# Dollarization in Latin America Barry Comerford, Emmet Ryan and Marton Gyongyosi Senior Sophister

Is dollarization, the surrender of a national currency to the increasingly almighty dollar, the last option for developing countries whose efforts towards economic reform are frequently devastated by currency specialisation? Barry Comerford, Emmet Ryan and Marton Gyongyosi offer a very readable survey of the costs and benefits of dollarization with case studies.

# Introduction

"...[Dollarization] is like when Cortez got to Veracruz, and his soldiers started getting a bit nervous when they saw what they faced, so he had the ships burned."

Such is the claim of Guillermo Ortiz, governor of the Banco de Mexico.<sup>1</sup> He is emphasising the irreversibility of any prospective move to full dollarization. As there is no going back, it is crucially important that South American policymakers examine the issue in full before taking any action. Why has dollarization recently become so topical?

Quite simply, Latin American countries have tried and, for the most part, failed to achieve exchange rate stability through fixed exchange rates. A new source of potential economic instability has been unleashed by financial deregulation. The action of speculators heightens currency risk. Increasingly, in Latin America there exist only two credible exchange rate options. These are a super fixed exchange rate (such as a currency board or full dollarization) and a float. The real test for dollarization, or any exchange rate regime for that matter, is whether or not it can deliver on the twin primary policy objectives of price stability and sustainable economic growth.

In the first section of this paper we briefly discuss the concept in question. We then examine the monetary history of Latin America and the lessons that can be learned from it. Floating exchange rates for the majority of these countries is advocated in the short run, while dollarization is possible in the longer term. Next we examine in

<sup>&</sup>lt;sup>1</sup> IMF (1999a)

detail both the benefits and costs of this policy, asserting that sound economic policies should precede dollarization. Finally, we investigate the crucial political considerations and argue that public support is a vital prerequisite for any country's move towards dollarization.

# **Dollarization: an Operation Already Begun**

"Dollarization is a process in which a country adopts - in whole or part - the US dollar as its official currency."<sup>2</sup>

The world economy is already heavily dollarized because of the US currency's domination of the international financial system. At a country-to-country level, dollarization can be considered scalar. At one end of the spectrum a state's economy may not be, to any degree, dollarized. At the other extreme, the US dollar is the only medium of exchange, store of value and unit of account.<sup>3</sup> This full dollarization is achieved by withdrawing all domestic currency in circulation and replacing it with US dollars. Resting between these two extremes is limited dollarization. Many countries throughout the world are partially dollarized. This includes Latin American economies and occurs when US dollars circulate in a country with the national currency continuing to perform the various functions of money.

Dollars play a major role when citizens lose faith in their national currency. This is often due to rapid and unstable inflation. In recent years, the previously inflationary economies concerned have made significant progress in limiting price rises. However, when economic and/or political conditions worsen, doubts again arise regarding the domestic currency's future value. Citizens insulate themselves from the threat of devaluation by holding assets in dollars. This has led to some developing countries' governments considering full or official dollarization. According to Pedro Peu<sup>4</sup> there are three forms of full or official dollarization. These are (i) unilateral dollarization (ii) monetary union with the United States (an EMU type agreement with a joint central bank) or (iii) dollarization through a bilateral treaty or agreement with the US. The most likely forms of dollarization are a unilateral dollarization or a dollarization that includes a treaty with the United States. For the rest of this paper when we speak of dollarization we are referring to the full or official variant.

<sup>&</sup>lt;sup>2</sup> Velde & Veracierto (1999)

<sup>&</sup>lt;sup>3</sup> Atlanta (1999)

<sup>&</sup>lt;sup>4</sup> Hausmann & Powell (1999)

#### **Learning the Monetary Lessons of Latin American History**

The countries of Latin America have a great deal of experience with different exchange rate regimes. The idea of super-fixed exchange rates, i.e. full dollarization, has recently been introduced by the Argentinean government. Argentina has already demonstrated that its currency board system, supported by a resolute political will, has the potential to withstand adverse market shocks. We consider the alternatives to dollarization here, because, in terms of currency regime, what is best for the countries of Latin America is a regime, which allows them to achieve stable economic growth. Objectively speaking, this does not have to be dollarization. Other monetary regimes have borne fruit in the past.

