

To Dollarize or not to Dollarize? A Preliminary Comparison of Some Dollarized Economies

December 25, 2021

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Outline of Presentation

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Introduction (1)

Panama: a typical example of official (or de jure) dollarization, since 1904.

Dollarization often considered as a strength - foreign trade, other international financial transactions are made relatively smoother and more efficient

The absence of exchange rate risk: also works as an advantage for some sectors including finance

Dollarization reduces the transactions costs on foreign trade.

Introduction (2)

Ecuador abandoned its national currency sucre and adopted US dollars as legal tender in 2000.

Ecuador was less dollarized in the first half of the 1990s but increased dollarization prior to adopting officially the US dollar in 2000.

Introduction (3)

El Salvador: the use of US dollars had already been prevalent, due to a significant flow of US dollars from the US through the Salvadoran immigrants in the US.

700,000 Salvadorans lived in the US in 2000, with the current figure exceeding 2 million. The economy of El Salvador was not in crisis, but El Salvador implemented the official dollarization in 2001, switching from its national currency colon.

Introduction (4)

In June 2021 El Salvador made headlines when it became the first country to announce its plan to accept Bitcoin as legal tender starting September 7, 2021, in addition to the US dollar.

Such a move may help the country gain foreign investment and decrease the cost of remittances.

Introduction (5)

There are a number of cases of unofficial (or de facto) dollarization: individuals save and borrow in US dollars; use them as means of payments.

Costa Rica: the use of US dollars in transactions including banking and tourism services is wide-spread, although there exists a national currency.

Guatemala is not an officially dollarized economy, but the US dollars are widely accepted and used.

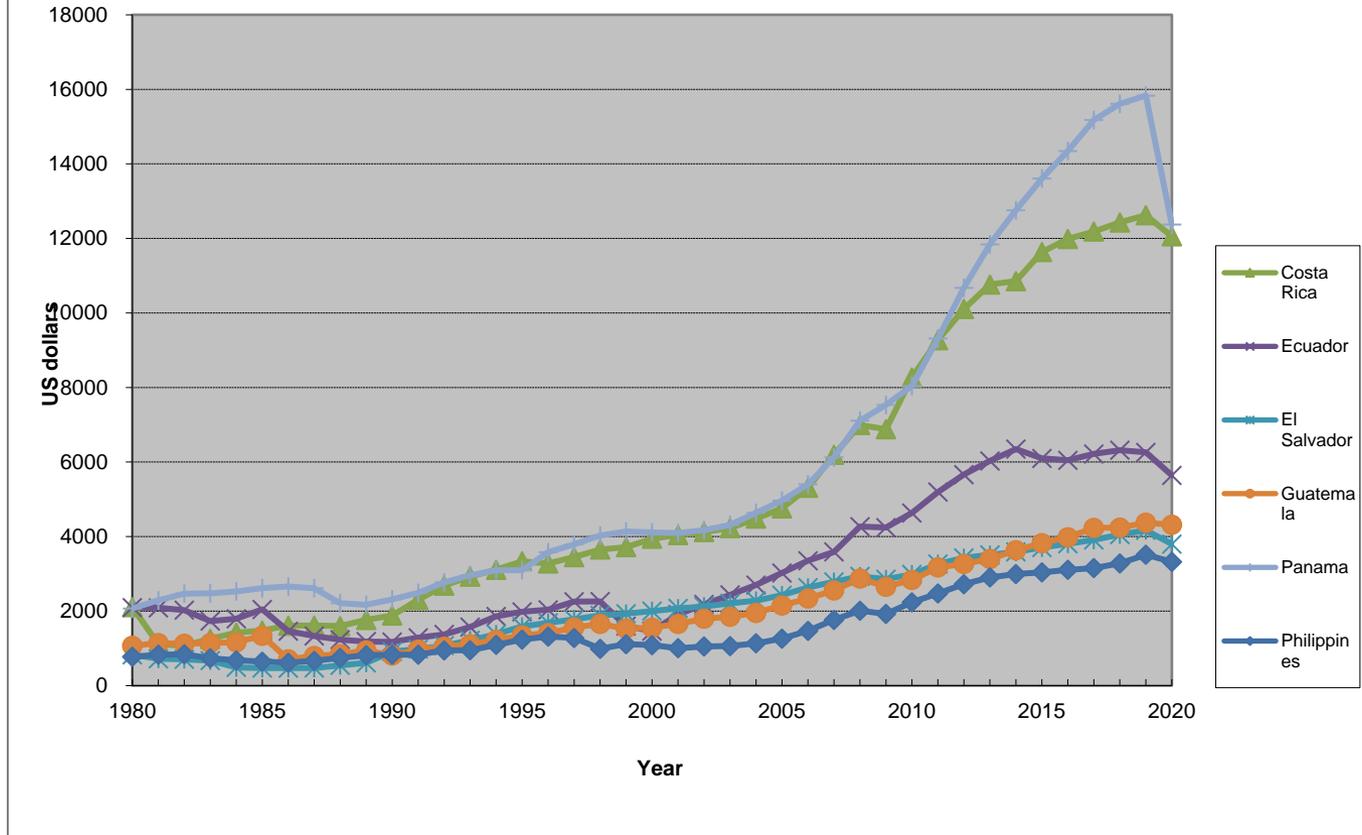
The use of US dollars is also common in the Philippines, driven by the significant amount of remittances sent from abroad as in the case of El Salvador. The branch in Manila of the United States Mint operated from 1920 to 1941.

