

# Dollarization in Cambodia

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## Executive Summary

Dollarization emerged spontaneously in Cambodia, because public confidence in the riel eroded, following a series of shocks that ranged from the destruction of all infrastructures by the Khmers Rouges, to the subsequent mismanagement of the economy. The lack of public confidence in institutions and in the banking system remains high and dollarization is still in progress, in spite of recent improvements in macroeconomic stability and of measures taken by the authorities to restore confidence. If this trend continues, the country may eventually become fully dollarized. No harsh action should certainly be taken against the use of dollar. However, there is a need to build up a consensus on how to promote the use of the national currency. This paper is one step in that direction.

## Summary

Part I – Dollarization did not result from policy decision, but emerged spontaneously, because confidence of the public was eroded.

1. History of Dollarization
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Part II- Immediate or forced de-dollarization could jeopardize macroeconomic stability; however it is possible to promote the use of the national currency.

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# *Part I – Dollarization Did Not Result from Policy Decision, but Emerged Spontaneously, Because Public Confidence Eroded.*

## 1. History of Dollarization

Dollarization in Cambodia resulted from a series of shocks, experiences and events that eroded public confidence in the capacity of the authorities to maintain the value of the national currency, the Riel.

There were already some amounts of US dollars circulating in Cambodia during the period of the Khmer Republic (1970-1975). However the Riel remained the currency used normally in domestic transactions. The **first shock** occurred from 1975 to 1979, when all financial infrastructures in Cambodia (markets, trade, money, and banking) were systematically destroyed. There was no place for a financial system under the Khmer Rouge<sup>1</sup>. Immediately after they conquered the capital city, the National Bank of Cambodia's headquarters was bombed to the ground<sup>2</sup>.



*This picture of the National Bank of Cambodia's headquarters was taken in January 1979 after the defeat of the Khmer Rouge.*

After the end of the Pol Pot regime, in 1979, commercial transactions were conducted mainly in the form of barter, or using rice and gold and later also Vietnamese dong.

In 1980 the Central Bank was re-established, under the name of the People's Bank of Kampuchea and the Riel was again the country's legal currency. During the 1980s, the People's Bank of Kampuchea

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<sup>1</sup> Initially, the Khmer Rouge leadership had every intention of issuing its own currency and establishing a banking system of its own. In January 1975, new banknotes, printed in China, were brought down the Ho Chi Minh Trail. In May 1975, it was decided that Riels should be put progressively into circulation. Nong Suan was appointed National Bank Chairman; in August he was replaced by Pich Chheang. Supplies of notes were sent to provinces in August 1975, and the new currency was effectively circulated in the Northern Zone, north-west of Kompong Cham. But the Central Committee and Pol Pot himself considered that the question of whether or not to use money concerned the essence of the Khmer Rouge state. On September 19, 1975, the Central Committee of the Communist Party of Kampuchea (CPK) resolved not to issue the new currency, a decision confirmed at the CPK's Fourth Congress four months later (*Pol Pot, the History of a Nightmare*, Philip SHORT, John Murray 2005).

<sup>2</sup> More than a deliberate decision of the regime, the destruction of the National Bank of Cambodia headquarters appears to be due to pillage by men from Easter Zone's headquarters: perpetrators allegedly made off with 200 kilos of gold and then blew up the building to make the theft appear to be the work of gangsters profiting from the confusion (*ibid*).

provided a multitude of services, including acting as the monetary authority, the cashier of the Government, and the only institution providing banking services, such as deposits, loans, and payment instruments.

The use of US dollar (USD) and Thai baht (THB) was restricted by the centrally planned economy. However, confidence in the Riel remained low, given the political structure and the security situation, with the consequence that dollar and baht and above all gold were largely considered as a refuge by Cambodians.

### Dollar Flows and the Start of Dollarization of the Economy

Cambodia was transformed from a planned economy to a market economy in the late 1980s, when its borders started to open to trade and when economic and political relations with western countries resumed.

In 1991-1992, the United Nations Transitional Authority in Cambodia (UNTAC) was one of the largest and most expensive operations in UN history, at a cost of USD 1.7 billion. US dollars flooded the economy, creating a **new shock** against the national currency, which the NBC was not prepared to cope with. Subsequently, the central bank and the unique commercial bank (namely Cambodian Commercial Bank, established in 1991 as a joint venture with Siam Commercial Bank), handled all the UNTAC operations and received growing foreign currency deposits.

This was the start of huge inflows of capital in the Cambodian economy (see chart 1).

