciences Économiques, Phnom Penh
- Thornton Daniel L., Décembre 1989, "The Effect of Unanticipated Money on the Money and Foreign Exchange Markets, Journal of International Money and Finance, Volume 8, Issue 4, Pages 573-587
- Toshinori Doi, 2003, "Banking Sector Reform and Financial Intermediation", in "Rapport du Fonds Monétaire International, 2003, "Cambodia: Selected Issues and Statistical Appendix », IMF Country paper N. 03/59
- Toshiyasu Kato, Long Vou Piseth, Be Kalyanna et Chan Sophal, 1997, "Coping with the Currency Crisis: A Survey of Five Phnom Penh Markets, 15-17 July 1997", SPECIAL REPORT, Cambodia Development Resource Institute
- Trejos Alberto, 2003, "International Currencies and Dollarization", the Conference "The Future of Central Banking.", Cambridge University Press.
- United States Agency for International Development (USAID), 2006, "Cambodia Garment Industry Workforce Assessment"
- Wicks Robert S., 1992, "Money, Market, and Trade in Early Southeast Asia. The Development of Indigenous Monetary Systems to AD 1400", New York, Cornell University, Ithaca Southeast Asia Program (SEAP)
- Wood Megan Epler et Leray Thaïs, 2005, "Corporate Responsibility and the Tourism Sector in Cambodia", Foreign Investment Advisory Service (FIAS)
- Zamaroczy Mario de et Sa Sopanha, 2003, «Economic Policy in a Highly Dollarization Economy, the Case of Cambodia», IMF Occasional Paper 219.
- Zamaróczy Mario de et Sa Sopanha, 2002, "Macroeconomic Adjustment in a Highly Dollarized Economy", IMF Working Paper N. 92
- Zhou Dagan, "Mémoires sur les Coutumes du Cambodge", Version traduite et commentée par Paul Pelliot, Bulletin École Française d'Extrême-Orient (EFEO), Tome II, 1902
- Zoryan Hakob, 2005, "The Measurement of Co-Circulation of Currencies and Dollarization in the Republic of Armenia", The European Journal of Comparative Economics, Vol. 2, n. 1, pp. 41-65

## Web Site

- National Bank of Cambodia : [www.nbc.org.kh](http://www.nbc.org.kh)
- World Bank: [www.worldbank.org](http://www.worldbank.org)
- Asian Development Bank : [www.adb.org](http://www.adb.org)
- Cambodia Development Resource Institute (CDRI): <http://www.cdri.org.kh/>
- Cambodian Rehabilitation and Development Board (CRDB) of the Council of the Development of Cambodia (CDC): <http://www.cdc-crdb.gov.kh/>
- International Monetary Fund : [www.imf.org](http://www.imf.org)
- Ministry of Commerce : [www.moc.gov.kh](http://www.moc.gov.kh)
- Ministry of Economy and Finance: [www.mef.gov.kh](http://www.mef.gov.kh)
- Ministry of Land Management, Urban Planning and Construction: [www.mlmupc.gov.kh](http://www.mlmupc.gov.kh)
- Ministry of Planning : [www.mop.gov.kh](http://www.mop.gov.kh)
- Ministry du Tourism : [www.tourismcambodia.org](http://www.tourismcambodia.org)
- Organisation for Economic Co-operation and Development : [www.oecd.org](http://www.oecd.org)
- Securities and Exchange Commission of Cambodia: [www.secc.gov.kh/](http://www.secc.gov.kh/)

There have been numerous studies on dollarization during the last two decades as dollarization has been increasingly occurring in many developing and emerging economies. There are also two opposing views among scholars with unequal popularity. One argues against dollarization (most popular) while the other is for dollarization (less popular). In fact, both scholars seemed to agree that successful de-dollarization is an ideal option but very tricky to achieve. Dollarization is also commonly recognized as a hysteresis phenomenon.

Based on the survey conducted in 2010 on micro data to analyze in detail the behavior of economic agents in Cambodia, this book, which is a doctoral dissertation defended on June 2013 with the grade of Excellent Cum Laude in France, tries to explain that dollarization is not a pathological phenomenon. Dollarization is a system that could work as long as the macroeconomic stability is well preserved. However, it exposes the economy to external risks and also imposes constraints on the conduct and effectiveness of monetary policy. This book also concludes that dollarized countries could coexist with dollarization and should take advantage from it; nevertheless, they ought to gradually and carefully promote its local currency to enhance the resilience of the economy as well as to support economic and financial policy objectives.