Other examples of informal and spontaneous dollarization: Argentina, Cuba, and Venezuela.

Observations (1)

Figure 1: GDP per capita
(current prices in US dollars)

Data source: IMF, World Economic Outlook Database, October 2021



Observations (2)

Figure1: 2020 per capita GDP

Panama (\$12,373), Costa Rica (\$12,057), Ecuador (\$5,643), Guatemala (\$4,317), El Salvador (\$3,799), the Philippines (\$3,323)

According to the World Bank:

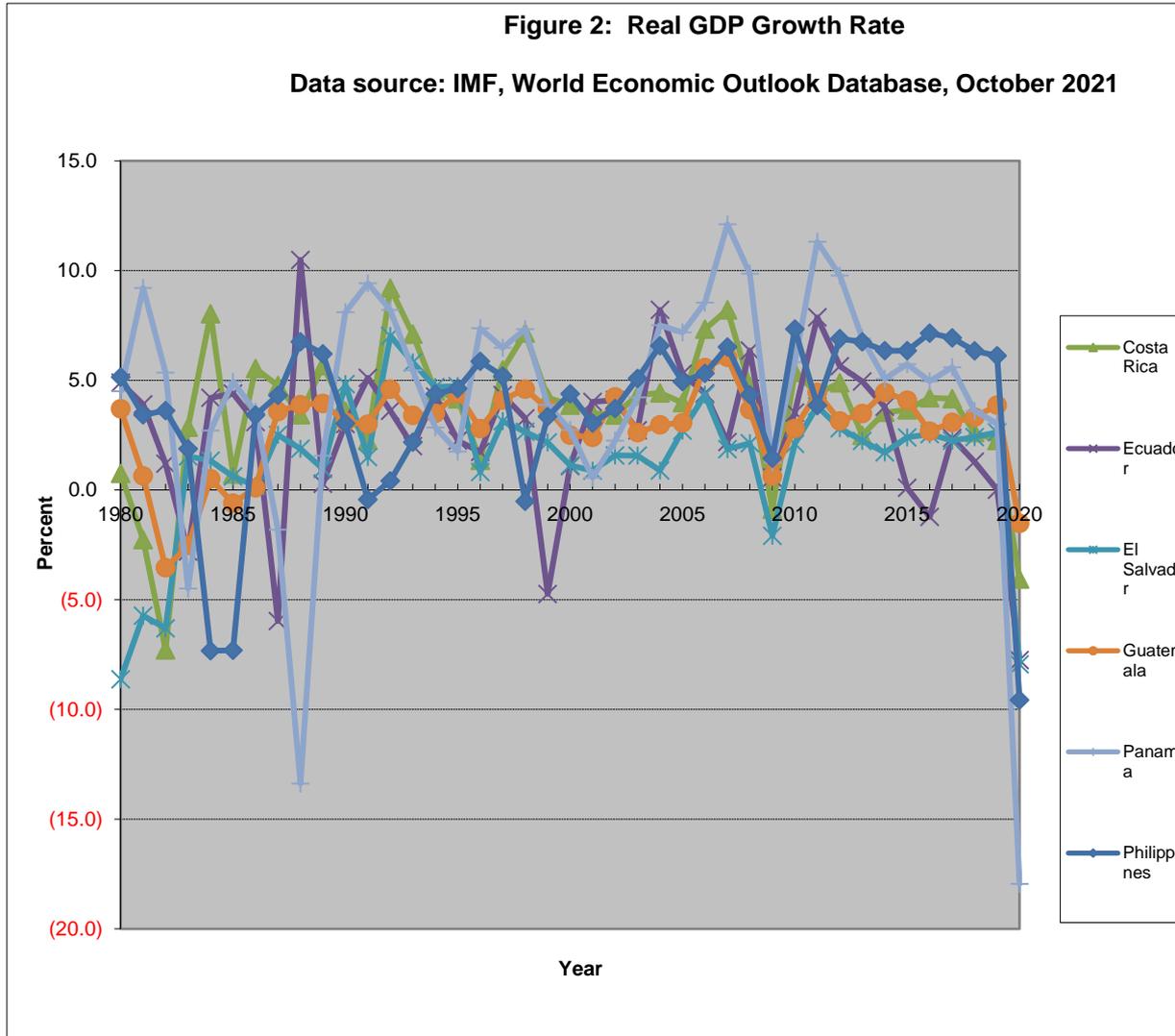
Panama, Costa Rica, Ecuador, and Guatemala: upper middle-income economies (GNI per capita between \$4,046 and \$12,535)

El Salvador and the Philippines: lower middle-income economies (GNI per capita between \$1,036 and \$4,045).