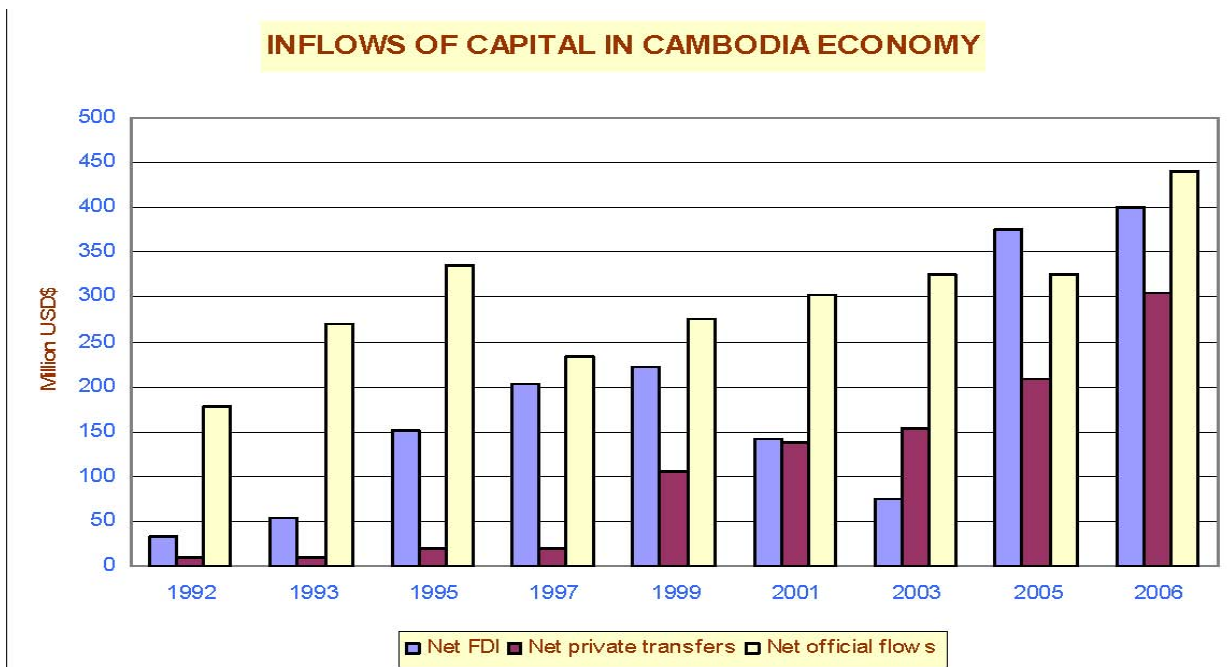


Chart 1-Evolution of Foreign Direct Investment (FDI), and Private and Official Flows

Subsequently, the dollar started to be used as medium of exchange and unit of accounts, and eventually also to store value alongside with the local currency.

## De Facto Currency and Asset Substitution

Dollarization did not result from a policy decision. It emerged because confidence of the public in the national currency and in the government policy was eroded.

In the early 1990s, while tax revenues were very limited due to inactive economy, low profile of the fiscal policy and lack of international support, the budget was mainly financing by central bank, which caused banks' net claims on government be multiplied by four between 1990 and 1993. The money supply (M2) swelled by 241% in 1990, 29% in 1991, and above 200% in 1992 (see chart 2). This resulted in a sharp devaluation of the riel and in a three-digit hyperinflation which created an **additional shock** for potential users of the riel.

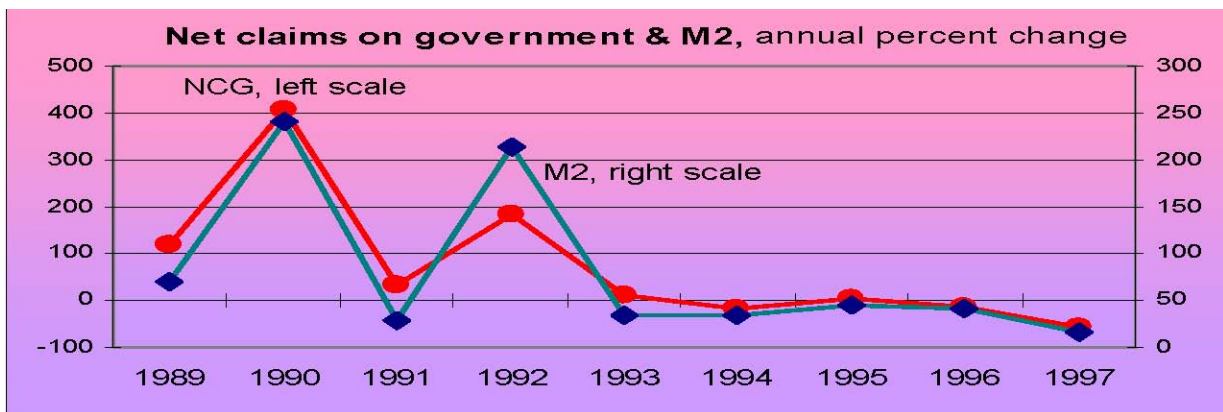


Chart 2-Evolution of Net Claims on the Government (NCG) and Broad Money Supply (M2)

Cambodia has known hyperinflation until 1992. Subsequently, Cambodians suffered from a rapid loss of purchasing power of the riel (see the following chart).

