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# **Deposit Dollarization in Myanmar**

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## Abstract

Myanmar has peculiar conditions of deposit dollarization that were shaped by administrative controls. On the one hand, restrictive controls encouraged the accumulation of foreign currency deposits (FCD). On the other hand, foreign currency loans (FCL) were not practiced officially; therefore, FCD was not utilized for credit. Given the adverse effects and persistence of dollarization in other dollarized economies and the recent recovery of local currency deposits in Myanmar, this paper opts for the prohibition of FCL and offers policy measures for de-dollarization.

**Keywords:** dollarization, foreign currency deposits, foreign currency loans, Myanmar **JEL classification:** F31, E41, O53

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## **Deposit Dollarization in Myanmar**

## 1. Introduction

Myanmar is seldom analyzed in the literature on dollarization. Menon (2008) documents the conditions of dollarization in the transitional economies of Southeast Asia, except Myanmar. As Myanmar has faced high inflation for a sustained period in the 1990s and 2000s, it is likely that its financial system is dollarized to some extent, as in the other transitional economies of Southeast Asia.

One reason for this gap in the literature is data unavailability. A common practice in the literature is to measure the extent of dollarization in terms of the proportions of foreign currency deposits (FCD) in the banking system to the total deposits or broad money. Since the International Monetary Fund (IMF 2001: 26) published data on FCD (as of May 2000),<sup>1</sup> no subsequent data on FCD have been disclosed for Myanmar. Our estimate of Myanmar's FCD, on the other hand, amounts to approximately twice as much as the country's local currency deposits in March 2008, implying a significant degree of deposit dollarization.

There are several administrative controls that shaped the current peculiar conditions of dollarization in Myanmar. First, the administrative controls encouraged exporters to maintain their export earnings as FCD. Second, foreign currency loans (FCL) were not practiced; therefore, FCD was not utilized for lending. In the recent economic reforms, Myanmar is at a dollarization crossroad; that is, whether to permit FCL for financial deepening at the cost of tying the country to using foreign-currency-denominated assets and liabilities in its banking sector.

The literature on dollarization summarizes the merits and demerits of dollarization for the development of the financial sector. On the one hand, dollarization in terms of FCD and FCL enables financial intermediation, which is otherwise not feasible under conditions of high inflation. On the other hand, it is well documented that dollarized economies are more prone to banking crises. Whether the merits surpass the demerits depends on the economic environment of each country.

By outlining the background of dollarization and inferring its degree, we address the question as to whether FCL should be practiced in Myanmar. The remainder of the paper is organized as follows. In Section 2, we offer a brief review of the literature on

<sup>&</sup>lt;sup>1</sup> As of May 2000, the proportion of FCD to total deposits in Myanmar was 14.7 percent.

dollarization, and outline the merits and demerits of dollarization. In Section 3, we provide a detailed background of deposit dollarization and infer its degree. In Section 4, we discuss the negative and positive effects of dollarization on financial intermediation in the context of Myanmar. In Section 5, we present our concluding remarks.

## 2. Literature on dollarization

Dollarization is a situation where domestic residents hold a significant share of their assets in the form of foreign-currency-denominated assets (Balino et al. 1999). There are at least three components of foreign-currency-denominated assets: (i) foreign currency cash, (ii) FCD, and (iii) cross-border deposits, which are bank deposits of domestic residents in foreign countries. Among these three components, (i) and (iii) are difficult to capture, whereas the data on (ii) are usually available. In the literature, the proportions of FCD to the total deposits and broad money are commonly employed as indicators of dollarization. The widespread use of FCD and FCL is termed "financial dollarization" in order to distinguish this circumstance from the situation in which foreign currency cash is circulating in place of local currency cash.

Dollarization is observed in developing and transitional economies that are experiencing economic and/or political instability. The literature on dollarization reveals two motives underlying the demand for foreign-currency-denominated assets: asset substitution and currency substitution. In terms of asset substitution, foreign currency assets are held as a store of value to hedge inflation. In terms of currency substitution, on the other hand, foreign currencies are used as a unit of account and a means of exchange to counter inflation.

