

Implications of Dollarization for Belize

Emory Ford
Economists
With Input by Senior Staff of Research Department
Research Department
Central Bank of Belize

Paper presented at the XXXIII Annual Monetary Studies Conference Belize City, Belize November 19 to 23, 2001

The opinions expressed are solely those of the authors and do not necessarily reflect the views of the Central Bank of Belize.

<u>IMPLICATIONS OF DOLLARIZATION FOR BELIZE</u>

<u>Introduction</u>

Dollarization has become a popular topic amongst economists, government officials and elements in the private sector with several countries recently choosing to give up their right to issue a sovereign currency and subsequently adopting the US dollar as legal tender. In recent months, the subject has also been raised in some quarters locally as Belize has been experiencing increasing pressure on its balance of payments, a shortage of foreign exchange in the official system and growth in the black market for US dollars.

The term dollarization is loosely defined as the use of any foreign currency by another country. Berg and Borensztein (2000) identified two forms of dollarization. The first is full dollarization under which a country officially abandons its own currency and adopts a more stable currency of another country – such as the US dollar – as its legal tender. Second, limited or unofficial dollarization occurs when residents hold a relatively large component of foreign currency and foreign currency deposits at domestic banks, foregoing the usage of their sovereign currency (due to economic instability and hyper-inflation) for transaction and store of value purposes.

In the Western Hemisphere, recent support for dollarization apparently started with Argentine President, Carlos Menem, who investigated the replacement of the Argentine peso with the US dollar in 1999. He sought to lower interest rates by eliminating the currency risk premium attached to Argentinean debt. Ecuador went one step further in dealing with its own economic crisis by giving up its domestic currency entirely and adopting the US dollar in March 2000. There are other notable cases in Central America including that of Guatemala, El Salvador and Panama, the latter of which has been effectively dollarized since 1904. Clearly, all of the countries that have opted for dollarization in recent years have the common goal of restoring economic equilibrium quickly and are hoping that this type of currency regime will facilitate future growth and development.

Although in most of the cases dollarization was only recently implemented and the data is limited, the first section of this paper will examine the experiences of some of these countries with dollarization to see what if any lessons can be drawn there from. Section II will examine Belize's macro-environment over the 1990 to 2000 period. Sections III looks at the potential benefits and costs to Belize of proceeding along this path. The paper's conclusion is presented in Section IV.

II. Experiences of selected dollarized countries

Ecuador

Ecuador moved from a floating exchange rate system to dollarization in March, 2000, with the use of the US dollar complemented by fully backed sucre coins. Prior to dollarization, Ecuador was in the midst of a severe economic and political crisis, much of it rooted in the near collapse of its banking sector, poor governance, structural rigidities and the lack of political will to enforce the targeted reforms needed to address weaknesses in the economic fundamentals.

From 1970 to 1981, Ecuador enjoyed an economic boom fueled by the discoveries of new petroleum fields and the sharp increases in oil prices in 1972/73. Since the 1980's, however, growth became sluggish in the face of falling international oil prices, natural disasters (such as the 1987 earthquake and El Niño in the last half of the 90's) and failure to pursue sound financial policies and structural reforms. Real GDP decelerated in the late 90's, contracting by 7.3% in 1999. Average GDP per capita growth, since the 1980's, had fluctuated between miniscule to negative growth. In 1995, approximately 33% of the population lived in poverty and 10% to 12% lived in extreme poverty. By 1999, these percentages had grown to 40 and 15 percent, respectively. In 1998 and 1999, per capita growth had contracted to 0.9% and 11.2%, respectively. The fiscal deficit rose from 2.4% of GDP in 1997 to 7.0% of GDP by 1999. The public sector external debt rapidly increased during the same period, rising from an average of 66.3% of GDP for the 1995-1998 period to 100.3%

of GDP in 1999. External payment arrears accumulated to over \$1.0bn by May 2000. Inflation soared, moving from 22.7% in 1995 to 52.2% in 1999.

A major linchpin in the economy's structural weaknesses¹ was a banking sector riddled with unsound operational and management practices and suffering from severe solvency and liquidity problems. Poor banking practices such as connected lending, large credit concentration, ineffective banking supervision and government's tendency to bail out troubled banks rather than enforce prudential standards all culminated in a financial system that was extremely vulnerable to external shocks. Low oil prices and El Niño damages to infrastructure, housing and export agriculture raised the proportion of non-performing loans. External sources of credit were cut off in the wake of the financial crises in developing economies and Russia. Credibility in the banking system suffered. The crisis peaked in March 1999 when Banco del Progresso, Ecuador's second largest bank, was acknowledged as insolvent in spite of receiving all liquidity assistance authorized by law. Further, the government was unable to provide the required measure of liquidity assistance (US\$800mn) to keep the bank operational. Fearing a run on deposits, the authorities ordered a freeze on all demand and savings deposits for six months and all time deposits for one year. During the 18-month period leading up to January 2000, sixteen financial institutions, accounting for about 65 percent of the financial system's on-shore assets, had been intervened, twelve of which were closed. Non-performing loans, by 2000, reached 45% of outstanding loans, carrying a fiscal cost of US\$2.6 billion or 20% of GDP.

Against a backdrop of social unrest, spiraling inflation, buildup in arrears of the external debt and severe lack of confidence in the banking system and economic policies, President Mahaud announced his intention to adopt the US dollar as legal tender in January, 2000. Less than two weeks later, he was succeeded by President Noboa² who opted to continue the dollarization scheme. The legal framework of the

¹ Other structural weakness was compounded by a labour market that exhibited low mobility and flexibility, a tax system that had weak legislation and poor administration and high barriers of trade and price regulation.

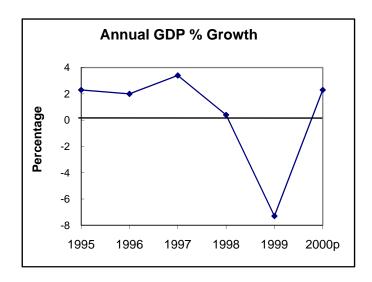
² President Noboa took office on January 21, 2000.