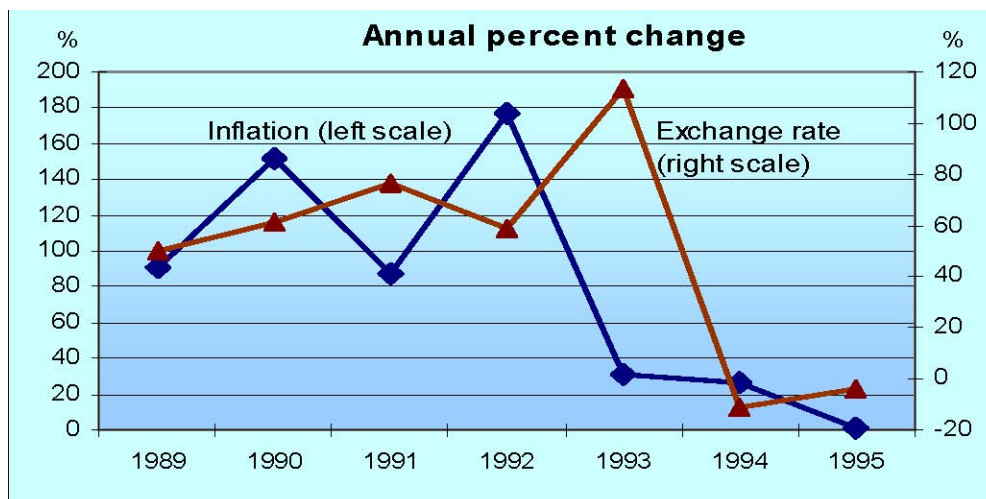
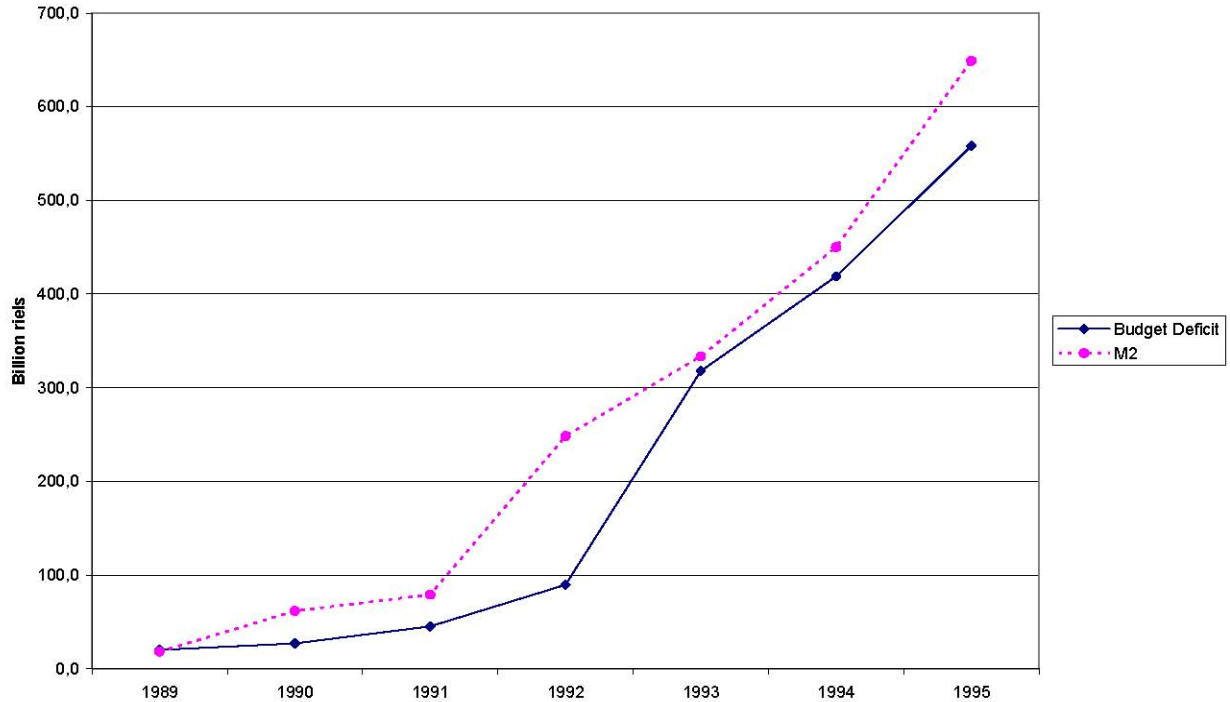


Chart 3-Evolution of Inflation and Exchange Rate

The fiscal performance went also out of control, which resulted in the monetization of fiscal deficit (see the following chart).



*Chart 4-Evolution of Fiscal Deficit and Broad Money Supply (M2)*

All these factors contributed to encourage an extensive use of US dollars. Dollarization became a pervasive phenomenon in Cambodia, like elsewhere in the world, in places where high and variable inflation rates have persisted. With hyperinflation, a large proportion of domestic transactions preferably used hard currency, rather than local currency. People also reacted by partially shifting their asset holdings into foreign currency, which was not subject to the same degree of inflation, in order to protect the value of their assets. The conversion of domestic currency into foreign currency put pressure on the exchange rate, which tended to depreciate.

### **Episode of the Asian Crisis in 1997-1998**

When the Asian crisis erupted, the Cambodian economy was already largely dollarized, whereas holdings of foreign currency were unrestricted. Finally, the effects of the Asian crisis were reduced in Cambodia. However, again, net credit to the government by banks rose by 300% in 1998, which resulted in **another shock**, with a high pressure on the exchange rate, which plunged by 29%. Finally, partial dollarization has imposed some discipline on fiscal operations, but not totally.

## **2. Current Situation**

Cambodia is a highly, but not fully dollarized economy: it is a multiple currency zone, where the Vietnamese dong (VND) coexists with the riel near the border with Vietnam, the Thai baht (THB) circulates in Western provinces, while the dollar of the United States (USD) commands the greatest share in domestic use.

Only 4% of the deposits in banks, and 5% of bank loans, are denominated in riel, as indicated in the following table.

<b>Billion riels End-2006</b>	<b>In Riels</b>	<b>In Foreign Currency</b>	<b>Total</b>	<b>Percentage of riel</b>
Loans	101	3 371	3 472	2,9%
Deposits	186	5 501	5 687	3,3%

*Table 1- Loans and Deposits in Banks as of end-2006*

In addition to the large amount of dollar denominated assets captured by official statistics, an unknown volume of dollars is widely circulating alongside the riel.

### **Be careful with statistics!**

In fact, the actual amount of dollars and other foreign currency denominated bills circulating in Cambodia is unknown. Therefore, we ignore the real figure of the money supply (M2). Statistics published by the Central Bank include only deposits in banks (denominated in both riels and foreign currencies) and bills in circulation (in riels only). Assuming that bills in riels represent only ten percent of the bills in circulation, the money supply is assessed at some USD 4 billion in 2005, instead of USD 1.2 billion, and USD 5.3 billion in 2006, instead of USD 1.7 billion, as indicated in the following table.

<b>Money Supply</b>	<b>billion KHR</b>		<b>million USD</b>	
	<b>2005</b>	<b>2006</b>	<b>2005</b>	<b>2006</b>
Currency outside banks (bills in riels)	1282	1600	313	394
Foreign currency deposits	3589	5196	875	1280
Riel deposits	153	147	37	36
<b>M2 (official statistics)</b>	<b>5024</b>	<b>6943</b>	<b>1225</b>	<b>1711</b>
Rough guess of bills in foreign currency (90% of total bills)	11538	14400	2814	3549
<b>Adjusted M2 (rough guess)</b>	<b>16562</b>	<b>21343</b>	<b>4040</b>	<b>5259</b>

*Table 2- Adjusted Money Supply*

There is no evidence that the above assumption is realistic and that bills denominated in dollars, baths and dong actually represent 90 percent of the bills in circulation. However, a comparison with other countries shows that this assumption does not lead to absurd figures.