It is widely accepted that dollarization has merits and demerits in terms of financial intermediation. The merits are that, FCD adds to the savings within the banking sector and to financial intermediation using FCL, irrespective of low confidence in the local currency among the domestic residents. As for the demerits, dollarization brings a currency mismatch in the balance sheets of banks and exposes the banks to exchange rate risk, potentially destabilizing the financial sector. An empirical analysis by De Nicolo et al. (2005) shows that dollarization promotes financial deepening only in high-inflation countries, and the risk of financial instability is higher in dollarized economies. Similarly, Levy-Yeyati's (2006) empirical results show that dollarized economies are more prone to banking crises while gains in financial intermediation are not significant; therefore, he opts for active de-dollarization policies.

Furthermore, dollarization often persists even after economic stabilization. While high inflation stimulates dollarization, inflation stabilization does not necessarily lead to de-dollarization in many countries (Calvo and Vegh 1992). Valev (2010) categorizes the causes of persistence of dollarization into (i) network externalities and (ii) expected high inflation, and presents the evidence that the former is dominant using the micro survey data of Bulgaria. Here network externalities refer to the condition that, if dollarization reaches sufficiently high levels during a period of high inflation, then transactions in foreign currencies prevail and become so convenient that they persist even after stabilization. On the other hand, Ize and Levy-Yeyati (2003) show that the persistence of dollarization is associated with the expected volatility of the inflation rate. Regardless of the causes, this persistence of dollarization must be recognized when a country considers its policy options, while standing at the crossroads of dollarization.

### 3. Status of Dollarization in Myanmar

## 3.1 Background of dollarization

Myanmar has experienced an economic environment that would lead the country toward dollarization. There have been three episodes of demonetization, where the government revoked the country's legal tender without respecting its conversion to other currencies. Furthermore, Myanmar faced chronic inflation in the 1990s when the average annual inflation rate amounted to 25.3 percent. The year-on-year inflation rate sometimes exceeded 60 percent in several months during this period. Such an economic environment reduced the domestic residents' confidence in their local currency and stimulated dollarization.

Asset substitution from local-currency-denominated assets to gold, precious stones and foreign-currency-denominated assets is considered to be prevalent in Myanmar. Referring to the banking crisis in February 2003, Turnell (2003) offers anecdotal evidence of dollarization. In the contagious bank runs among the large private banks, the total deposits of the banking sector plunged to half. In the midst of these bank runs, the banks suspended or limited the convertibility of local currency deposits. Firms in need of local currency liquidity sold their foreign-currency-denominated assets, which resulted in an appreciation of the local currency against the US dollar in parallel markets. This suggests that foreign-currency-denominated assets were held for asset substitution. As for FCD, while asset substitution and currency substitution were not necessarily absent, the administrative controls on foreign exchange and trade were also considered to have shaped the demand for FCD to a certain extent. Such administrative controls differed significantly between the state sector, including the state economic enterprises (SEEs), and the private sector.

In the state sector, export earnings of the SEEs were surrendered to the government and maintained as FCD at the state banks. As a legacy of central economic planning which lasted until 1988, the allocation of foreign exchange within the state sector was centrally controlled at least until 2012 (Hori and Wong 2013; Kubo 2013). Exporting SEEs surrendered all their export revenues to the state budget. Then, the central government maintained such foreign exchange as FCD at the Myanma Foreign Trade Bank (MFTB), one of three state banks that handled foreign exchange. The central government allocated the foreign exchange budget from its FCD account at the MFTB to the FCD accounts of the importing SEEs. In this system, any trade surplus of the state sector led to an increase in FCD at the MFTB rather than an accumulation of foreign reserves at the Central Bank of Myanmar (CBM).