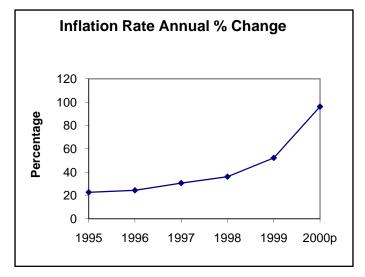
dollarization scheme was later worked into the Economic Transformation Law (Trole 1) which was passed and effected on March 13,2000.

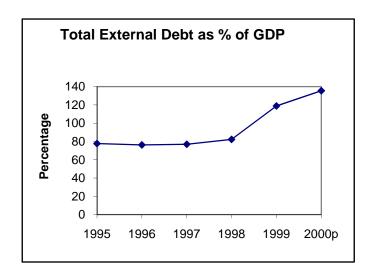
Since dollarization, the economic fundamentals have improved somewhat, although it is difficult to separate out the impact of dollarization from the reforms that Ecuador has made under its IMF structural adjustment programme.

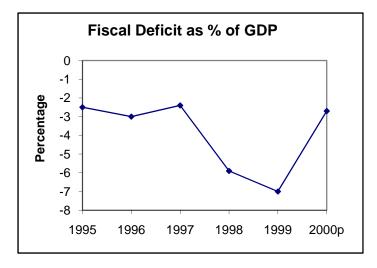
Inflation shot up to 96.2% in 2000, but most of this increase is attributed to the depreciation of the sucre during the end of 1999 and the high levels of money creation in the period before January 2000. In 2001, inflation is forecasted to decelerate to 40.6%, reflecting increases in public sector prices as subsidies on domestic fuel and cooking gas were reduced. GDP growth revived to 2.3% during 2000 due to increased investment and consumption. The confidence generated by Ecuador's dollarization and its embarkation on an IMF programme led to the opening of credit lines from several multilateral funding agencies, easing the liquidity constraint in the banking system. The restoration of confidence in the banking sector was evidenced by the volume of deposits that remained after time deposits were unfrozen in March 2000. In addition, quasi-money expanded by 12% between the end of 1999 and October 2000. Ecuador was also able to re-programme part of its external debt, including changing its Brady bonds and eurobonds that were not serviced since October 1999 for new ones maturing in 2012 and 2030. The gains in stabilizing the macro-economic fundamentals have been bought, however, with much social unrest and popular sentiment continue to retard the implementation of structural reforms.

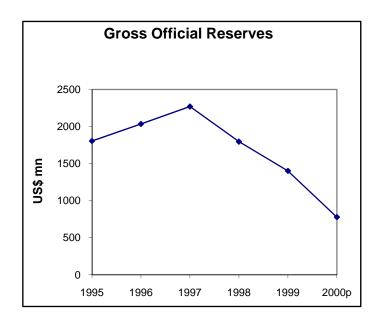
Ecuador Macro-Economic Indicators











EL Salvador

After fixing its exchange rate at C8.75 to the US dollar since 1992, El Salvador took the final irrevocable step and legitimised the US dollar as legal tender in January 2001. Although the central bank can no longer print colones, it still retains a stock of colones that can be issued to replace obsolete notes. Coins are imported from the United States. Colones are to be replaced gradually as consumer demand for the dollar for local transactions increase.

Since the end of the civil year in 1992, El Salvador's economic policies have been directed at increasing economic growth through low inflation, encouragement of private sector investments, privatisations and liberalisation of the financial sector.

In January 1993, El Salvador re-pegged its currency to the US dollar (C8.75 to US\$1), controlling inflation that moved from an average of 14.8% during the first half of the 90's to a respectable 0.5% by 1999. An investment and post war reconstruction boom led to an average annual real growth rate of 5.7% from 1990 to 1995. Strong growth in non-traditional and maquila³ exports combined with high family remittances from abroad to hold the current account deficit of the balance of payment to within 1.9% of GDP. Prudent fiscal policies held the overall public deficit to an average of 1.5% of GDP during the same period. Interest rates on domestic currency loans averaged 16.7% while those on foreign currency loans measured 11.3%, a 5.4% differential.

Since 1997, growth has stagnated, declining from 4.2% in 1997 to 2.0% by 2000 as deterioration in the terms of trade caused by unfavourable prices for coffee, sugar and shrimps negatively impacted on the export sector. Rising oil prices helped to push inflation up to 2.3% in 2000, while unemployment rose from 7.5% in 1998 to 7.9% by 2000. The current account deficit on the balance of payments also rose from 0.7% to 3.2% of GDP during the same period, with international reserves reducing by US\$49mn in 2000. Since 1998, the government had loosened fiscal spending in an attempt to improve growth with the overall public deficit rising from 2.2% of GDP in

_

³ Assembly type manufactures.

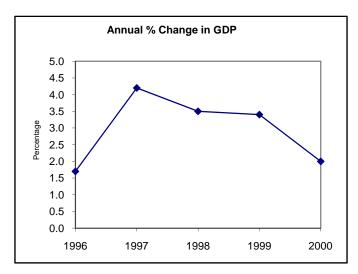
1998 to 2.8% by 2000. The government bailout of the national agricultural bank and subsidies for electricity contributed to the deficit. Private sector credit also contracted sharply in 2000 as banks were brought under tighter financial supervision due to the increase in their non-performing loans.

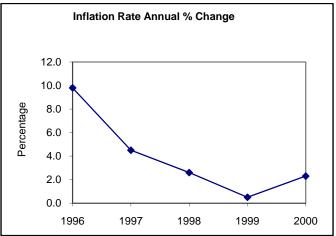
With growth stagnating, the government dollarized with the stated objective of increasing credibility in their economic policies and reducing domestic interest rates by eliminating the currency risk element. The feeling was that the high interest rates on domestic loans was deterring investment and contributing to the economic stagnation. However, the move to dollarization does not appear to have as much basis in macroeconomic fundamentals as in the case of Ecuador. In fact, a knowledgeable source alleges that the decision was made by the current governing party in order to reduce the potential for running an unsustainable fiscal deficit by any future administration.