Assuming that 90 percent of the bills in circulation are denominated in foreign currency, the adjusted figure for M2 represents 8 months of the Cambodian GDP, as indicated in the following table. In neighbor countries, this figure is higher: M2 represents 9 months of GDP in Vietnam, 11 months in Thailand and 14 months in Singapore. In the Euro Zone, M2 represents 9 months of GDP.

Eventually, this tends to comfort the above assumption that some 90 percent of the bills in circulation are not captured in the monetary statistics.

2005	Cambodia (billion USD)	Vietnam (bUSD)	Thailand (bUSD)	Singapore (bUSD)	Euro Zone (bUSD)
GDP	6.2	52.8	176.6	116.8	9942
Currency outside banks (total bills)	3.1*				725
Bills / GDP	50%				7%
<b>Bills in months of GDP</b>	<b>6</b>				<b>1</b>
M2	4.0	40.9	160.1	132.1	7556
M2 / GDP	65%	77%	91%	113%	76%
<b>M2 in months of GDP</b>	<b>8</b>	<b>9</b>	<b>11</b>	<b>14</b>	<b>9</b>

\* Rough guess

Table 3- Adjusted Money Supply: Comparison with Foreign Countries

### Respective Use of Riel and Dollar

The riel is used by the Government and the National Bank of Cambodia for paying their employees, and is preferred by the general public for small transactions. It is also more in use in rural areas.

The dollar serves all functions of money, since it is used as:

- a valuation instrument (prices being often indicated in dollar),
- a settlement instrument (transactions being mostly settled in dollar cash), and
- a saving instrument.

The dollar is used by both residents and non residents. Foreign firms, NGOs, agencies and embassies spend in dollars, including paying their employees.

Banks also prefer to carry out transactions in foreign currency. In December 2006, out of 18 banks, 8 did not accept deposits in riels, although the riel was declared by law as the country's legal tender. Most loans were also denominated in dollars (97%). Out of 18 banks, only 4 granted loans in riels, for limited amounts.

Most banks also had their capital denominated in dollars.

### The Memory of Hyperinflation and Devaluation is still vivid.

In theory, the anticipated yield on riel denominated investments depends not only on the interest rate (which remains high) but also on the anticipated exchange rate against the dollar expected to prevail when the investment matures, plus a risk premium.

Average 19 banks	Loans in riels					Loans in USD				
	Daily	1 month	3 months	6 months	12 months	Daily	1 month	3 months	6 months	12 months
Dec 2006		23.04%	23.02%	23.04%	23.07%		17.18%	16.99%	17.03%	16.67%
Interest rate										

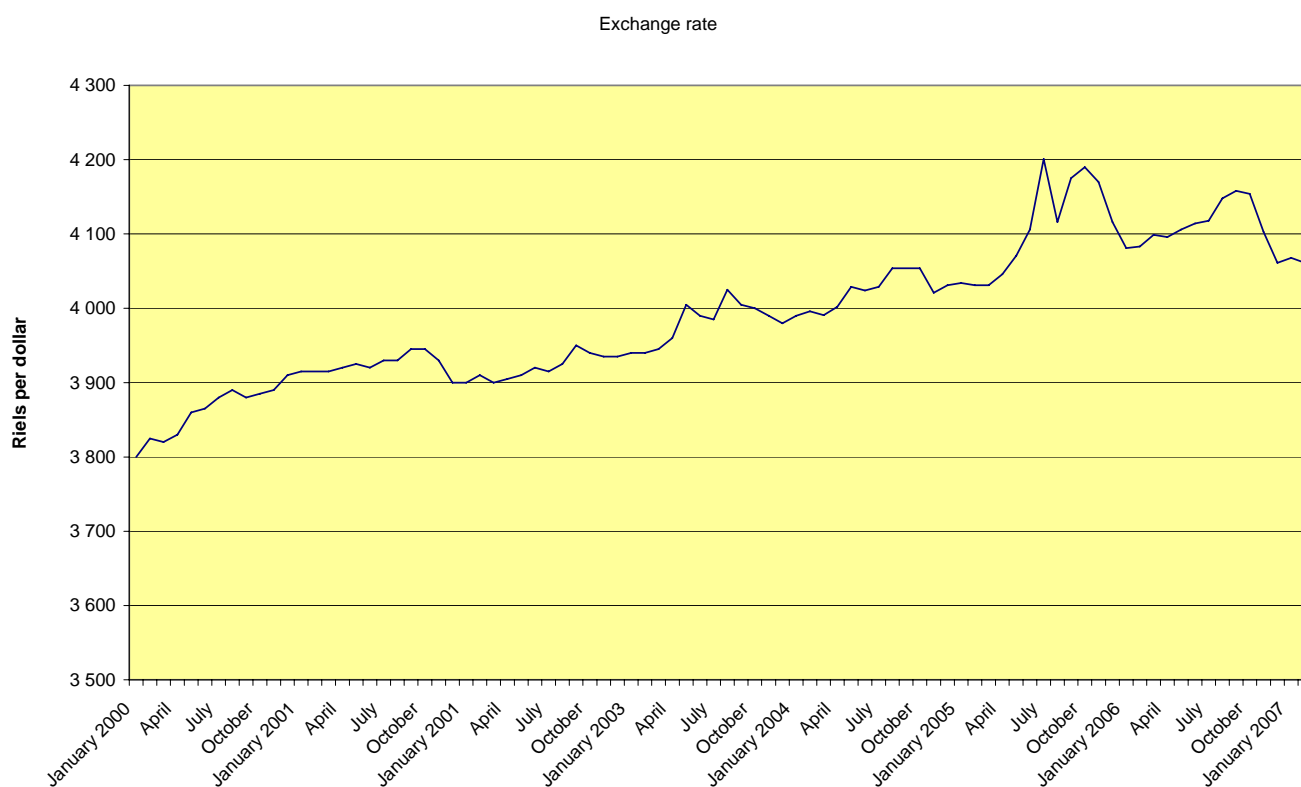


Average 19 banks	Deposits in riels					Deposits in USD				
	Savings	1 month	3 months	6 months	12 months	Savings	1 month	3 months	6 months	12 months
Dec 2006	1.83%	4.28%	4.42%	5.40%	6.40%	0.97%	2.70%	3.51%	4.13%	4.84%

*Table 4-Bank Interest Rates as of end-2006*

Inflation remains moderate: 6.7% in 2005, 5.6% in 2004, and only 0.7% from 1998 to 2003.