The private sector, on the other hand, faced two notable controls that prompted firms to hold FCD. First, in contrast to the state sector, there was, in principle, no surrender requirement for the export earnings of private export firms.<sup>2</sup> Instead, these firms were required to deposit their export earnings as FCD at either the MFTB or the Myanma Investment and Commercial Bank (MICB), which is another state bank.<sup>3</sup>

Second, until the policy reform in April 2012, there was no formal facility for private export firms to convert foreign exchange to local currency; for the sake of informal currency conversion, exporters and importers maintained FCD. The state banks did not buy or sell foreign exchange with private firms.<sup>4</sup> However, the financial authorities tolerated domestic account transfers of FCD at the state banks. By transferring their FCD to private importers' accounts, private exporters traded FCD with the importers at free market prices, which constituted the informal foreign

<sup>&</sup>lt;sup>2</sup> There were several exceptional cases that the government ordered the private exporters to sell their export earnings at the unfavorable overvalued exchange rates.

<sup>&</sup>lt;sup>3</sup> Furthermore, branches of another state bank—the Myanma Economic Bank (MEB)—handled foreign exchange remittances and FCD for trade at the land border posts. The foreign exchange operations of MEB were limited in comparison with those of the MFTB and MICB.

<sup>&</sup>lt;sup>4</sup> This is one of the characteristics of the *de facto* multiple exchange rate regimes in Myanmar before the reforms in April 2012. See Kubo (2014) for details of these multiple exchange rate regimes.

exchange market. As a result, either the exporters or the importers had to maintain a part of their working capital in FCD for currency conversion in the informal market.

While the recent reforms enabled private firms to sell and buy foreign exchange at the banks, trade of FCD between private exporters and importers via domestic account transfers persisted, as did the holdings of FCD. In November 2011, the CBM granted foreign exchange authorized dealer licenses to 11 private banks, in addition to the state banks, and the private banks started international banking services, including currency conversion and the acceptance of FCD, in August 2012. Nonetheless, the private exporters and importers appeared to prefer the conventional practice of selling and buying FCD among themselves, because it allowed them to save on the bank charges. As documented in Kubo (2014), the spread between the selling and buying rates of foreign exchange is considerably smaller in the informal market than at the banks. Because of cost efficiency, informal currency conversion persists.

Furthermore, FCD can be used for the settlement of domestic transactions, such as the buying and selling of real estate between any two parties, as long as these parties possess FCD accounts. Thus, domestic account transfers of FCD facilitate currency substitution.

Turning to cross-border deposits, there were other peculiar controls on the settlement of both exports and imports in the private sector. Myanmar Customs did not let export goods clear customs unless there was evidence of advance payments from foreign buyers. In terms of imports, there was an instruction not to allow importers to make advance payments from the Myanmar state banks to foreign suppliers, requiring importers to make payments with either letters of credit (L/Cs) from the state banks or deferred payments.<sup>5</sup> While these controls might protect Myanmar traders from the breach of contracts by foreign trade partners, they also potentially narrowed Myanmar's trade opportunities.

Myanmar's private firms circumvented these controls using cross-border deposits to meet the payment conditions of their trade partners. To circumvent the controls, both exporters and importers set up shell companies in a third country, such as Singapore. When foreign buyers did not agree on advance payments for exports, Myanmar's exporters sent their own funds from the bank accounts of shell companies in a third country to their own bank accounts at the Myanmar state banks (for the sake of customs clearance) and later received payments from the foreign buyers into their shell

 $<sup>^{5}</sup>$  Furthermore, the state banks imposed a 100 percent margin on FCD for importers paying with L/Cs; that is, without a sufficient amount of FCD at the state banks, importers could not pay with L/Cs.

company accounts. Likewise, when the foreign suppliers did not agree with the importers on the payments with L/Cs, Myanmar's importers made advance payments from their shell company accounts in a third country to the foreign suppliers and later replenished the funds in these accounts via their own remittances from Myanmar after the arrival of goods. Consequently, the controls on settlements encouraged the private exporters and importers to maintain a part of their working capital as cross-border deposits.

As explained above, the demand for FCD and cross-border deposits is considered to be associated with administrative controls in both the public and private sectors. It will be presented in a subsequent section that a change in administrative controls led to a sharp change in FCD.

Finally, the Myanmar banks have not practiced FCL. The uses of foreign currency liquidity by the Myanmar banks were their deposits in the accounts for settlements at the Central Bank of Myanmar and at foreign banks abroad, as well as foreign currency cash. FCD is not utilized for financial intermediation, which, in turn, limits the extent of dollarization in Myanmar.