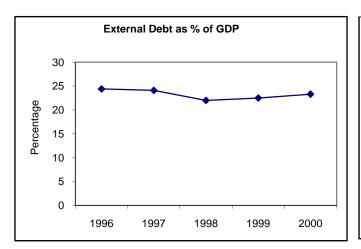
Initial results of the Salvadorian dollarization process are still skimpy. By May 2001, the IMF reported that lending interest rates had declined by over 200 basis points since late 2000 and stood at some 300 basis points above the US prime lending rate. However, two earthquakes in January and February of 2001 coupled with low prices for coffee and a drought that affected a significant part of the basic grains harvest are already placing pressure on the government to cope with the social problems of helping people rebuild their lives and feed themselves. For 2001, the public sector deficit is estimated to rise higher than initially planned due to a projected decline in total revenues and grants by 1 percent of GDP. The government will need to undertake additional external borrowing to fund its disaster recovery and rehabilitation efforts. Central bank revenues are forecasted to deteriorate from an operating surplus of 0.6% of GDP to a deficit of 0.4% of GDP, partly due to the payment of interest on bank reserves held with the central bank. The government intends to offset the losses by 'scaling back' the wage bill and transfers and reducing capital expenditure. In addition, IMF staff recommended a reduction in export subsidies for nontraditional exports, an increase in taxes on alcohol and cigarettes, cutting excess reimbursements of VAT rebates to exporters, and reducing water

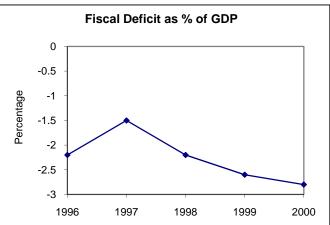
subsidies to the poor. Further, the IMF, in their July 9, 2001, Article IV consultation report, cautioned the government against issuing currency from their stocks since this would undermine the credibility of the new regime.

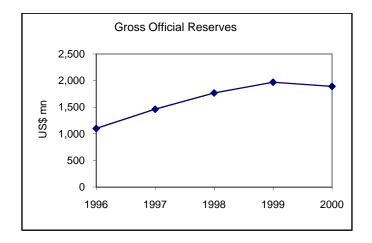
El Salvador Macro-Economic Indicators



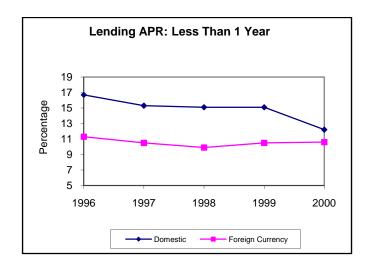


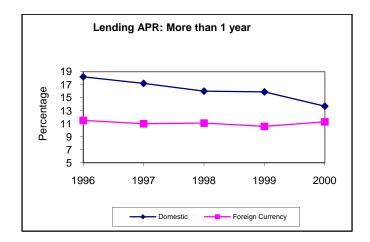


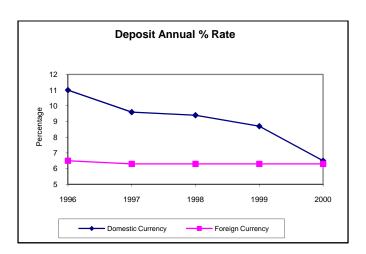




El Salvador Macro-Economic Indicators







<u>Liberia</u>

Liberia has operated a dual legal tender system with the Liberian dollar on a 1:1 parity with the US dollar. While the US dollar was the main banknote used, the coins were Liberian with the largest denomination being \$5. Use of the US dollar as legal tender in Liberia has not minimized the effects of economic mismanagement, governance problems and the consequential loss of international confidence. It has also not stopped the development of a parallel market for US dollars when the flow of dollars abruptly plunged as terms of trade worsened and loss of confidence led to capital flight.

The country enjoyed relatively stable and strong growth through most of the 60's and 70's when prices for its major export commodities - iron ore, rubber and timber - were favourable. The latter led to regular current account surpluses on the balance of payments and the international confidence generated by the strong performance of its external sector allowed Liberia to borrow heavily. By the 1980's, the country had accumulated a large stock of external debt, a major portion of which went into the non-tradable sector for 'non-productive' projects that were unable to generate an adequate stream of hard currency earnings to meet debt service obligations. External shocks such as rising oil prices and falling commodity prices coupled with high debt servicing obligations and persistent fiscal deficits resulted in severe balance of payment crises, and by, 1984, the country was unable to meet even its payment obligations with the IMF. The loss of confidence in the economy led to capital flight that further deepened the decrease in US dollar banknotes in circulation, which in turn caused a significant contraction in the money supply and shortage of liquidity in the economy.

The liquidity constraints and the need to finance huge budget deficits drove the government to increase the use of Liberian currency, and by 1989 (the start of their seven years civil war), Liberty \$5 notes had become the principal medium of exchange – a shift away from the US dollar. During the same period, beginning in 1985, a parallel market developed with the Liberian dollar trading at a substantial discount against the US dollar when the government was unable to guarantee local

convertibility. In August 1998, after the end of the civil war and a return to normalcy, Liberia rescinded the 1:1 official parity of the Liberian dollar with the US dollar and allowed their dollar to float. Whilst the US dollar has remained legal tender, the main currency is the Liberian dollar that trades between L\$40 to L\$42 for US\$1. Currently, the country remains mired in external debt of US\$2.6bn, of which US\$2.3bn are in arrears.

Liberia appears to have now switched from the US dollar as the main basis for its monetary system to the Liberian dollar, although the US dollar remains legal tender. Dollarization only functioned smoothly when the country had a steady stream of commodity dollars arising from surpluses on its current account. Although Liberia's economic fundamentals were mismanaged, massive external borrowing permitted the dollar based monetary system to operate. When the flow of dollars became severely constrained, the liquidity problems forced a return to the major use of Liberian currency and prompted the development of a black market for US dollars.