On average, the riel depreciated annually by about 1% over the last three years. In 2005, despite some pressure from the balance of payments transactions, the riel remained reasonably stable, showing a depreciation of 2.3% compared to 2004. For the first time, the riel has appreciated against dollar by about one percent in 2006, as indicated on the following chart.



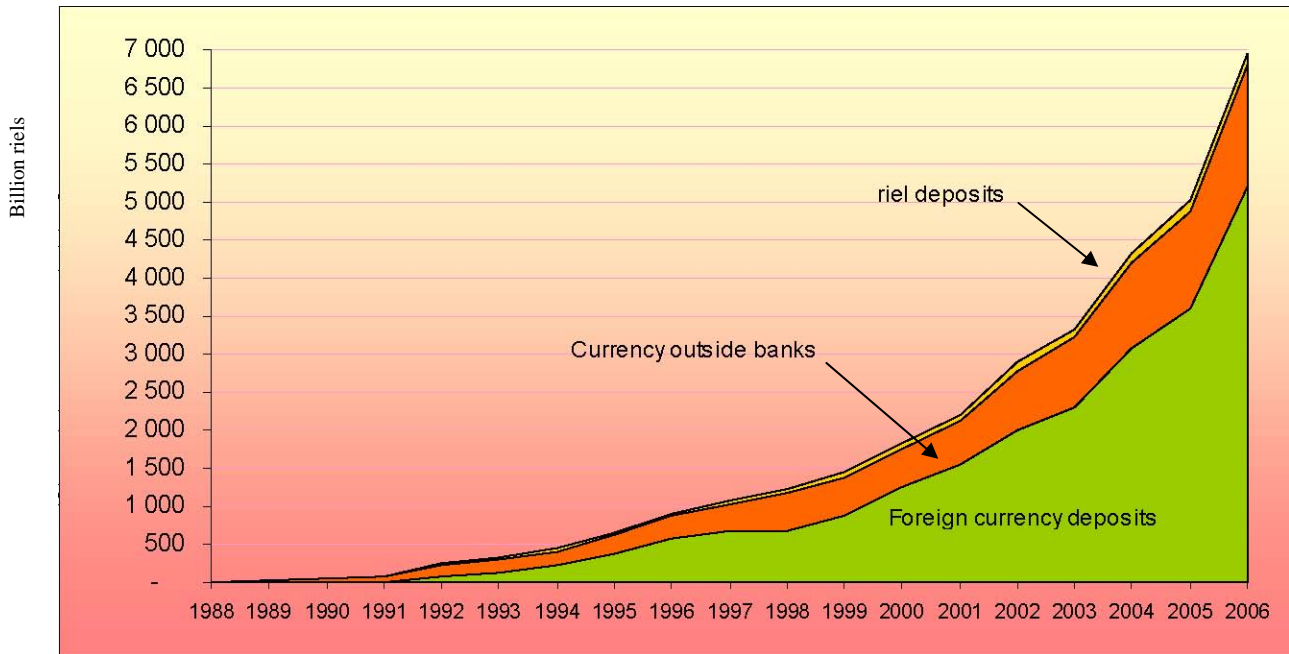
*Chart 5- Evolution of the exchange rate (riels per dollar)*

However, from the point of view of banks as investors, the risk on riel-investment is still considered as high. Hence, for the same maturity, the interest rate on loans denominated in riel is higher than on loans in dollar, because the memory of hyperinflation and devaluation is still vivid.



### 3. Trends of Dollarization

The dollar has been widely used since 1993 (see chart 6 below). Until now, dollarization persists despite the return to economic and political stability since 1999, indicating an influence of market expectations on the choice of the currency used in the Cambodian economy.



*Chart 6-Evolution of the Composition of the Money Supply (M2)*

*Note: M2 is composed of currency outside banks in riels (COB), deposits in foreign currency (FCD) and deposits in riels (Riel Deposits). It does not include cash in foreign currency held by the public.*

#### **Dollarization Seems to Be Sustained**

Since there is continued uncertainty regarding inflation and depreciation of local currency, there is also a tendency for the public to shift gradually towards greater dollarization.

billions riels	Foreign Currency Deposits (FCD)	Currency Out of Banks (COB)	Riel Deposits	Money Supply M2	FCD/M2	COB/M2	FCD/COB	FCD/Total Deposits
1993	121.1	189.7	22.6	333.5	36.3%	56.9%	0.6	84.3%
1995	365.6	250.9	32.6	649.1	56.3%	38.7%	1.5	91.8%
1997	664.9	356.1	41.9	1,062.9	62.6%	33.5%	1.9	94.1%
1998	667.0	509.1	54.0	1,230.1	54.2%	41.4%	1.3	92.5%
1999	878.8	489.9	73.8	1,442.5	60.9%	34.0%	1.8	92.3%
2001	1,538.6	577.6	87.5	2,203.7	69.8%	26.2%	2.7	94.6%
2003	2,309.6	908.2	111.2	3,329.0	69.4%	27.3%	2.5	95.4%
2004	3,079.1	1,114.7	135.5	4,329.3	71.1%	25.7%	2.8	95.8%
2005	3,589.4	1,282.1	153.4	5,024.9	71.4%	25.5%	2.8	95.9%
2006	5,196.0	1,599.5	147.0	6,942.3	74.8%	23.0%	3.2	97.3%

Table 5-Evolution of the Detailed Composition of the Money Supply (M2)

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Although dollar substitution is well advanced, the riel has continued to be used as a unit of account and medium of exchange, especially for small transactions involving non-durable goods and services (foodstuff, *motodop* fee, haircut fee, etc.). The riel is still generally well accepted, given relative macroeconomic stability achieved over the last decade.