#### **3.2 Degree of dollarization**

Following the literature on dollarization, we examine the degree of dollarization in Myanmar with the proportions of FCD to the total deposits and broad money. A challenge for this analysis is that there are no published FCD data for the period after May 2001; therefore, we need to infer the amount from the available data.

Here we assume that the amount of the commercial banks' foreign assets is identical with that of FCD. The *International Financial Statistics* (IFS) of the IMF reports the amount of commercial banks' foreign assets (claims on nonresidents), which is considered to consist of their deposits in accounts for settlements at foreign banks abroad and their holding of foreign currency cash. The sources of foreign assets of the Myanmar banks are FCD of the Myanmar residents (not reported in the IFS), and foreign liabilities of the Myanmar banks to nonresident (reported in the IFS).<sup>6</sup> While the breakdown of the foreign liabilities referred to the liabilities of the state economic enterprises (SEE) for which the Myanmar state banks acted as the paying agents.

<sup>&</sup>lt;sup>6</sup> Another source of foreign assets is the banks' purchase of foreign exchange from the residents. Banks did not purchase any foreign exchange prior to the reform in October 2011. The other sources of foreign assets include deposits of foreign entities, foreign direct investments and external borrowings.

Although these loans of foreign entities to SEE were not entered up in the balance sheets of the Myanmar state banks, they might be administered as the foreign liabilities of the Myanmar banks in the compilation of the statistics. The foreign liabilities of the Myanmar banks in the IFS had been USD 1.6 to 3.7 billion in the 2001–2012 period,<sup>7</sup> which used to surpass the foreign assets of the Myanmar banks on nonresident in the IFS until 2007. If the foreign liabilities of the Myanmar banks to nonresidents did not consist of foreign assets of the Myanmar banks on nonresidents, the amount of the Myanmar banks' foreign assets (claims on nonresidents) is a reasonable proxy variable for that of FCD.

Figure 1 summarizes the indices of Myanmar's monetary aggregates and the extent of dollarization. The bars indicate three components of money as a percentage of gross domestic product (GDP): currency outside the banks, local currency (Myanmar kyat) deposits, and FCD. The line graph indicates the amount of FCD in terms of US dollars. FCD peaked in 2011, both in terms of percentage of GDP (15.5 percent) and US dollars (USD 8.3 billion). In Myanmar, FCD is not counted under broad money. If we include FCD as quasi money, the proportion of FCD to broad money (i.e., sum of currency outside the banks, local currency deposits, and FCD) amounted to 41.8 percent in 2007, indicating a significant degree of dollarization. In the same year, the proportion of FCD to total deposits (local currency deposits and FCD) was 66.5 percent.

## Figure 1

There are several significant changes that influenced the weight of FCD in the monetary aggregates. First, as mentioned in the previous subsection, there were contagious bank runs among the major private banks in February 2003 and a subsequent tightening of prudential regulations. The contagious bank runs resulted in a sharp decline in local currency deposits—from 19.7 percent of GDP in the end of fiscal year 2001 (March 2002) to 10.6 percent in 2002 (March 2003).<sup>8</sup> After the bank runs, the financial authorities implemented the "deposit-to-capital ratio" regulation to limit the total amount of deposits that a bank could accept to seven times its paid-up

<sup>&</sup>lt;sup>7</sup> Foreign liabilities of the depository corporations (commercial banks) to nonresidents dropped from USD 3.45 billion in March 2012 to USD 0.12 billion in April 2012, implying a change in definition.

<sup>&</sup>lt;sup>8</sup> Myanmar's fiscal year runs from April 1<sup>st</sup> to March 31<sup>st</sup> of the next calendar year.

capital.<sup>9</sup> This "deposit-to-capital ratio" prudential regulation constrained the growth in local currency deposits. The stagnant growth in local currency deposits partially accounts for the relatively high weight of FCD in the monetary aggregates.