III. Macro-environment of Belize

Following a period of strong growth in 1987-1990, when real GDP rose by an average of 10.4%, activity in the Belizean economy decelerated with growth averaging 6.3% in 1991-1992 as the export sector struggled through bad weather conditions, agricultural diseases and adverse terms of trade. While private sector investments contracted owing to the completion of major hotel projects and lower investment in the agricultural sector (mainly citrus and banana), public sector investments ballooned as government undertook a number of capital projects including construction of several public buildings. Total fiscal expenditure consequently rose from 28% of GDP in 1990 to 35% of GDP by 1992. Because of the significant increase in capital outlays, the fiscal position deteriorated as evidenced by the erosion of the overall balance from a surplus of 1% of GDP in 1990 to a deficit of 6% of GDP by 1992. The capital expansion was financed mainly through receipts from the sale of assets and domestic credit. Central Bank's loans and advances to government and public sector entities rose by \$27mn and funds were also raised through privatization

of Belize Telecommunications Ltd (BTL) and Belize Electricity Ltd. (BEL). Acceleration in imports - especially in manufactured goods and machinery - combined with sluggish growth in export earnings led the current account of the balance of payments to fall from a surplus of 5% of GDP in 1990 to a deficit of 6% of GDP by 1992. At the same time, the gross official reserves plunged from \$US74.9mn to \$US59.5mn, reducing the import cover from 4.2 to 2.6 months.

The new administration that took office in June 1993 sought to restore the fiscal imbalance by curtailing capital expenditure and shifting the source of capital funding more toward external creditors. However, current expenditure outlays continued to rise owing to the prior expansion in the number of government employees, an inherited wage agreement that allowed for an across the board wage increase of 10 – 12 percent over three years and increased subsidies for education in fulfillment of a campaign promise. There was a marked increase in the cost of debt servicing as short-term loans previously incurred came due putting a further squeeze on the fiscal position. All of this necessitated further increases in financing from the domestic banking system in 1994 and 1995 and caused the level of foreign reserves and import cover to fall even lower.

Efforts to strengthen government finances included introduction of a Gross Receipts Tax and renegotiation of the wage agreement. In March 1995, government wages were frozen and the economic citizenship programme was expanded. Excise taxes, import duties and surcharges on fuel were all raised and 860 government employees were retrenched during the last quarter of that year. During the first quarter of 1996, a value added tax of 15% was implemented to replace the Gross Receipts Tax and to offset the loss of revenues due to implementation of phase I of the Common External Tariff. Continued downward pressure on the foreign reserve position caused the Central Bank to commence buying foreign exchange receipts directly from sugar exporters (bypassing the commercial banks) and to begin rationing hard currency to commercial banks. Monetary policy was also tightened to support the foreign reserve position⁴. The tightening in monetary and fiscal policies combined with more

⁴ The liquidity reserve requirement was raised from 24 to 26% in December 1995

restrained foreign borrowing resulted in a lower and rather erratic growth pattern during this period.

In August 1998, a new administration took office with a mandate to spur economic growth through fiscal expansion⁵. Massive capital outlays mainly on housing and other infrastructure were combined with lower taxes⁶ and loose monetary policies. The latter included reductions in commercial bank reserve requirements in November 1998 and April 2000. Meanwhile, widening fiscal deficits were financed by funds raised through the securitization of home mortgages, privatisation of public utilities (BTL, BEL and WASA) and substantial borrowing on commercial terms from the international financial markets. The Central Bank also injected some \$84.0mn into the system through loans to DFC that were used to finance projects concentrated mainly in the non-tradable sector. A significant portion of these involved home construction. Lending by the Social Security Board also grew significantly during this period with the mortgages component of its portfolio up from 23.9% to 53.4%. In response to these policies, real economic growth accelerated to 6.4% in 1999 and 10.5% in 2000. At the same time, increased pressure was exerted on the balance of payments as imports rose while exports stagnated due to negative terms of trade for traditional agricultural products. After achieving small surpluses in 1995 and 1996, the ratio of the current account deficit on the balance of payments to GDP began to trend downwards from -2.5% in 1997 to reach -16.3% in 20007.

As expected, excessive liquidity and expansion of the domestic money supply during the past three years has been matched by higher demand for hard currency to finance imports. An already existing imbalance between foreign exchange supplies and demand has worsened creating lengthened queues at the commercial banks and heightened activity of parallel market operations. In 2000, it was estimated that approximately 21% of retained imports were acquired with funds from the parallel market. The shortage of foreign currency in the official system has also stimulated

-

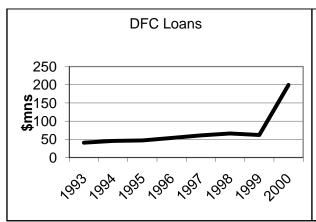
⁵ The PUP won a landslide victory of 26 to 3 after campaigning on a platform of providing 15,000 jobs and building 10,000 houses.

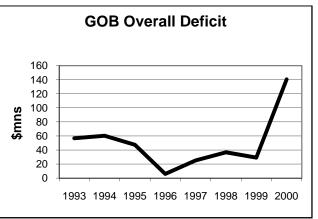
⁶ The 15% VAT was replaced with an 8% Sales Tax

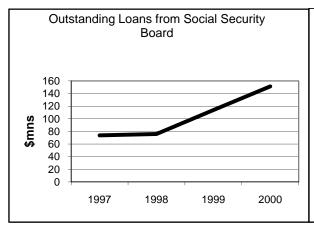
⁷ The effects of prior fiscal expansion was exacerbated by reconstruction work following Hurricane Keith

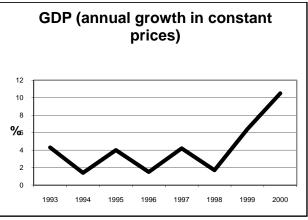
public fears and rumours of devaluation. With the Government apparently still determined to hold its course and push through its mandate, no effective changes have been made in monetary and fiscal policy and the Central Bank has therefore had to significantly increase its borrowing from abroad in order to enable it to meet official commitments and a portion of the needs of the private sector. Increased disquiet in the general public has given rise to the suggestion from some private sector entities that Belize should solve its foreign exchange problem by dollarizing. The pros and cons of this course of action are explored in the next section.