Observations (3)

Figure 2: Real GDP Growth Rate

Data source: IMF, World Economic Outlook Database, October 2021



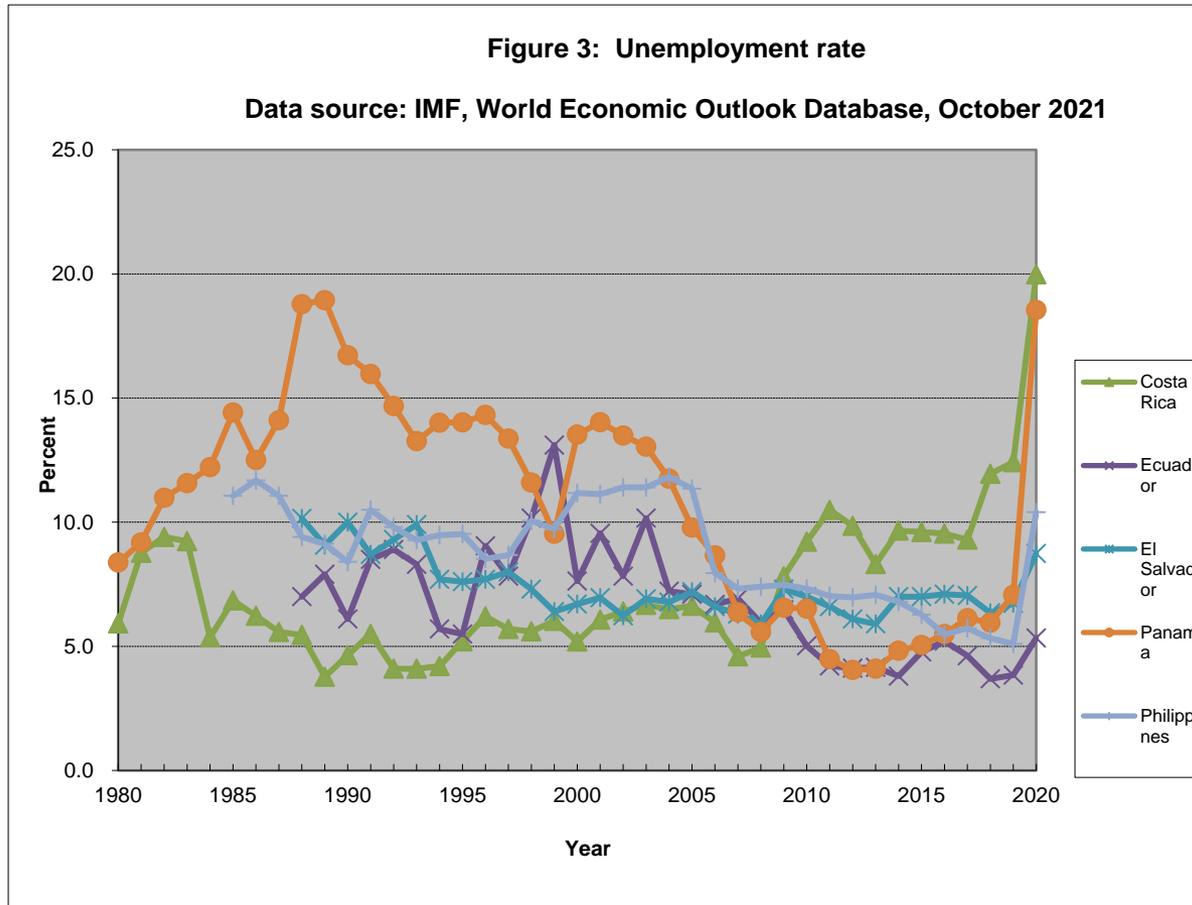
Observations (4)

Figure 2: a comparison of growth performance.

The overall growth performance of the six countries appears to follow a somewhat comparable pattern.

The Philippines: sustaining higher growth since 2012 before suffering severely from the COVID-19 recession.

Observations (5)



Observations (6)

Figure 3: unemployment rate.