It is worthwhile to note that the local currency deposits have recovered in recent years. New banking licenses were granted in July 2010 to four private banks, of which three were listed in the top 10 largest private banks in Myanmar in March 2012 and accounted for 13 percent of the private banks' total deposits.<sup>10</sup> Furthermore, the "deposit-to-capital ratio" regulation was lifted by 2011. These two changes helped the recovery of local currency deposits, leading to a decline in the weight of FCD in the monetary aggregates.

Second, the buoyant natural gas exports by one of the SEEs contributed to the increase in FCD. Table 1 summarizes the trade balance by the state and private sectors.<sup>11</sup> Natural gas exports increased from an average of USD 0.71 billion in the 2001–2003 period to USD 3.23 billion in the 2010–2012 period. The average annual trade surplus for the state sector, including the SEEs, was USD 3.09 billion in the 2010–2012 period, whereas the private sector experienced trade deficits averaging to USD 2.27 billion. While there are no disaggregated FCD data by the state and private sectors, the coincidence of the rise in FCD in terms of US dollars with the growth in the trade surplus of the state sector suggests that a large portion of FCD may belong to the state budget.

## Table 1

Nonetheless, we have at least two reservations when considering the relationship between FCD and trade balance. As for the state sector, a considerable portion of the natural gas export revenues has been paid to foreign stakeholders. In terms of Myanmar's balance of payments, the transfer of income from Myanmar to foreign countries sharply increased since the rise of natural gas exports, which averaged to USD 1.66 billion per annum in the 2005–2011 period.<sup>12</sup> As for the private sector mentioned above, imports through the formal channel necessitated FCD and the

<sup>&</sup>lt;sup>9</sup> The ratio was relaxed to 10 times, but the author is not certain of the timing of this change.

<sup>&</sup>lt;sup>10</sup> The figure is calculated from the data in the 2011-2012 annual report of the Central Bank.

<sup>&</sup>lt;sup>11</sup> The trade figures in this paragraph are retrieved from the *Selected Monthly Economic Indicators* of the Central Statistical Organization, Myanmar. <sup>12</sup> The figure is from the *Balance of Payments Statistics* of the IMF.

opening of L/Cs at the state banks. Therefore, the robust increase in private sector imports should also accompany a rise in the private sector's FCD.

Third, there were reportedly large transfers of foreign assets from the MFTB to the CBM during fiscal year 2012 (IMF 2013), that was associated with a decline in the banks' FCD. A portion of the government's FCD at the state bank was converted to local currency deposits to strengthen the international reserves of the central bank. As a result, the foreign assets of the CBM increased from USD 0.54 billion at the end of fiscal year 2011 to USD 2.86 billion in 2012, along with a sharp drop in FCD of the banking sector.<sup>13</sup>

### **3.3 International comparison**

Apart from the high weight of FCD in the monetary aggregates, Figure 1 shows a high proportion of local currency outside the banks to broad money. If we define broad money as the sum of local currency outside the banks and local currency deposits, the proportion of currency outside the banks to broad money was 69.1 percent in end of fiscal year 2003 (March 2004), following the February 2003 bank runs, and it was still as high as 36.3 percent in end of fiscal year 2012 (March 2013). There are two factors that possibly account for the high proportion of kyat cash in broad money. One is that domestic residents are dependent on payments and settlements with local currency substitution, using foreign currency cash instead of local currency cash, has not prevailed remarkably in Myanmar.<sup>14</sup>

The proportion of the currency in circulation to broad money is prominent in Myanmar compared with its peers. Figure 2 shows the international comparison of the composition of money among three transitional economies in Southeast Asia, namely, Cambodia, Lao PDR, and Myanmar. The bars indicate three components of money (local currency in circulation, local currency deposits, and FCD) as a percentage of GDP, and the respective line graphs refer to the proportion of FCD to the sum of the three components of money. In 2012, the currency in circulation as a percentage of GDP was 6.6 percent in Cambodia and 8.2 percent in Lao PDR, which is considerably

<sup>&</sup>lt;sup>13</sup> The CBM also started two-way foreign exchange auctions with the domestic banks that may have helped the accumulation of foreign reserves.