However, dollarization has already existed for a decade and is well institutionalized. People think in terms of dollars, and prices in domestic currency are indexed to the exchange rate; e.g. the price of palm sugar and other local products tends to rise like imported products, when the riel depreciates. Therefore, to reverse the process would take long time and require patience and active participation of all stakeholders.

## *Part II- Immediate or Forced De-Dollarization Could Jeopardize Macroeconomic Stability; However It Is Possible to Promote the Use of the National Currency.*

### 1. Advantages of Dollarization

Given the lack of public confidence in the riel, dollarization has helped in maintaining payment capacities in Cambodia.

First, the introduction of large quantities of banknotes in dollars, at the beginning of the 1990s, allowed the public to switch from using gold to banknotes for transactions and to store wealth. Until then, using unproductive physical assets such as gold was common practice in Cambodia. Subsequently, the progress of monetization has encouraged savings within the middle class.

Second, dollarization prevented capital flight and promoted financial deepening. The elimination of incentives to place savings abroad encouraged domestic financial intermediation, which resulted in the growth of the financial system. Only over the past three years, the volume of bank activity has roughly doubled, and the loan to deposit ratio has grown regularly.

	2002	2003	2004	2005	2006
<i>Loan/Deposit Ratio</i>	49%	55%	57%	62%	61%

*Table 6-Evolution of Loan to Deposit Ratio*

Third, dollarization lowered the risk of currency devaluation. The demand for riel remained low and the market very small. Hence there was little incentive for speculators to try to gain from short term changes in the price of riel. Dollarization has protected Cambodia against contagion in the face of the Asian crisis (1997-2000). It sustained confidence of investors in their operations in Cambodia.

Fourth, dollarization promoted awareness by policymakers of the need to avoid bank financing of public deficits.

Eventually, the use of dollar facilitated the integration process of Cambodian trade in the international economy. Currency stability promoted macroeconomic stability and a predictable business environment. It reduced the transaction costs (avoiding currency conversions). It allowed the boom in the garment industry in Cambodia.

### 2. Disadvantages of Dollarization

There are also disadvantages in dollarization.

First, it undermines the effective conduct of monetary policy. The NBC cannot develop instruments of monetary policy and its role of lender of last resort for banks facing liquidity problems is greatly constrained.

Second, the national currency may appear as a symbol of sovereignty and nationhood.

Third, the income from seignorage<sup>3</sup> is minimized. The government of the United States gains seignorage benefits from Cambodia, since the dollar denominated money stock held by Cambodian people does not earn interest. The net annual income foregone is assessed in the range of USD 20 to 90 million per year.

### 3. International Experience

Cambodia is far from being isolated in its experience of dollarization<sup>4</sup>.

#### Increasing Trend of Dollarization

Dollarization has been on the rise in the past two decades, all over the World (see the following table).

*Percentage of foreign currency deposits to broad money*

Group of countries (number of countries)	1980-85	1988-93	1996-01
Africa (48)	0	2	7
Emerging Asia (26)	3	8	11
Middle East (14)	11	20	21
Transition Economies (26)		17	29
Western hemisphere (29)	5	13	23
Of which South America	10	23	35

*Table 7-International Trend of Dollarization<sup>5</sup>*

In Asia, only a few countries were able to contain dollarization, since they did not experience high inflation or severe macroeconomic instability (for example India, Sri Lanka, Bangladesh, and advanced economies such as Singapore, Malaysia, Taiwan).

#### De-Dollarization Policies

Three categories of de-dollarization policies have been experimented.

First, to arrest inflation expectations, macroeconomic policies were aimed at maintaining exchange rate and price stability. Inflation targeting is one of these policies.

<sup>3</sup> *Seignorage* is the difference between the cost of producing and distributing money, and the eventual income withdrawn from lending this money.

<sup>4</sup> This section owes to Wafa Abdelati, *International Experience of De-Dollarization* (IMF-2006).

<sup>5</sup> Source: Wafa Abdelati.

Second, regulatory and legal reforms have intended to create incentives to use the national currency, through regulatory differential reserve requirements or remuneration rates, provisioning standards, liquidity requirements, etc. For example, a premium was paid on dollar-indexed local currency deposits over dollar deposits (Nicaragua); a tax was introduced on checks paid in dollars (2% in Peru); domestic transactions were required to be paid in local currency (Lao); several countries also implement higher reserve requirements for foreign currency deposits (Bolivia, Honduras, Nicaragua, and Peru). Some countries barely escaped dollarization by introducing financial indexation that helped contain the erosion of financial savings in domestic currency (Chile, Colombia).

Third, administrative enforcements were implemented in some countries, such as a ban on direct transfers of foreign currency deposits among residents (Israel), limitations of foreign currency lending (Lebanon, Vietnam, Malaysia, Philippines), forced conversion of dollar deposits to local currency (Peru, Bolivia, Mexico in the 1980s) and prohibition or limitation of foreign currency deposits (several African countries). Several countries relied on financial repression and capital controls (Venezuela, Nigeria, sub-Saharan Africa); these measures led to capital flight, financial disintermediation, and high levels of dollarization.

### Successful De-Dollarization Experiences

Only 4 out of a sample of 85 countries succeeded in de-dollarization. Only 2 had lasting reversals with minimal side effects (Israel, Poland); for the other 2, it is too early to tell if de-dollarization will be sustained (Mexico, Pakistan).