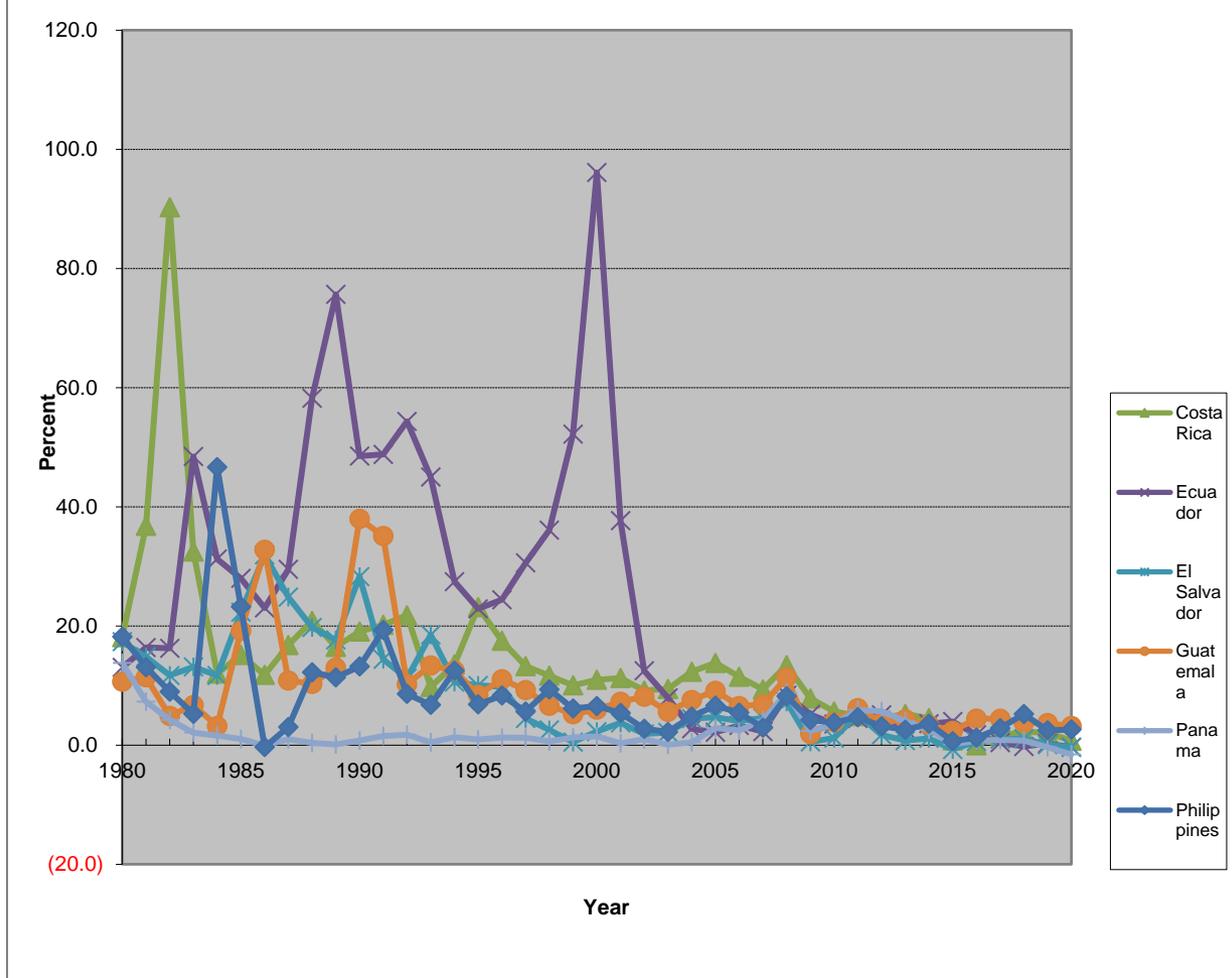
As expected from Okun's Law, the performance reflects the real growth rate, and thus demonstrates a somewhat similar trend.

The employment condition of Costa Rica has deteriorated significantly since 2009, provoked by the Great Recession.

Observations (7)

**Figure 4: Inflation
(Average consumer prices)**

Data source: IMF, World Economic Outlook Database, October 2021



Observations (8)

As in Figure 4, the inflation has come to be under control in all the six countries.

Ecuador succeeded in disinflation by adopting dollarization.