<sup>&</sup>lt;sup>14</sup> To restrain the circulation of foreign currency cash, the government of Myanmar started issuing foreign exchange certificates (FECs) in February 1993. In March 2013, the government announced the redemption of FECs in its effort to unify multiple exchange rates. FECs in circulation amounted to USD 45 million in December 1999 (IMF 2001: 26) and were reportedly USD 31 million at the time of redemption, which is considerably smaller than the amount of FCD.

lower than that in Myanmar. In contrast, broad money (including FCD) as a percentage of GDP was 50.4 and 48.7 percent, respectively, which is similar to that in Myanmar. On the assumption that these three countries are at a similar level of financial sector development in terms of the dependence of their economies on cash transactions, this comparison implies that foreign currency cash circulates in place for local currency cash more in Cambodia and Lao PDR than in Myanmar. In other words, these figures imply less circulation of foreign currency cash in Myanmar.

## Figure 2

## 4. Dollarization and Underdevelopment of the Financial System

### 4.1 Merits and demerits of dollarization in Myanmar

The literature on dollarization lists the negative and positive effects of dollarization (Balino et al. 1999). The negative effects include the potential for greater fragility of the banking system due to exchange rate risk. On the other hand, the positive effects of dollarization include the use of FCD, which can bring back deposits to the banking sector regardless of macroeconomic instability and add to financial intermediation by means of FCL.

In Myanmar, the negative effects due to exchange rate risk have been contained because its banks have not practiced FCL. As for the country's state banks, their foreign-currency-denominated FCD liabilities have been fully covered by foreign-currency-denominated liquidities. As a result, the banks have not been exposed to exchange rate risk. As for the private banks, on the other hand, the regulations limit the foreign exchange net open position to just 30 percent of the paid-up capital. Moreover, as long as the selling and buying of foreign exchange at the banks are scarce, the private banks' foreign exchange open positions remain marginal.<sup>15</sup> Thus, it is appropriate to conclude that exchange rate risk is not yet a threat to the stability of Myanmar's banking system.

At the same time, the benefits of dollarization in terms of enhanced financial intermediation are not realized either. While foreign exchange revenues for both the state and private sectors are deposited as FCD in the banking system, FCD has not

<sup>&</sup>lt;sup>15</sup> As for the private banks, other sources of foreign exchange include inward workers' remittances and disbursements of paid-up capital by foreign investment companies.

been utilized for FCL. Instead, the banks have maintained foreign currency cash and the deposits at nostro accounts in foreign banks. This option, at most, facilitates international payments and settlements for Myanmar's imports, and does not add to financial intermediation.

The credit to the economy in terms of the percentage of GDP is low for Myanmar. Figure 3 compares the financial intermediation for Myanmar with its peers.<sup>16</sup> As shown in this figure, FCL accounts for large percentages in Cambodia and Lao PDR. Furthermore, the proportion of local currency loans to local currency deposits is low in Myanmar compared with that in Lao PDR. In fact, Myanmar private banks hold large amounts of treasury bonds of the Myanmar government, despite their low yields.<sup>17</sup> This suggests that the root causes of the country's low financial intermediation are not only the absence of FCL but also the environment surrounding the credit market.

## Figure 3

Should the financial authorities of Myanmar encourage FCL to enhance financial intermediation? It would certainly help the banks to expand credit to some extent. Additionally, as the banks earn interest revenues from FCL, they would pay interest on FCD. Currently, state banks offer two types of FCD: current deposits in foreign currencies<sup>18</sup> with no interest, and six-month fixed deposits in US dollar with 1% interest per annum.<sup>19</sup> Private banks offer only current deposits in foreign currencies with zero interest. Paying higher interest on FCD would help repatriate the yield-motivated, cross-border deposits of domestic residents to the Myanmar banking system.

However, FCL would also expose the banks to exchange rate risk, as well as credit risk. Given the present limited capacity of the central bank to enforce prudential regulations, permitting FCL could do more harm than good on the stability of the banking sector. Furthermore, the recent relatively high growth in local currency

<sup>&</sup>lt;sup>16</sup> The definition of "credit to the economy" differs from one country to another. In Myanmar, the credits to SEEs are not included.