Let us examine the economic history of the continent in question. Why is it that Latin American countries seem forced to choose between two extremes - to float or to fix their exchange rates? In short, many intermediate possibilities have already been tried with limited success. In the 1960s there was international support for the Bretton Woods system. This was echoed in much of Latin America, where Chile, Brazil and Colombia maintained crawling pegs. Their policymakers believed that by gradually adjusting the nominal exchange rate over time they could achieve the level of inflation of industrial countries.

In the 1970s there was still widespread support for fixed exchange rate systems. They were thought to foster monetary discipline. Several countries in South America adopted the *tablita* or pre-announced crawling pegs. In 1978, for example, Chile, Uruguay and Argentina introduced a regime of pre-announced schedules of declining rates of domestic currency depreciation against the dollar. The aim was to tame inflation by tying the domestic currency to a stable foreign currency. Unfortunately inflation did not fall in proportion to the tablita declining depreciation rates. Hence, Chile, Uruguay and Argentina experienced massive real currency appreciations and increasing current account deficits in the years 1979-1980.

With the onset of the debt crisis, speculative attacks on the South American currencies triggered the collapse of inflation stabilisation programmes. As funding from the industrial world ran dry, some of the debtor countries experienced hyperinflation. Countries attempted different solutions to the crisis. Bolivia, feeling the effects of hyperinflation in 1985, implemented an orthodox stabilisation program. This ended existing price controls and reduced the government budget deficit by raising taxes and cutting public spending. Even though the policy was

successful in curtailing inflation, it did not succeed in restoring real economic growth.

Argentina, on the other hand, introduced an anti-inflationary programme based on significant currency reform; the Peso was replaced by the Austral. After initial success in reducing inflation, the budget deficit continued to widen and by 1987 inflation returned with renewed vigour. Finally, in 1991, the Menem regime restored economic growth by implementing Cavallo's broad plan of budgetary, trade and monetary reform. The balancing of the government budget was achieved through privatisation, tax reforms, cuts in state expenditure etc. The most revolutionary aspect of these reforms was the introduction of a currency board. This made the austral/peso fully convertible into US dollars at a fixed exchange rate. A special law was enacted which required the monetary base to be fully backed by official foreign reserves. The same law also prohibited the indexation of wages to the price level. The Cavallo plan had a massive effect on the level of inflation. It dropped from 800% in 1990 to well below 5% in 1995. Despite significant inflows of foreign investment, unemployment persisted and the current account deficit continued to grow. After several attacks on the Argentinean peso, the rise in domestic interest rates reduced aggregate demand and increased unemployment.

Chile was the most successful country in stabilising its economy. In the 1980s, the country engaged in a managed exchange rate float. She succeeded in reducing inflation significantly with only moderate real currency depreciation. Most importantly, investor confidence was maintained because the current account deficit was successfully kept in check. Mexico used a whole host of exchange rate regimes. Having defaulted in the aftermath of the two oil crises, she introduced a broad stabilisation programme in 1987 that contained exchange rate targeting and wage-price controls. Mexico also fixed its peso exchange rate against the US dollar, moving to a crawling peg in 1989 and to a crawling band in 1991. Following a devaluation of the peso, the government floated its currency. In 1995 unemployment rocketed amidst sharp fiscal cuts, very high interest rates and a banking crisis.

Having examined the economic policies pursued by Latin American countries, we can see that many intermediate exchange rate policies between fixed and floating exchange rates have been tried. If pegs are problematic, what is the best alternative? The current enthusiasm for dollarization seems to be based mainly on the experience of one country. Argentina has met the challenges of the 90s by developing perhaps the strongest monetary regime in the region. She is even considering taking the final step - full dollarization. It would, however, be foolhardy to believe that other

countries are ready to follow suit. Dollarization would be very costly. An adequate amount of reserves would be required before the process was started and a transition period may be useful as in the case of EMU.