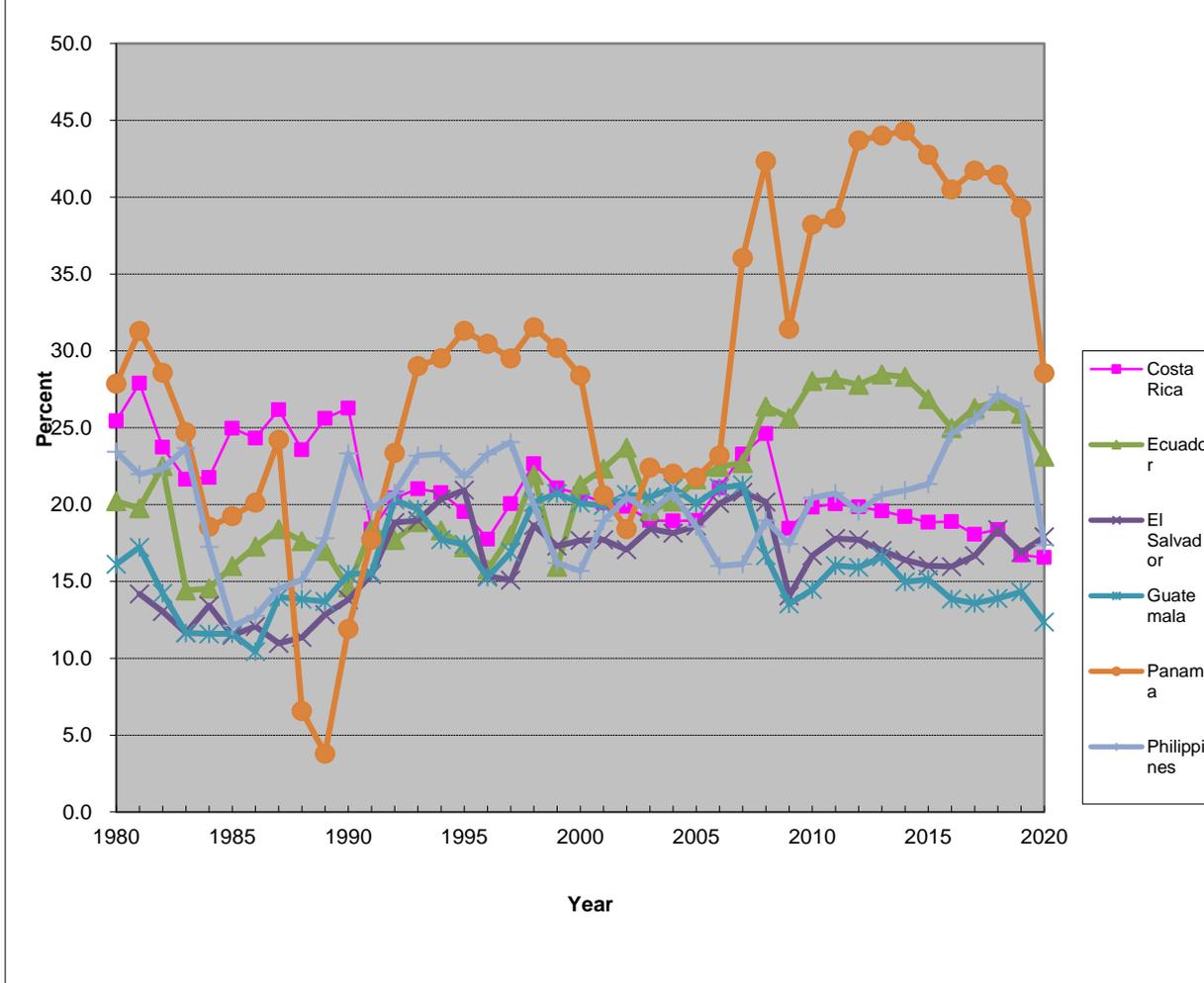
El Salvador's inflation performance has been comparable to that of Panama since its dollarization.

Inflation has come to be checked both under official and partial dollarization.

Observations (9)

Figure 5: Total investment / GDP

Data source: IMF, World Economic Outlook Database, October 2021



Observations (10)

Figure 5 compares the investment as a ratio to GDP over time.

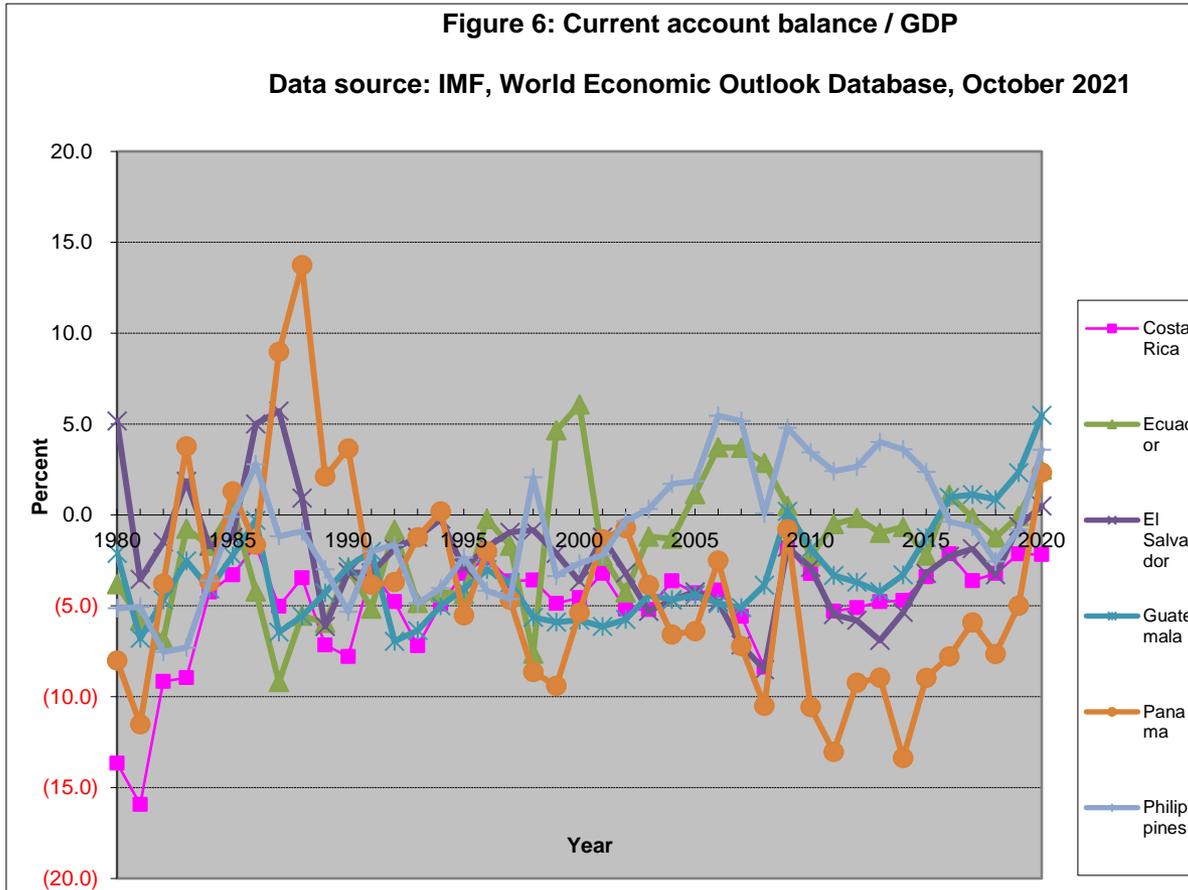
Panama particularly and Ecuador have lately performed better.