<sup>&</sup>lt;sup>17</sup> According to the consolidated balance sheets of the private banks, loans and treasury bonds as a percentage of total deposits amounted to 63 and 29 percent, respectively, as of the end of 2008 (CSO Statistical Yearbook, 2009).

<sup>&</sup>lt;sup>18</sup> US dollar, Euro and Singapore dollar.

<sup>&</sup>lt;sup>19</sup> According to the author's interviews with the MFTB and MICB in July 2014, despite the high interest rate, the six month fixed deposit is not popular compared with the current deposits. One reason is that the interest rate is lower than those of the local currency deposits. Another is that the fixed FCD does not count in the margin when importers open L/C at the state banks.

deposits indicates improving confidence of the domestic residents in the banking system and toward local-currency-denominated assets.

Rather, we should focus on how to encourage depositors of FCD to convert to local currency deposits. Once FCD is converted to the local currency and deposited, these savings could be readily mobilized for local currency loans. Compared with improving the environment of the credit market, this option would be feasible in the short to medium term. In this context, we need to identify the obstacles that discourage depositors of FCD from switching to local currency deposits.

### 4.2 De-dollarization in Myanmar

As argued above, the intermediate target of de-dollarization in Myanmar is pertinent to encouraging depositors of FCD to convert to local currency deposits. The motives behind the demand for FCD are related to the administrative controls on foreign exchange and trade, and these controls differ considerably between the state and private sectors.

As for the state sector, it is the centralized foreign exchange budget system that has led to the accumulation of FCD at the MFTB. Dissolving the partition of budget between local and foreign currencies would reduce FCD, increase local currency deposits of the state sector, and facilitate the accumulation of foreign reserves at the central bank.

As for the private sector, the motives behind the demand for FCD among exporters and importers are related to the transaction costs of converting currencies and the government controls on the settlement of imports. Instead of converting export earnings using bank accounts, reassigning FCD to importers through domestic account transfers yield higher returns to exporters. Importers, on the other hand, can raise foreign exchange at a lower cost by purchasing FCD from exporters through domestic account transfers rather than from the banks. Such an informal practice of currency conversion has prevailed for the last two decades, and the developed informal market enables the trade of FCD at a small transaction cost. Furthermore, the controls on the settlement of imports have required importers to maintain FCD in terms of the 100% margin for opening L/C.

One policy measure for encouraging private exporters and importers to convert currencies at the banks, and to maintain working capital in local currency deposits, is prohibition of domestic account transfers of FCD. If such a policy change is difficult to implement, an alternative is taxation on the domestic account transfers of FCD. Such a tax would raise the transaction costs of informal currency conversion between exporters and importers, and encourage currency conversion with the banks.

Furthermore, the government of Myanmar should reconsider the restrictive controls on payments and settlements for international trade. Relaxation of these controls would not only help importers to reduce their holdings of FCD but also add to the repatriation of the cross-border deposits that are maintained for the purpose of circumventing the controls.

## 5. Conclusion

Myanmar is at the crossroads of dollarization; that is, whether to permit foreign currency loans (FCL) for financial deepening at the cost of tying the economy to the use of foreign-currency-denominated assets and liabilities in its banking sector. On the one hand, superficial dollarization appears to be high in this country. Our estimate indicates that FCD amounted to approximately twice as much as local currency deposits in the late 2000s. Nonetheless, the main motives for the demand of FCD in Myanmar may not be currency substitution or asset substitution but more pertinent to administrative controls on foreign exchange and trade.

On the other hand, FCL is not practiced officially; therefore, a large amount of FCD has not yet contributed to financial intermediation. Considering the adverse effects and persistence of dollarization in dollarized economies in other dollarized countries and the recent recovery of local currency deposits in Myanmar, we argue that the appropriate policy direction is de-dollarization.

As for de-dollarization in the state sector, the centralized foreign exchange budget system is a root cause for the expansion of FCD that obstructs the accumulation of foreign reserves at the central bank. We believe that ending the separation of foreign and local currencies in the budget system would prompt a shift from FCD to local currency deposits in the state sector.