The short run solution is to float. The recent experience of Mexico demonstrates that floating is a rational alternative for these countries. In 1996-97, during the Asian crisis, the Mexican peso was remarkably stable. Some economists object to floating because they claim markets in Latin America are not deep enough and that hedging is impossible. Flexible exchange rates, they claim, do not yield the kind of monetary discipline desperately required. The Mexican case shows that these objections are not convincing. If Mexico had had a fixed exchange rate or a currency board during the recent crisis, the costs in terms of unemployment and output would probably have far exceeded what was actually suffered.<sup>5</sup>

Exchange rate arrangements for Latin-American Countries<sup>6</sup> (As of April 4, 1999)

Exchange arrangements with no separate legal tender	Currency board arrangements	Other conventional fixed peg arrangements	Crawling pegs	Exchange rates within crawling bands	Managed floating with no preannounced path for exchange rate	Independent floating
Panama (dollarised)	Argentina	The Bahamas	Nicaragua	Colombia	Jamaica	Peru
		Barbados	Costa Rica	Honduras	Dominican Rep.	Brazil
		Belize	Bolivia	Venezuela	Paraguay	Guyana
		El Salvador		Uruguay		Mexico
		Trinidad & Tobago		Chile		Ecuador
						Guatemala

The above table shows that as of April 1999 Latin American countries are still trying a variety of exchange rate regimes. The most common are conventional fixed, crawling bands and independently floating. Only Panama is currently dollarized but

<sup>6</sup> IMF (1999b)

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<sup>&</sup>lt;sup>5</sup> Edwards (1999)

as this paper is being finalised Ecuador is moving in that direction. Given the rapid progress of global financial integration, a gradual dollarization seems the best long-run policy. Canada and Mexico have already contemplated the idea of the Dollar becoming a common NAFTA currency. What has been learnt in the last decade is that it is no longer possible to buck the market. Governments cannot shelter their economies from international speculative capital flows unleashed by financial deregulation. Only powerful fixed exchange rate systems, i.e. currency board systems and, ultimately, officially dollarized economies have the potential to win market confidence. However, as already stated, most Latin American economies are unprepared for any changeover. Thus, floating exchange rate systems seem the most credible option in the short run. The economic pros and cons of official dollarization are considered in the next two sections.

# The Benefits of Dollarization

Dollarization would stimulate Latin American economic growth for a number of reasons: it would lessen the risk of currency devaluation, limit the possibility of high inflation (reducing interest rates), reduce transaction costs associated with international trade and finance and, finally, impose a certain amount of discipline on fiscal policy.

Full dollarization reduces the possibility of currency devaluation by doing away "with the Achilles' heel of the region's economies: weak currencies that no one ... trusts." As has been already discussed, attempts to stabilise the suspect currencies by fixing its value to the Dollar have repeatedly come under pressure from both internal and external sources. The capital flight from many Latin American countries in 1998 and early 1999 came about mainly because asset holders appeared to believe that the Asian and Russian crises threatened economic stability. Those with access to international financial markets did not hesitate in moving to exchange national currencies for dollars and other 'safe haven' currencies. \*\* De facto\* dollarization has always involved a serious diversion of resources. Money intended for productive investment has gone instead on unproductive accumulation of dollar bills by

<sup>&</sup>lt;sup>7</sup>Bussey (1999)

<sup>&</sup>lt;sup>8</sup> Atlanta (1999)

domestic residents. Official dollarization would mean that this exchange rate uncertainty is eliminated. It would further reduce the scope for speculation.<sup>9</sup>

The second reason for dollarization is to limit the possibility of high inflation. By dollarizing, a country adopts US monetary policy as its own. As long as this is prudently managed, the inflationary environment in the dollarized economy should remain subdued. The domestic government has no control over the money supply and therefore cannot print money to finance deficits. Importing benign US inflation and thus severely curtailing the risk of devaluation should result in lower interest rates. However,

"in order for dollarization to be sustainable in the long run, prices in the dollarized country must be stable or rising at a rate consistently on par with US inflation, for there is no exchange rate to serve as a buffer between different inflation speeds." <sup>11</sup>

Panama, Latin America's only dollarized economy, has averaged 2.4% inflation between 1955 and 1998. This is a remarkable achievement especially considering the periodic episodes of hyperinflation that have affected its neighbours in Latin America. Growth in Panama has also been relatively good. It was 5.3% on average between 1958 and 1998 and has been a full percentage point above its Latin American neighbours in the 1990's. 13

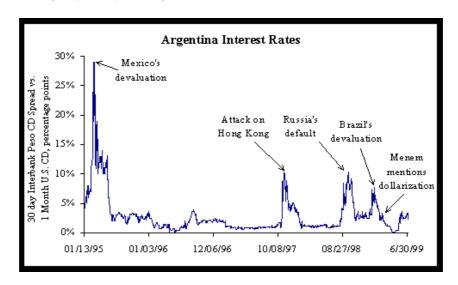
<sup>&</sup>lt;sup>9</sup> Calvo (1999) argues that the size of a country is important. The larger a country, the more stable it is. By dollarizing, a country can increase its size by becoming part of a large currency bloc.