The investment has recently increased in the Philippines, boosted by the government's "Build, Build, Build" infrastructure program actively applying public-private partnership (PPP).

Investment in Costa Rica has lost dynamism since the Great Recession.

Investment has been rather stagnant in El Salvador and Guatemala.

Observations (11)



Observations (12)

Figure 6 is a comparison of the current account as a ratio to GDP. The effects of official dollarization are not clearly observed.

In spite of its advantage in the service trade, Panama has kept large current account deficit.

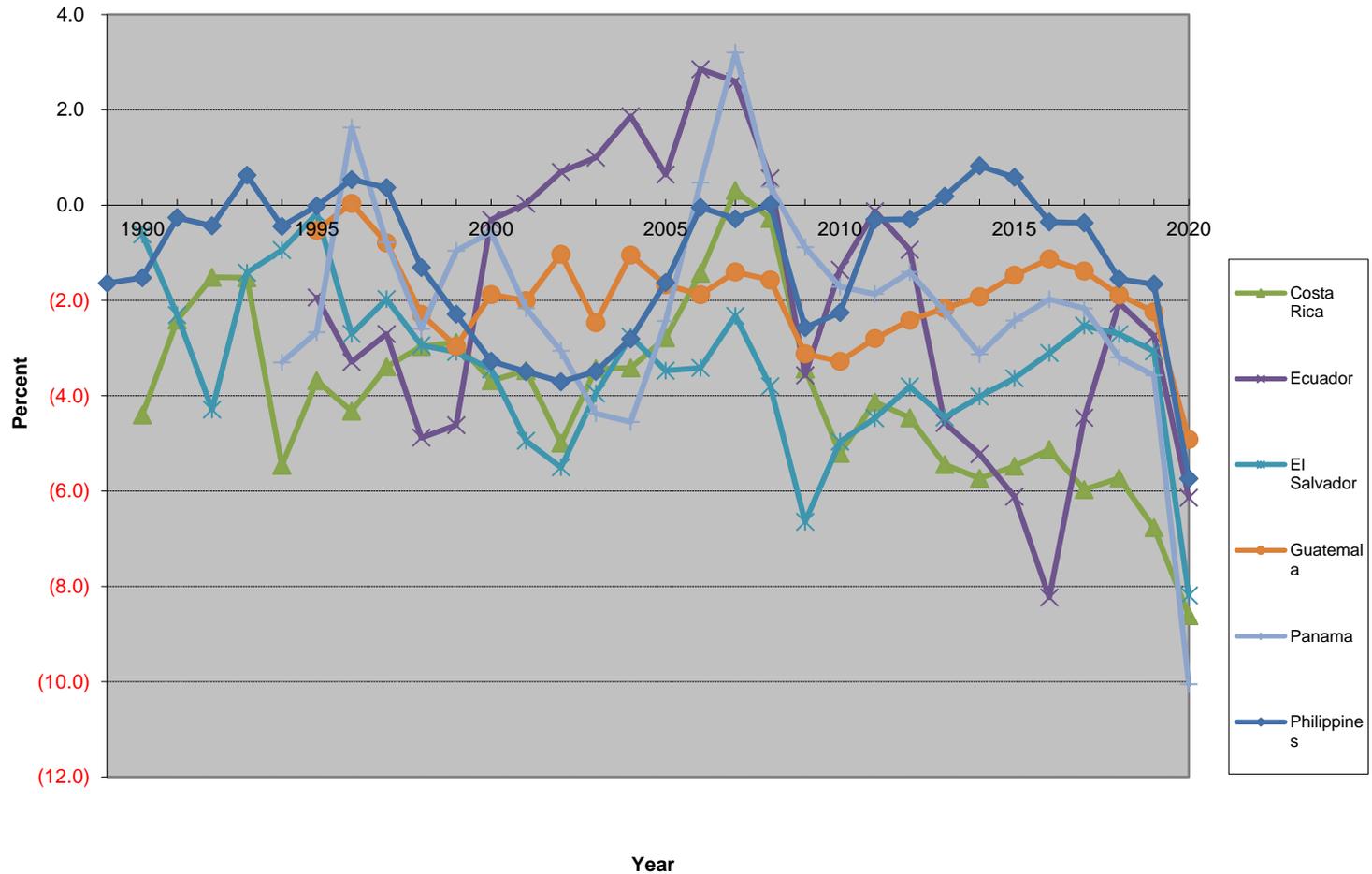
Ecuador's cyclical performance can be caused by the fluctuations in the oil price.