As for the private sector, FCD is held for informal currency conversion between exporters and importers through domestic account transfers, and allows them to save on the bank margins of currency conversion. In order to alleviate this type of deposit dollarization, countermeasures include imposing taxes on the domestic account transfers of FCD.

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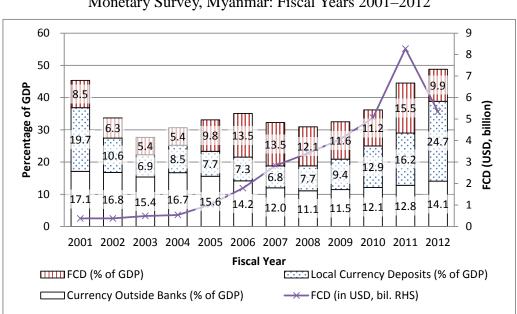


Figure 1 Monetary Survey, Myanmar: Fiscal Years 2001–2012

Sources: International Financial Statistics, IMF; IMF (2013).

Notes: Figures are as of end of each fiscal year. FCD refers to foreign currency deposits. The amount of FCD is assumed to be equal to "claims to non-residents" of the banking sector (Line **51821...ZK...** of the *International Financial Statistics*).

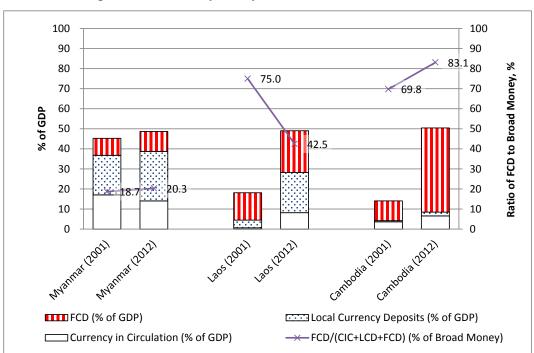


Figure 2 Composition of Money in Myanmar, Lao PDR, and Cambodia

Sources: IMF Country Reports.

Notes: FCD refers to foreign currency deposits. CIC and LCD stand for currency in circulation and local currency deposits, respectively.

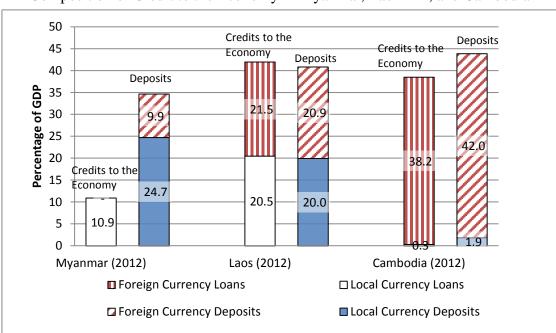


Figure 3 Composition of Credit to the Economy in Myanmar, Lao PDR, and Cambodia

Sources: IMF Country Reports

	Government			Private Sector		
Fiscal Year	Exports	Imports	Trade Balance	Exports	Imports	Trade Balance
	Unit: USD million					
2001	1,216	958	259	1,333	1,777	-444
2002	1,422	511	911	1,653	1,786	-133
2003	1,048	703	345	1,308	1,532	-224
2004	1,653	626	1,027	1,262	1,354	-92
2005	1,951	614	1,337	1,603	1,368	235
2006	3,155	1,125	2,031	2,068	1,804	264
2007	4,028	910	3,119	2,373	2,444	-70
2008	4,310	1,954	2,357	2,469	2,590	-121
2009	4,496	1,270	3,225	3,091	2,911	180
2010	5,362	1,788	3,574	3,499	4,624	-1,126
2011	5,064	2,426	2,638	4,072	6,609	-2,538
2012	4,566	1,518	3,048	4,411	7,551	-3,139

Table 1Trade Balance by State and Private Sectors, Fiscal Years 2001–2012

Source: Selected Monthly Economic Indicators, Central Statistical Organization (CSO), Myanmar.