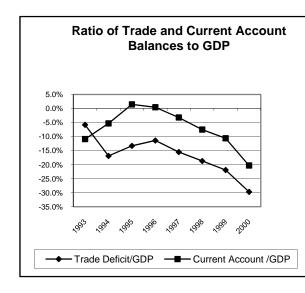
Notable Trends in the Belizean Economy

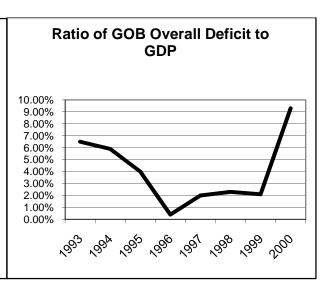












Dollarization for Belize

For the purposes of this paper the discussion will center on the question of full dollarization for Belize. It is assumed that the US dollar would become the sole, legal tender. During implementation, the Central Bank would purchase Belizean dollars at the current exchange rate within a specified period of time. Thereafter, the legal tender status of Belizean notes would be terminated though domestic coins may still be issued by the Central Bank for transaction purposes. In practice, all prices, financial records and bookkeeping would be denominated in US dollars and all accounts would be settled in US dollars. The process would be undertaken unilaterally, meaning that no formal bilateral arrangement with the US could be made.

For Belize, the most significant advantage of dollarization would be the elimination of the risk of a sudden devaluation of the exchange rate. The recent rapid increase in money supply arising from expansionary fiscal and monetary policies has raised import demand, increased the balance of trade deficit, placed pressure on the international reserves and exerted tremendous strain on the fixed exchange rate. However, with dollarization, the risk of devaluation would disappear since Belizean dollars would no longer be used. Such a move would prevent capital flight arising from the fear of devaluation and safeguard the value of monetary holding and financial assets. The only exchange rate risks would be those associated with the US dollar.

Elimination of the parallel market for US dollars would be an immediate benefit of dollarization. The rationing of foreign exchange began in the 1990's and over the years, the parallel market has grown in relative importance alongside the increasing demand for foreign exchange. Driving the growth was the profit margin realised from the premium placed on the US dollar brought about by too many local dollars chasing too few US dollars.

While a parallel market for US dollars has always existed because of its free acceptance for the purchase of goods and services in the community, the start of the

tightening of supply of US dollars can be traced to the period during which the Central Bank suborned the export earnings from sugar in order to guarantee a sufficient supply of hard currency to meet government's debt service obligations and other essential imports.

Using the payment gap for imports of goods (shown in Table 1) as a very crude indicator of the size of the parallel market would place this market at approximately \$161.2mn in 2000. This market has grown considerably, by more than 50%, in the last two years, reflecting the expansionary fiscal and monetary policies that have increased domestic absorption and driven up the demand for imports and the hard currency to pay for these imports.

Table 1: Import Payment Gap

| | 1997 | 1998 | 1998 1999 | |
|-------------------------|---------|---------|-----------|---------|
| | BZ \$mn | BZ \$mn | BZ \$mn | BZ \$mn |
| Retained Imports c.i.f. | 505.9 | 542.1 | 641.1 | 763.9 |
| Payments for goods, | 378.2 | 394.6 | 439.0 | 574.3 |
| insurance and freight | | | | |
| Imports not requiring | 26.3 | 32.4 | 30.0 | 28.4 |
| p/ment | | | | |
| Payment gap | -101.5 | -115.1 | -172.1 | -161.2 |

While dollarization may initially reduce the scramble to find foreign exchange, any relief would be very short-lived because the actual pool of dollars is growing at a slower pace than the demand. Negative terms of trade and natural disasters have been main constraints to expansion of the tradable sector. During 2000, disbursements from loans to the public sector and proceeds from mortgage securitisation pumped more than \$200mn into the economy - more than the import payment gap of \$161.2mn. Although Central Bank's foreign exchange sales to commercial banks rose by over 36%, the problem still persisted. Hence, while dollarization may eliminate the parallel market, it will not cure the shortage of foreign currency.

Another immediate benefit of dollarization is the reduction of transaction costs, that is, the costs incurred when importers buy US dollars for payment of foreign goods and

services. With dollarization, importers would no longer have to pay the commissions and other fees associated with currency conversion – fees that could total over 1.0% of the amount of money bought. Further, with the disappearance of the parallel market, the currency premiums for foreign exchange would disappear, also lowering transaction costs.

The immediate impact of dollarization on domestic interest rates is hard to predict. When El Salvador and Ecuador dollarized, part of their implementation strategy included a mandated reduction in interest rates on loans that were converted to US dollar. Ecuador used a conversion mechanism, known as *desagio*, to translate previous sucre-denominated loans and deposits into dollars at lower interest rates, as well as a conversion process for previously issued dollar debt to lower interest rates for a short period (after which they would be rolled over at market rates). In El Salvador, banks were required to exchange colones for dollars, without charging any fee, and to re-denominate all old transactions in US dollars. In the meantime, a three months period was given to gradually lower interest rates on old loans that had been denominated in colones in line with the decline in banks' cost of funds and the interest rates on new US dollar loans.

Interest rates in the local financial sector are largely determined by the official reserve requirements, operational costs and desired profit margins of the financial institutions. If liquidity reserves held for the commercial banks are paid interest at market rates and liquidity reserve requirements are lowered, banking costs should decline and be reflected in lower interest rates. The extent to which the pass through of lower cost savings to customers occurs would depend on the mind set and operating norms of the existing banking culture. History has however shown that the oligopolistic structure of the domestic banking system in Belize makes the banks more inclined to pad their profit margins. Nevertheless, it is possible that, in the longer term, dollarization may contribute to a lowering of interest rates by reducing the competitive insulation that the commercial banks currently enjoy.

The impact of dollarization on international interest rates is as equally difficult to assess with any degree of certainty. Berg and Boresztein (2000) wrote that 'an immediate benefit from eliminating the risk of devaluation is reducing the risk premium on foreign borrowing and obtaining lower interest rates for the government and private investors'. Economists theorise that the international cost of borrowing by a country reflects premiums associated with both currency and sovereign risk. They assert that the removal of currency risk through dollarization should therefore reduce international borrowing costs.