<sup>&</sup>lt;sup>10</sup> Atlanta (1999)

<sup>&</sup>lt;sup>11</sup> Campbell (1999)

<sup>&</sup>lt;sup>12</sup> Edwards (1999)

<sup>&</sup>lt;sup>13</sup> ibid. Edwards goes on to say that the growth performance hides heavy IMF involvement and large budget deficits in the 1970's and 1980's.



Source: David Malpass' testimony to the Senate hearings on Dollarization in Latin America (July 15<sup>th</sup> 1999).

Currently, investors have to be compensated for the extra risk of devaluation in the form of an interest premium. Even Argentina, which maintains a peg with the Dollar backed up fully by US reserves, can suffer overnight inter-bank loan rates in pesos of about 1 percentage point higher than the rate in dollars with the spread widening to about 5 percentage points for one-year inter-bank loans. Dollarization arguably could reduce these spreads to nearly zero. The above graph shows that during the recent currency crises the spread between Argentinean and US interest rates rose rapidly to high levels as concerns over the sustainability of Argentina's currency regime arose. Dollarization would arguably reduce these spreads - estimated to be worth 2%-3% of GDP a year in Latin America. 14

# From Atlanta Fed Report (1999)

In addition to deterring devaluation and inflation, dollarization reduces the transaction costs associated with international trade and finance with the United States. The chart above illustrates how important the US is as a trading partner.

<sup>&</sup>lt;sup>14</sup> Atlanta (1999)

Dollarization, it is claimed, would promote the creation of a "Dollar bloc". Some consider the evidence

"compelling, that deepening the economic ties between a developing country and its industrial country counterparts can promote economic development in the less developed economy." 15

Outward-oriented trade policies are consistently associated with economic success. No less important is financial integration; financial markets in US dollars are much deeper than domestic currencies, so dollarization can make long term financing available where it currently is not.

Finally, dollarization would foster fiscal discipline. <sup>16</sup> Governments would be made to focus on programmes that offer the best returns. They would no longer have the option to print money. However, dollarization should not be viewed as a panacea for an environment created by economic mismanagement. <sup>17</sup> Developing policy credibility takes decades of prudent fiscal and monetary policies, uninterrupted over many administrations and supported by major political parties. As Federal Reserve Chairman Greenspan said in a speech last year: "It is questionable whether a sovereign state, otherwise inclined to economic policies that are 'off the wagon, can force itself into 'sobriety' by dollarization." <sup>18</sup> In a recent paper on Argentina, Steve Hanke and Kurt Schuler put it like this: "Dollarization would not absolutely guarantee sound economic policies, but no system could. The important thing is that dollarization would improve the odds that Argentina would continue to follow sound policies..." <sup>19</sup> The message is clear. Dollarization cannot make sound fiscal policies, but can support them if they already exist.

# **The Costs**

Dollarization means a total loss of monetary sovereignty. Opponents of dollarization note the cost of losing flexibility in monetary and exchange rate policy. Optimal

<sup>&</sup>lt;sup>15</sup> Prepared testimony of Dr. Michael Gavin for the Senate hearing on Official Dollarization in Latin America (Subcommittee 1999b)

<sup>&</sup>lt;sup>16</sup> Bogetic (1999)

<sup>&</sup>lt;sup>17</sup> Atlanta (1999)

<sup>&</sup>lt;sup>18</sup> Greenspan (1998)

<sup>&</sup>lt;sup>19</sup> Hanke & Schuler (1999b)

Currency Area theory<sup>20</sup> states that countries (or regions) should only share a currency if they are broadly similar, are highly integrated and have factor mobility. The US and Latin America fail these tests. The US is a highly developed, diversified large economy, while Latin American countries, on the other hand, are underdeveloped and quite specialised (usually in agriculture or minerals). While almost 50% of Latin American exports are to the US (see previous graph), only 7% of US exports are to the Latin American countries (excluding Mexico). Although capital mobility is fluid, labour mobility, as in the Euro-zone, would be a concern. The USA would not be prepared to take on the immigration that OCA theory suggests is necessary for a successful monetary union.