The Philippines has often recorded current account surplus, helped by steady remittances mainly from Overseas Filipino Workers (OFWs).

Observations (13)

**Figure 7: Fiscal stance / GDP
(General government net lending / borrowing)**

Data source: IMF, World Economic Outlook Database, October 2021



Observations (14)

Figure 7: fiscal stance of the six countries over time

The relations with official dollarization are ambiguous.

Fiscal stance has generally deteriorated since the Great Recession except the Philippines.

Costa Rica's persistent budget deficit: leading to a discussion of public sector reform combined with the IMF program.

Pros and Cons of Dollarization (1)

(Positive)

Several direct cases for dollarization:

In Panama, Ecuador, and El Salvador: no exchange rate volatility - advantageous in making the international trade and business transactions smoother and freer from the exchange rate risk and transaction costs, as observed in the Eurozone.

Use of US dollars attracts domestic and foreign savings: a potential hedge from inflation.

Dollarization can facilitate exports of services, as in Panama.

Pros and Cons of Dollarization (2)

Dollarization is considered to keep inflation under control.

As in Figure 4, Ecuador's adoption of the US dollar in 2000 led to a successful disinflation.

Inflation has been under control in Panama and El Salvador. (Inflation in all the six countries has become more stable in this century.)

Pros and Cons of Dollarization (3)

Ecuador's disinflation experience: similar to Argentina hyperinflation in 1989-1991.

Argentina adopted the currency board (1 Argentine peso = 1 US dollar) on April 1, 1991. The Argentine currency board succeeded in controlling inflation and achieving macroeconomic stability. The currency board became unsustainable in 2002, when Argentina experienced another severe and chaotic economic crisis.

De la Torre et al. (2003): full dollarization could have been a less destructive alternative to the adopted exit strategy from the Argentine currency board.

Pros and Cons of Dollarization (4)

Dollarization could have implications for debt management. If an economy is officially dollarized, it can facilitate issuing government bonds denominated in US dollars in the international financial market.

The international interest rates are lower than the domestic rates in Costa Rica - some argue in favor of dollarization to convert part of the internal public debt into external.

(Ambiguous)

The implication of official dollarization for growth (Figure 2) and unemployment (Figure 3) performance is not clear.

Pros and Cons of Dollarization (5)

(Negative)

Dollarization is not free from potential difficulty.

When Panama, Ecuador, or El Salvador is hit by a unique shock, independent of the US, the fact that the country lacks a monetary authority makes it difficult to deal with the specific local shock.

Only the country's fiscal policy, instead of monetary policy, can be used to deal with such a local shock to the economy.

Pros and Cons of Dollarization (6)

It is impossible for an officially dollarized country to adjust the trade balance via the nominal exchange rate. This aspect became relevant during the Greek government-debt crisis after the Great Recession. As a member of the Eurozone, Greece lacked monetary policy flexibility.

Hong Kong has kept a currency board for a long time, resulting in a stable exchange rate of the Hong Kong dollar vis-à-vis the US dollar. This can lead to a macroeconomic stability. Yet, as was the case with the Argentina currency board, the inflexible exchange rate can be a cause of losing competitiveness.

Pros and Cons of Dollarization (7)

Another critical disadvantage of official dollarization: the loss of “seignorage” income.

The presence of national currencies and the proper central banking system can be linked to the sense of sovereignty.

Former Soviet Union countries opted to issue their own national currencies upon independence. (The option of sticking to rubles could have been convenient, given the initial lack of expertise in monetary policies.)

Trade Implication (1)

Dollarization has a major implication for the adjustment of the trade balance. The trade balance, TB, can be expressed as follows:

$$TB = p_x X(p, y^*) - E p_m^* M(p, y),$$

where p_x denotes the export price, p_m^* the import price in US dollar, X is the export volume, M stands for the import volume, and E is the nominal exchange rate (home currency / US dollar).