Countries with floating exchange rates are subject to wide fluctuations in their exchange rates, and hence, high currency risk. In Belize's case, the stable exchange rate in place since 1976 makes it difficult to assess currency risk. The fixed exchange rate was maintained even when Belize was forced into an IMF adjustment programme in 1984. In the recent past, the credit ratings given by agencies such as Moody's and Standards & Poor have been based on the country's macro-economic fundamentals and its capacity to generate hard currency earnings to meet debt service commitments. The risk premium appeared to be tied more to sovereign, rather than currency, risk. This fact was emphasised even further by the downgrading in October, 2001, of the Standard and Poor's credit rating for Belize in the aftermath of September 11.

Dollarization would obviously not eliminate Belize's sovereign or default risk, which is a function of international interest rates and macroeconomic fundamentals⁸. The assessment of this risk is largely based on the soundness of Belize's macroeconomic internal and external positions. In particular, the level of fiscal deficit is weighted against the country's ability to meet future debt obligations given its current capacity to generate revenues, especially in times of economic shocks. Other factors that are considered include monetary policy, social conditions and political stability. By itself, dollarization would not improve Belize's social and political environment nor the investment climate for economic growth. This can only be achieved with timely structural adjustment programs and responsible policy decisions, and these can be

⁸ See El Salvador- Recent Economic Developments

undertaken without dollarizing. Hence, it is difficult to ascertain if the cost of foreign borrowing would decline.

On the other hand, the costs of dollarization could add to Belize's country risk. To fund the dollarization program, Belize would have to borrow from external creditors, since its international reserves would be insufficient to meet the costs. The country's debt burden and debt servicing requirements would increase, adding to, not detracting from country risk.

Dollarization would entail three direct financial costs. The first would be the loss of seigniorage, the income that accrues to a money issuing body. The Central Bank earns a profit by issuing currency, a non-interest bearing debt (or liability), in return for real or financial assets of equal nominal value. For instance, the Bank uses its seigniorage income to buy foreign exchange and government securities. While many different ways of measuring seigniorage exist, one simple measurement is the annual increase in base money (the sum of currency in circulation plus bank reserves) less printing costs.

The average annual flow of seigniorage income from 1995 to 1999 has been approximately US\$3.2mn. This would be forfeited in perpetuity and all future seigniorage income would instead be transferred to the US Federal Reserve, the money-issuing agency for the US.

| Annual Flow of Seigniorage measured as the increase in base money less printing | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|--------|
| costs | | | | | | | |
| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Sep-01 |
| Currency in Circulation | 71.3 | 76.3 | 79.2 | 86.7 | 103.7 | 115.2 | 112.0 |
| Deposits by licensed financial | 38.1 | 36.8 | 41.8 | 46.9 | 34.3 | 76.3 | 82.4 |
| Base Money | 109.4 | 113.1 | 121.0 | 133.6 | 138.0 | 191.5 | 194.4 |
| Change in Base money | 5.81 | 3.63 | 7.93 | 12.61 | 4.42 | 53.52 | 2.86 |
| Less cost of printing notes & Coins | 0.73 | 0.76 | 0.63 | 1.02 | 0.40 | 0.93 | 0.7 |
| Seigniorage Revenue | 5.08 | 2.87 | 7.29 | 12.51 | 4.02 | 52.59 | 2.16 |

Sources: Central Bank Reports

The second financial cost would be that of currency conversion, meaning the value of US dollars the Central Bank will spend to buy back the stock of Belizean dollars held by the public and banks upon the implementation of dollarization. As of September

| Financial costs of dollarization during first year | | | | | |
|--|-------------|--|--|--|--|
| Cost of changing base money | US\$97.2mn | | | | |
| Annual flow of seigniorage | US\$3.1mn | | | | |
| Replacement costs | US\$0.1mn | | | | |
| Total financial costs | US\$100.4mn | | | | |

2001, this cost would amount to a minimum of US\$97.2mn, equal to the currency in circulation (commercial bank vault cash plus currency with the public) plus deposits held at the central bank by licensed financial institutions. The third financial cost would be that of replacing worn out and mutilated notes. On a yearly basis, this has averaged US\$0.1mn. With gross international reserves of US\$113mn (a substantial portion of which is already committed) at the end of September, 2001, it is very likely that the government would have to fund the initial conversion costs through additional borrowing.

Another major disadvantage of dollarization is the loss of monetary policy as a tool of stabilization or growth. The expediency of monetary policy in counterbalancing the effects of exogenous shocks such as natural disasters and a deterioration in the terms of trade would be forfeited. Since dollarization would likely be done unilaterally⁹, control of monetary policies would shift to the US Federal Reserves that design monetary policies for the United States. Because of the differences in the structure of the Belizean economy vis-a-vis the US economy, business cycles in Belize are not similar to that of the US. During times of economic shocks, adverse economic conditions in Belize may be exacerbated due to the lack of appropriate monetary stimulus.

_

⁹ The Federal Reserve has already indicated their unwillingness to compromise US monetary policies for countries that are dollarized.

The lender of last resort function of the Central Bank would become significantly impaired. One of the Central Bank's most important roles is to avert banking crises

by providing liquidity support to banks or acquire bank assets in the event of a severe bank run. The ability to print money allows the Bank to cover the commercial banks' liabilities if depositors rush to withdraw their money balances from these institutions, and this assistance is pivotal in keeping affected banks afloat during the crisis period. Since dollarization removes the central bank's ability to print money, its role as lender of last resort is immediately limited to its stock of foreign assets or its ability to obtain credit from foreign sources. Thus, while the central bank may be able to provide some liquidity to depository institutions, its ability to guarantee credit to cover the liabilities of all commercial banks would be severely restricted.