If there were a serious domestic macroeconomic shock the government of a dollarized economy would not be able to use discretionary monetary policy. Any problem would be exacerbated with the US unwilling to change its monetary policy objectives or procedures for the sake of dollarized economies. As Larry Summers, Head of the US Treasury, has warned, the US could not open the discount window of the Federal Reserve Bank to dollarized economies<sup>21</sup>. While the Federal Open Market Committee cannot ignore developments in the global economy that may affect the US, it bases its decisions solely on considerations about the welfare of its citizens<sup>22</sup>. Argentina has found itself in such a crisis recently after the Brazilian devaluation; "the recent collapse of the Brazil Real has inflicted new pressures to devalue, all the more devastating because Brazil takes fully a third of Argentina's exports"<sup>23</sup>. This crisis has put Argentina into recession and was made worse by the Federal Reserve raising interest rates during 1999. For all the benefits of dollarization, it can have its drawbacks as well.

Having said all that, empirical evidence contradicts this objection. Annual growth rates in developing countries without monetary flexibility were 50% greater than those with central bank and monetary flexibility during the 1950-93 period. Furthermore, the variability of those growth rates was virtually identical, indicating that a lack of monetary flexibility did not result in a greater incidence of vulnerability to external shocks.<sup>24</sup> Some argue that developing countries are better

<sup>&</sup>lt;sup>20</sup> See Mundell (1961) for the original paper on OCA theory and see De Grauwe (1994) for a recent update.

<sup>&</sup>lt;sup>21</sup> Subcommittee (1999a)

<sup>&</sup>lt;sup>22</sup> Atlanta (1999)

<sup>&</sup>lt;sup>23</sup> Falcoff (1999)

<sup>&</sup>lt;sup>24</sup> Hanke & Schuler (1999a)

off without discretionary monetary policy because of the danger of it becoming politicised and destabilising the value of money.

The measurable monetary cost of dollarization would be lost seigniorage. This is the real output that a government obtains by printing money and spending it. Seigniorage is a component of government revenue everywhere, but it is particularly important in the finances of developing country governments. However, its total benefit is estimated to be less than 1% of gross domestic product (GDP)<sup>25</sup> in most countries. Extra growth achieved by dollarization should more than compensate for the foregone seigniorage. Moreover, a dollarized country can recapture seigniorage through an agreement with the country issuing the currency it uses.

The final objection to dollarization brings us back to the point raised at the end of the last section - sound fiscal policy should precede sound money. Dr. Liliana Rojas-Suarez<sup>27</sup>, Chief Economist of Deutsche Bank Securities Inc., for Latin America, argues that dollarization should be the last step taken in an ongoing market-led process of regional financial integration. She claims that the main risk in South America is not devaluation risk but "country" or "default" risk. Emerging markets have increasingly become financially dependent upon international bond markets. Hence, any economic policy or political news affecting investors' perceptions about a country's capacity to service its debt is immediately reflected in the yield spread between bonds issued by a particular country and comparable US Treasury instruments of corresponding maturity.

A deterioration in investors' perceptions about a country's risk situation increases external financial costs. This translates into rising domestic interest rates, as existing financing needs press against the limited supply of domestic funds. It is increased 'country' risk that leads to increased devaluation risk and not the other way around. Some dispute this point. They assert that European fiscal deficits were reduced as a result of the announcement of the creation of the Euro because exchange rate convergence brought cheaper borrowing costs. It remains unclear, though, whether it is worthwhile to compare Europe directly with Latin America, given their different historical experiences. Furthermore, because exchange rates cannot be used to offset trade shocks, the adjustment would take place in a more severe contraction of output

<sup>&</sup>lt;sup>25</sup> Atlanta (1999)

<sup>&</sup>lt;sup>26</sup> For some short theoretical work on the loss of seigniorage see Schmitt-Grohé & Uribe (1999).

<sup>&</sup>lt;sup>27</sup> Subcommittee (1999b)

growth. Long and deep recessions would then possibly exacerbate the perception of a country's reduced capacity to service its debts.