Foreign currency deposits to broad money	1980	1985	1990	1995	2000
Argentina			34%	44%	55%
Azerbaijan				50%	40%
Bhutan					25%
Bolivia			71%	79%	85%
Bosnia					60%
Cambodia				56%	68%
Croatia				57%	70%
Haiti					30%
Israel	29%	48%	27%	20%	18%
Lao				43%	75%
Mexico	17%	3%	15%	10%	6%
Mongolia				20%	26%
Nicaragua			29%	55%	70%
Pakistan			3%	15%	8%
Peru	38%	67%	80%	63%	69%
Philippines				22%	29%
Poland		25%	80%	29%	15%
Romania			4%	23%	41%
Russia				20%	27%
Turkey			23%	47%	44%
Uruguay			80%	65%	72%
Vietnam		2%	33%	21%	32%
Yemen				23%	31%

Table 8- Evolution of Dollarization in Various Countries<sup>6</sup>

<sup>6</sup> Source : Wafa Abdelati

Both Poland and Israel implemented successful disinflation programs, built on a strong exchange rate anchor. Israel also used indexed assets, which proved to be an effective substitute for dollar deposits. High interest rates were applied to local currency deposits in Poland. It is unclear that these conditions can be replicated, especially since the initial level of dollarization was not too high in these two countries.

### **Unsuccessful Attempts at De-Dollarization**

Many attempts involved administrative enforcements, without fully restoring confidence in the local currency. In some countries forced conversion led to an increase in cross border deposits, capital flight, and reduced financial intermediation. Eventually, after the failure of these policies, foreign currency deposits increased further. In other words, administrative enforcements actually increased dollarization.

### **Intentional Dollarization**

Several countries have intentionally opted to maintain a high level of foreign currency as part of their broad money: Euro area, Bhutan (Indian rupee), Brunei (SGD), Namibia (South African rand), Bosnia (euro), Haiti and Bahamas (USD). A few countries opted to full dollarization: Panama, Salvador, and Timor-Leste.

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In brief, international experience shows that, once an economy is highly dollarized, it is hard to reduce dollarization.

## **4. What to Do Now?**

As mentioned earlier dollarization in Cambodia did not result from policy decisions. Rather it emerged because public confidence in the riel eroded. Keeping riel in circulation will depend on the capacity of the government to move forward with reforms that increase public confidence in the local currency.

Removing the use of dollars cannot proceed by forced conversion of foreign currency deposits into riel. Such a measure would stimulate capital flight and drive the dollarized economy underground. Hence, subsidized riel lending or harsh actions against dollar intermediation are not recommended.

Altogether, the immediate target cannot be to “de-dollarize”, but to promote the use of riel, through an increase of the general public’s demand for the national currency.

## **5. How to Promote the Use of Riel?**

### **Prerequisites**

The first and foremost condition to promote the use of riel is to maintain peace and institutional stability, since uncertainty was the main incentive for the public to keep cash in dollars at home.

The only real long-term fix to dollarization is to stabilize inflation in a credible way. Fiscal prudence is key element that needs to be conducted in proper way. In view of the inertia in strengthening credibility, stabilizing inflation will only have an impact on dollarization over time.

Anything that can strengthen confidence in the banking system, including bank supervision, must be encouraged. Similarly, anything that can be done in terms of strengthening the capacity, independence, and credibility of the central bank is welcome.

### **Measures Already Implemented**

Several measures have already been implemented, to increase the demand for riel, and improve the quality of supply.

Since 2000 an increasing proportion of public sector transactions have been required to be paid in riels (public utilities such as water and electricity, and tax liabilities are paid in riels). In addition, Government employee salaries are denominated and paid in riels.

The NBC has made efforts to replace old, dirty bank notes with new ones. New types of notes have been issued periodically. Requesting that taxes be paid to the NBC has facilitated the withdrawal of old notes. The NBC has also issued notes with high face value (up to 100 000 riels). However those notes are not much used by the public and, because there are limited channels by which bank notes can return to the NBC, very old notes remain in the circulation.

Exchange rate stability is important in maintaining price stability in a highly dollarized country. Hence, the NBC's policy has aimed at maintaining the value of riel, through foreign exchange interventions (direct sales of dollars, to absorb cash in riels from the public, and to accommodate the demand of utilities companies).

The demand for micro-loans from the poor to microfinance institutions (MFIs) is mostly denominated in riels. However, MFIs have access to international funding in dollars, not in riels. To avoid taking foreign exchange risk, they are forced to extend a significant part of their loans in dollars (34% of their loan portfolio as of end-2005). The NBC is willing to encourage their funding in riels, to support rural areas that are not used to making transactions in dollars. Hence, in 2005, the NBC has tempted a pilot experience of direct funding to a microfinance institution in riel, in order to enable it to grant loans denominated in riel. However, the central bank considers that market mechanisms are preferable, such as recycling riels deposited in commercial banks.

A new Law on Negotiable Instruments and Payment Transactions was issued in 2005. It improved the payment system framework, and also reinforced the role and authority of the central bank on interbank payments, clearing, and information. This is a significant achievement for the credibility of the Cambodian financial system.

Despite these measures, the trend remains towards increased dollarization and, if sustained, the Cambodian economy may eventually become fully dollarized.



## Further Options

A series of new measures may be considered to support the demand for riel, increase supply, and improve the quality of market mechanisms.

- Stimulate the Demand for Riel

All prices of goods and services should be indicated in riel.

**The government** may expand its riel requirement to the collection of non-tax revenue. It should also settle more domestic expenditures in riel, since only 74% of expenses are paid in riel (2001). The government could also consider requesting all international organizations in Cambodia do so.

Paying public employees through a deposit into a bank account (instead of through cash) may encourage bank intermediation in riel, and discourage public workers from changing their riels into dollars as soon as they get paid. Commercial banks would also benefit from larger intermediation.