Some economists maintain that dollarization lends credibility to government policies and heightens fiscal transparency and accountability. Since government would no longer be able to finance its deficit by printing money, it would either be forced to match expenditures with revenues or borrow to finance its deficit, as Liberia did. Should the government choose to borrow, rather than increase taxation, in order to continue its current expansionary fiscal policies, the country could quickly run into default difficulties (such as experienced by Liberia and Panama) unless the borrowings are channeled into projects that could generate a stream of hard currency earnings that would be sufficient to meet debt servicing obligations as they fall due. In addition, debt-servicing commitments for domestic credit would now require commodity dollars instead of fiat currency. On the other hand, should the government opt to balance its budget, the significant drop in public consumption (the government is one of the largest consumers in the economy) would be immediately recessionary.

It is also purported that dollarization may contribute to greater economic integration than otherwise would be possible with the United States. However, this would require a conscious harmonization of domestic policies with those being implemented by US authorities. From a trade perspective, dollarization will not raise the demand for

Belizean exports by US citizens. Lower transaction costs may lead to an increase in aggregate demand for US products in the short run. After this, one would expect the self-correcting mechanism to kick in that would constrain purchases from abroad to the country's earning capacity. From a cost of living perspective, Belize's inflation rate already parallels that of the US. Dollarisation may reduce this to the extent that trade transactions costs are reduced, lowering import costs. However, unlike, Ecuador and El Salvador, the country already enjoys stable and relatively low inflation This should not change much with dollarization. From a financial sector rates. perspective, financial transactions with entities abroad would become far more difficult to monitor and regulate in the medium to long term with obvious consequences for data collection and economic planning. Where the level of integration with US financial markets are concerned, this would be dependent not only on the soundness and depth of the domestic financial system but also on the liberalisation of capital flows, the latter of which may not be a good thing for this type of small economy.

Dollarization could have a major unexpected drawback as the free flow of US dollars into and out of the economy would make it more difficult to control money laundering. Unofficial reports are that Guatemala's shift to a dual legal tender system in the context of weak financial sector supervision made it easy for illegal elements to launder their funds by buying prime real estate in the main business districts. Inflows of dollars from questionable sources have resulted in both Guatemala and Panama being black listed internationally.

In a social context, some people reject dollarization for symbolic reasons. For them, dollarization represents an erasure of a national symbol and to support dollarization is to condone the erosion of Belize's cultural identity.

Conclusion

There appear to be two clear and immediate benefits of dollarization – the elimination of currency risk and lower transaction costs. Normally, one would expect the

termination of parallel market operations to be one of the obvious benefits as well. However, as was observed in the case of Liberia, inadequate inflows of US dollars, solvency problems along with civil unrest led to increased use of the domestic currency and the creation of a parallel market for US dollars. The benefits to be obtained from dollarization with respect to lowering of the differential between domestic and international interest rates are more difficult to ascertain. While the last vestige of currency risk would be removed, the question of sovereign risk which is linked to the economic fundamentals of the country would continue to be an important factor influencing foreign borrowing costs. Where domestic interest rates are concerned, it would seem that dollarization would have to be accompanied by other legislative measures in order to ensure that any cost savings derived from lower reserve requirements are passed through to the general public. Both Ecuador and El Salvador passed legislation to force banks to reduce lending rates as part of their dollarization programme.

The financial costs of dollarizing would prove to be very substantial. In the first year alone, total foregone seigniorage would amount to approximately US\$100mn. In essence, all seigniorage revenue that has accrued to the country over time would be handed over to the US when the monetary base is converted. On an annual basis, Belize could expect to lose about US\$3.2mn in seigniorage.

The cost in terms of the loss of fiscal and monetary flexibility may prove to be just as or even more difficult to deal with. The basic indicators show that El Salvador, for example, was enjoying the benefits of sound fiscal and monetary policies up to the time when it chose the path of dollarization. However, the economic shocks from two earthquakes in 2001 showed how rigid the confines of a dollarized economy are in reality. The reduced flexibility of the regime resulted in cutbacks in overall expenditure, removal of subsidies to the poor, and increased taxation almost immediately after dollarization was implemented. This added to the trauma the Salvadoran people were experiencing as a result of the disasters.

On a continuum of exchange rate flexibility, dollarization is 'the extreme case of fix'. Commodity money replaces fiat money since every dollar in circulation would have to be earned from the export sale of goods and services or derived from foreign investments or loans. The success of the regime requires that a sustainable stream of foreign currency be generated or attracted into the economy. Liberia may be an extreme example of some of the logistical difficulties that can be encountered when a country is relying on banknotes that are in insufficient supply. Some reports were that US dollar notes were fragmenting from overuse in that country given the shortage of supplies. Ensuring a sustainable stream of hard currency earnings that is growing in line with the developmental requirements of the economy will entail investments into and sustained expansion and diversification of the tradable sector – clearly not a short-term effort.

In cases where governments have shown a consistent trend of overspending leading to excessive balance of payments pressures, some have argued that dollarization would be one way of guaranteeing fiscal responsibility as Central Bank financing of fiscal deficits would no longer be an option. Others would respond that the currency board system would be just as effective without the major drawback that the loss of seigniorage presents under dollarization. The currency board system would be far simpler to implement and in addition to seigniorage, has the advantage that it can be replaced with a more flexible exchange regime when credibility in decision making and economic fundamentals have been restored. In contrast, dollarization would be practically irreversible since the US dollar cannot be easily substituted with a weaker currency in an economy where the United States already accounts for 50% of imports and exports.