It is important to note that official dollarization should not reduce the ability of the government to provide liquidity under normal conditions. Furthermore domestic banks could arrange for appropriate credit lines from foreign banks.<sup>28</sup> The problem here is that such an arrangement could contribute to escalating an already serious crisis of confidence if the international banks were not themselves on a sound economic footing. Hence, it would seem that the remaining problems in Latin America are due more to fiscal and banking mismanagement than to monetary issues. Hence, a sound fiscal policy and bank reform is needed as a prerequisite to dollarization.

#### **Political Considerations.**

The decision to dollarize is highly political. As Hausmann and Powell<sup>29</sup> argue

"It is a collective decision, enforced by the State with implications for every member of society. It will generate winners and losers and change the structure of the economy in significant and uncertain ways. It is a momentous decision, which should not be taken lightly or solely on the basis of technical considerations. It is critical that the countries considering dollarization carry out a serious, open and broad discussion of the subject and go forward only on the basis of a strong political consensus."

Any proposed change should take place only after the move has been sanctioned by the people.

There is already a groundswell of support for a reliable currency among hardworking Mexicans who have suffered the economic consequences of peso devaluation too many times. Elsewhere, discussion can still spark a heated, nationalistic backlash. Dollarization can be seen as a sort of financial or economic colonisation. However, the failure of the dollar to decline with inflation suggests

<sup>&</sup>lt;sup>28</sup> Bogetic (1999). Also see Moreno-Villalaz (1999) for a discussion of how this operates in Panama.

<sup>&</sup>lt;sup>29</sup> Hausmann & Powell (1999)

<sup>&</sup>lt;sup>30</sup> Peterson (1999)

systematic irreversibilities associated with the effect of inflation on dollar holdings people are already voting through their monetary preferences. Even though official dollarization seems a sound economic policy in the long run, the sensitivities of individual countries should not be ignored. While arguing for dollarization recently, Barro<sup>31</sup> claimed that Brazilians should "worry more about sound policy and less about nationalism." His suggestion that Brazil will never have the fiscal discipline to support a stable currency amounts to economic imperialism.

Already US officials have signalled strong resistance to Washington taking on new obligations for countries that might embrace the dollar. If Americans deem it desirable for countries to dollarize then the US should do what it can to aid the process. If it refuses to assume the leadership to create a dollar area, some Latin American countries may feel obliged to adopt the euro. Judy Shelton<sup>32</sup> contends that the US should work with Mexico in establishing a common monetary foundation for all participating nations. She asserts that "the US should be sending both an urgent message and gracious invitation to Mexico: We need to talk."

#### Conclusion.

As we were on the verge of completing this paper, the Ecuadorian President announced his plans to dollarize. In one day, the inter-bank borrowing rate of the Sucre fell from 152% to 25% as the market began to factor in the prospect of a stable exchange rate. Ecuador would be the first economy to formally dollarize since 1944.<sup>33</sup> Details, however, remain unclear with regard to the speed of the transition. On the other side of the world Estonia stands ready to '*euroize*'. Are we witnessing part of the construction of the often-predicted bipolar/tripolar monetary world of tomorrow?<sup>34</sup>

It is vital that Latin American countries, operating in this changeable monetary climate and seeking to improve their growth prospects by polarizing, proceed with caution. The process is very different (assuming there is no change in US policy) from the creation of the Euro. An integral part of EMU was the establishment of the European Central Bank with its mandate for price stability in the Euro-zone. Latin American countries must instead deal with a 'ruthless benefactor' who is unlikely to

<sup>32</sup> Shelton (1999)

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<sup>&</sup>lt;sup>31</sup> Barro (1999)

<sup>&</sup>lt;sup>33</sup> Financial Times (12/1/00)

<sup>&</sup>lt;sup>34</sup> Barai (1999)

be willing to subordinate domestic goals to the needs of dollarized economies. This worry aside, dollarization is suitable if, firstly, it is properly thought out and organised by policy makers (sufficient reserves of dollars held, lender of last resort etc.) and secondly, if it wins the support of the general public. To ensure the policy is a success (i.e. reduce inflation and create a stable investment environment) it would have to be built upon other reforms such as market liberalisation, privatisation and fiscal stability.

Once implemented, governments will need to maintain fiscal stability as dollarization means that they cannot print money to pay for deficits or use inflation to erode the real value of their debt. They will have to be more responsible with their finances. Because most emerging market economies in this part of the world are not in the same position in terms of inflation, fiscal discipline and monetary stability, the process should advance on a gradual ad hoc basis.

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