According to the Public Financial Management Reform Program (PFMRP), all Government's accounts must be centralized in the NBC. These funds should be converted into riel, according to the Central Bank Law (article 21-2).

The quality of payment services in riel must also be improved to enhance the credibility of the national currency.

**Bank intermediation** in local currency needs to be developed.

Although the banking system is globally highly liquid, some banks have difficulties to access liquidity. There is a need for an interbank market and also for a stronger payment system.

Microfinance institutions (MFIs) have special difficulties to access resources in riel. This should be addressed given the large number of people who use only riels in rural areas; MFIs should not provide them with dollars that they do not demand for. Hence, there is a need to organize a wholesale market for the funding of microfinance. The support of commercial banks will be critical in this field.

In addition, banks would accept more riel deposits if they could find other riel-denominated assets, such as treasury bills bearing an attractive interest rate. However, the National Treasury currently does not need to borrow from the market. Hence the NBC may consider revising the structure of its interest rates. Currently, NBC dollar interest rates are higher than in riel, as indicated in the following table.

NBC rates (% per annum)	Sight	3 months	6 months	12 months
Deposit in riel		1%	1.2%	2%
Deposit in US\$		SIBOR x 6/8		
Loan in riel		6%		
Overdraft in US\$	8%			

*Table 9-Interest rates of NBC*

Instead, market interest rates for bank loans and deposits in riels are higher than in dollars by at least 2 or 3% (see table 4).

Together with commercial banks interested in the process, the authorities could consider promoting **price indexation** to facilitate the growth of financial instruments in riels. However, preconditions must be met, such as a sufficiently sophisticated financial system, a credible price level, etc.

- Increase Supply Passively

The NBC is encouraging commercial banks to install ATMs that distribute banknotes in riel, and to promote credit cards in riel.

The central bank also intends to pay even greater attention to improving the quality of bank notes circulating throughout the country, including through a greater commitment of its branches. The NBC is considering a reform of its activity in provinces, to enhance the performance of its branch network.

- Improve Market Mechanisms

The wholesale payment system needs to be dramatically improved. The NBC has initiated the process, with the support of international expertise. Commercial banks have also taken several initiatives.

The interbank market should be developed, through the introduction of secured transactions. The legal base is already in place, but the market still lacks tradable securities, to be used as collateral.

## Conclusion

The Cambodian authorities do not support a full dollarization of the economy. On the contrary, the Government thinks disadvantages of full dollarization outweigh the benefits and prefer to reduce gradually the level of dollarization. However, in spite of various measures that were taken in the past to “de-dollarize” the country, the trend is still towards even greater dollarization.

No harsh action should be taken against the use of dollar. However, there is a need to build up a consensus regarding dollarization and on how to promote the use of the national currency. This paper is only one step in that direction...

## References

- Wafa ABDELATI, *International Experience of De-Dollarization* (in *Cambodia: Rebuilding for a Challenging Future*, IMF) 2006.
- Tomás BALIÑO, Adam BANNETT, and Eduardo BORENSZTEIN, *Monetary policy in Dollarized Economies* (IMF Occasional Paper n°171), 1999
- Melanie BERESFORD, Ceema NAMAZIE, Rathin ROY, SAU Sisovanna, and NGUON Sokha, *The Macroeconomics of Poverty reduction in Cambodia* (UNDP) 2004.
- HONG Sok Hour, *Comment rééliser l'économie cambodgienne?* (Cambodge Soir 16-17 Aug. 2005)
- Socorro HEYSEN, *Dollarization*, (Finance and Development) March 2005
- HUOT Pum, *La dollarisation et ses conséquences économiques* (projet de thèse de doctorat) draft for PhD, Lyon 2007
- Alain IZE and Eduardo LEVY-YEYATI, *Dollarization of Financial Intermediation: Causes and Policy Implications*, (IMF Working Paper) March 1998
- Alain IZE, Gianni de NICOLO and Patrick HONOHAN, *Dollarization of the Banking System: Good or Bad?* (IMF Working Paper) July 2003
- Alain IZE and Andrew POWELL, *Prudential Responses to De Facto Dollarization*, (IMF Working Paper) April 2004
- Alain IZE and Eduardo LEVY-YEYATI, *Financial De-Dollarization: Is It for Real?* (IMF Working Paper) Sept 2005
- Alain IZE, *Financial Dollarization Equilibria: A Framework for Policy Analysis*, (IMF Working Paper) Sept 2005
- Alain IZE, Miguel KIGUEL and Eduardo LEVY-YEYATI, *Managing Systemic Liquidity Risk in Financially Dollarized Economies*, (IMF Working Paper) Sept 2005
- KANG Chandararot, "Voraussetzungen zur Entdollarisierung in Kambodscha" -eine monetar-keynesianische Losung (Prerequisites for De-dollarization in Cambodia) PhD, Berlin 2001
- Pr. KIWON Kang, *De-dollarization for Cambodia*, 23 Dec. 2002
- Pr. KIWON Kang, *Is Dollarization Good for Cambodia?* 14 Féb 2005
- Tola MAY, *Dedollarization*, (National Bank of Cambodia), Dec. 1, 1995
- Tola MAY, *The National Bank of Cambodia: My Experience in Building an Institution*, NBC, Nov. 22, 2004
- SUM NIPHA, *La politique monétaire au Cambodge face à la dollarization de l'économie*, (Banque Nationale du Cambodge, Actes de la 3<sup>ème</sup> réunion des gouverneurs des banques centrales francophones à Phnom Penh), Nov. 1996
- Robert RENNHACK and Masahiro NOZAKI, *Financial Dollarization in Latin America* (IMF Working Paper), January 2006
- Mario de ZAMAROCZY and SOPHANA SA, *Economic Policy in a Highly Dollarized Economy, the Case of CAMBODIA*, (IMF Occasional Paper n°219) 2003