Dollarization would not resolve the macro-economic imbalances that have created the shortage of foreign exchange. Indeed, apart from not addressing the scarcity problem, it would increase the vulnerability of the economy to exogenous shocks by severely restricting the blend of fiscal and monetary policies that could be used to foster sustainable economic growth and development. Further, precipitously plunging into dollarization without the backing of a dynamically expanding export and tradable

sector can be a recipe for an economic slow-down. In summary, the country would be best served by independently conducting prudent fiscal and monetary policies tailored to its specific developmental needs.

| EL SALVADOR | | | | | | |
|--|--------------------------|---------------|---------------|----------------|-------|--|
| Selected I | Macro Indicators | | | | Prel. | |
| | 1996 | 1997 | 1998 | 1999 | 2000 | |
| National Accounts and Prices | | | | | | |
| Real GDP | 1.7 | 4.2 | 3.5 | 3.4 | 2.0 | |
| Real GDP per capita | -0.4 | 2.1 | 1.4 | 1.4 | | |
| Consumer price index (period average) | 9.8 | 4.5 | 2.6 | 0.5 | 2.3 | |
| Unemployment rate (in percent) | 7.7 | 8.0 | 7.5 | 7.7 | 7.9 | |
| | (In pe | rcent of GDP, | unless otherw | ise indicated) | | |
| External Debt | (1 - | , | | , | | |
| Public external debt | 24.4 | 24.1 | 22 | 22.5 | 23.3 | |
| Fiscal Sector | | | | | | |
| Overall public sector deficit | -2.2 | -1.5 | -2.2 | -2.6 | -2.8 | |
| Balance of payments | | | | | | |
| Current Account | -1.6 | 0.9 | -0.7 | -2.3 | -3.2 | |
| Merchadise trade balance | -16 | -14.5 | -15.4 | -16.1 | -19 | |
| Private Transfers | 11.6 | 11.7 | 12.3 | 12.3 | 13.6 | |
| Capital and Financial Account | 3.2 | 2.4 | 3.2 | 3.9 | 2.8 | |
| International reserves (-=increase) | -1.6 | -3.3 | -2.5 | -1.6 | 0.4 | |
| Gross Official Reserves (\$US mn) | 1,100 | 1,462 | 1,767 | 1,969 | 1,891 | |
| (in months of next year's imports of goods and services) | 3.5 | 4.4 | 5.1 | 4.7 | 3.9 | |
| Real effective exchange rate (C to US\$1) | 5 | 4.7 | 1.3 | 1.1 | 5.1 | |
| Interest rate | (In percentum per annum) | | | | | |
| Loans up to one year | | | | | | |
| Domestic currency | 16.7 | 15.3 | 15.1 | 15.1 | 12.2 | |
| Foreign currency | 11.3 | 10.5 | 9.9 | 10.5 | 10.6 | |
| Loans of more than one year | | | | | | |
| Domestic currency | 18.2 | 17.2 | 16 | 15.9 | 13.7 | |
| Foreign currency | 11.5 | 11 | 11.1 | 10.6 | 11.3 | |
| Time Deposits | | | | | | |
| Domestic currency (30 days) | 11 | 9.6 | 9.4 | 8.7 | 6.5 | |
| Foreign currency (30 days) | 6.5 | 6.3 | 6.3 | 6.3 | 6.3 | |

Source: El Salvador - Recent Economic Developments Staff Report for the 2001 Article IV Consultation

| | ECUA | DOR | | | | | |
|---|--|---------------|---------|---------|---------------|-------|--|
| | Selected Mac | ro Indicators | | | | | |
| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000p | |
| | Annual Percentage Change | | | | | | |
| National Accounts and Prices | | | | | | | |
| Real GDP | 2.3 | 2 | 3.4 | 0.4 | -7.3 | 2.3 | |
| Real GDP per capita | 0.2 | -0.1 | 1.3 | -1.7 | -9.2 | -3.3 | |
| Consumer price index (period average) | 22.7 | 24.4 | 30.6 | 36.1 | 52.2 | 96.2 | |
| Unemployment rate (in percent) | 6.9 | 10.4 | 9.3 | 11.8 | 15.1 | 16.1 | |
| Exchange Rate | Sucre per US dollar | | | | | | |
| Principal Rate (period average) | 2,564.5 | 3,189.5 | 3,998.3 | 5,446.6 | 11,786.8 n.a. | | |
| | In Percent of GDP (unless otherwise indicated) | | | | | | |
| External Debt | | | | | | | |
| Total public debt | 77.7 | 76.2 | 76.9 | 82.2 | 118.8 | 135.4 | |
| Private Sector | 8.7 | 10.2 | 12.8 | 16 | 18.4 | 23.9 | |
| Public Sector | 69 | 65.9 | 64.2 | 66.2 | 100.3 | 111.4 | |
| Fiscal Sector | | | | | | | |
| Overall balance of public sector | -2.5 | -3 | -2.4 | -5.9 | -7 | -2.7 | |
| Balance of payments | | | | | | | |
| Current Account | -4.1 | -0.7 | -3.6 | -11 | 7.1 | 5.3 | |
| Merchadise trade balance | 2 | 5 | 3 | -5 | 12.4 | 12.1 | |
| Capital and Financial Account | 2.9 | 0.4 | 4.1 | 7.1 | -13.4 | 2.5 | |
| Change in international reserves (-=increase) | 1.2 | 0.3 | -0.5 | 3.9 | 6.3 | -1.4 | |
| Debt Indicators | | | | | | | |
| Total external debt service | 28.8 | 28.8 | 30.5 | 35.7 | 33.8 | 35.9 | |
| (% of exports of gds & srvcs) | | | | | | | |
| International Reserves Position | | | | | | | |
| Gross Official Reverves (US\$mn) | 1805 | 2035 | 2270 | 1796 | 1402 | 778 | |
| (in months of imports) | 4.4 | 5.1 | 4.7 | 3.4 | 4.6 | 2.3 | |

Source: IMF country reports

References

Berg, Andrew and Eduardo Borensztein, 2000, "The Pros and Cons of Full Dollarization" IMF Working Paper WP/00/50

Belize-Recent Economic Developments, IMF SM/98/198

Belize-Staff Report for the 1993 Article IV Consultation, IMF SM/93/248

Belize: Selected Issues and Statistical Appendix, 2001, IMF Country Report No.01/151

Central Bank of Belize Annual Report and Accounts (1991-2000)

Ecuador-Selected Issues and Statistical Annex, 2000, IMF SM/00/194

El Salvador-Recent Economic Developments, 2001, IMF SM/01/212

El Salvador-Staff report for the 2001 Article IV Consultation, IMF SM/01/215

Frankel, Jeffery A., (1999), "No Single Regime is Right for all Countries or at All Times", Graham Lecture, Princeton University

Liberia-Staff Report for the 1999 Article IV Consultation and Staff Monitored Program, 2000, IMF EBS/00/25

Statistical Digest, 2000, Belize: Central Bank of Belize