Export volume depends on the terms of trade p , defined as $p_x / E p_m^*$, and foreign income y^* , while import volume depends on the terms of trade and domestic income y .

Trade Implication (2)

Shocks to the terms of trade influence the trade balance as in the above relation.

Provided that the trade account is close to zero initially and that the sum of absolute value of the price elasticity of the export and import exceed unity, it can be proved that a worsening (improvement) of the terms of trade will improve (deteriorate) the trade balance.

Trade Implication (3)

The government of Costa Rica, Guatemala, or the Philippines can worsen the term of trade $p = p_x / E p_m^*$ by raising E , through depreciation. The trade balance will improve in the long run, as the export and import volume behave more favorably.

The dollar import price p_m^* is usually out of control for Costa Rica, Guatemala, or the Philippines.

The export price p_x is also subject to foreign influences, since the traditional exports of Costa Rica, Guatemala, and the Philippines such as banana, coffee, meat, and sugar have their international dollar prices determined mainly outside of the country.

The nominal exchange rate can serve as a crucial element in controlling the terms of trade and hence in maintaining the price competitiveness among the exports sector.

Trade Implication (4)

For Panama, Ecuador, or El Salvador, the terms of trade will be $p = p_x / p_m^*$ as the absence of national currency implies $E=1$. p_x is no longer a local currency price but a US dollar price. The government cannot control the terms of trade through the nominal exchange rate.

The dollar import price is generally independent of Panama, Ecuador, or El Salvador. And the export price could also be influenced strongly by foreign factors.

An officially dollarized country is deprived of an economic policy tool, the nominal exchange rate, which would be useful if the terms of trade had to be controlled with the initiative of Panama, Ecuador, or El Salvador.

If a major social instability affects the dollar price of exports significantly, the country is subject to an abrupt change in the terms of trade.

Trade Implication (5)

The existence of the nominal exchange rate can lead to an intrinsic risk of a speculative attack on the exchange rate, as seen in the Mexican peso crisis in 1994 and the Asian financial crisis in 1997.

Costa Rica and Guatemala: this type of risk has been of minor importance. The government's ability to influence the terms of trade should dominate the case for eliminating exchange rate risks. The goods exports are crucial for the economy of Costa Rica, Guatemala, and the Philippines.

Trade Implication (6)

The commodity trade deficit in Panama can be compensated for the significant revenues from the service transactions including the Canal, Colon free trade zone, and banking. The terms of trade has been of less importance in Panama.

If the economy of Panama becomes more dependent on the international commodity trade and more frequently attacked by shocks independent of the US, the country could even be better off issuing its own currency. This case is strengthened if the value of the US dollar begins to fluctuate to a larger degree in the future, and if Panama begins to trade more with countries other than the US.

Panama gained control of the Canal: the economy has become less dependent on the US than before.

Concluding Remarks (1)

The prevalent use of the US dollars both in officially dollarized countries (Panama, Ecuador, and El Salvador) and partially dollarized countries (Costa Rica, Guatemala, and the Philippines): the merit and demerit of dollarization have been reviewed and discussed.

Concluding Remarks (2)

In a small open economy, the main strength of issuing a national currency: the government can retain its ability to control directly the terms of trade.

The lack of autonomous control of the nominal exchange rate in Panama, Ecuador, and El Salvador: a potential source of instability in adjusting the international trade.

Costa Rica, Guatemala, and the Philippines can maintain the price competitiveness of their exports by adjusting the nominal exchange rate.

Concluding Remarks (3)

As long as there is a good possibility that the economy of Costa Rica, Guatemala, or the Philippines is occasionally hit by shocks unrelated to the US economy, the advantage of issuing a local currency should exceed the alternative gains from the exchange rate stability and from the smoother trade and financial activities.

Unlike Panama, the merchandise trade balance is crucial for the economy of Costa Rica, Guatemala, or the Philippines.

Added to these advantages is the significant seignorage income.

Concluding Remarks (4)

If the economy is more stable, free from high inflation and macroeconomic volatility, Ecuador and El Salvador can have reasons to revert to official de-dollarization.

Even Panama could gain by adopting its own paper currency in the distant future, if (1) the international trade of goods becomes more important, (2) the economy behaves quite differently from that of the US, or (3) the value of the US dollar fluctuates more. The scenario (2) can be realistic, in view of the completed transfer of the ownership of the Canal to Panama.

Advocates of official dollarization of Costa Rica, Guatemala, or the Philippines have to prove that a reliable set of evidence exists in favor for that policy option.

References

Alvarez-Plata, Patricia and Alicia Garcia-Herrero (2008), “To Dollarize or De-dollarize: Consequences for Monetary Policy,” *Discussion Papers of DIW Berlin*, 842, December 2008, German Institute for Economic Research, Germany.

https://www.diw.de/documents/publikationen/73/diw_01.c.92705.de/dp842.pdf

“¿Cómo les ha ido a los 3 países de Latinoamérica que se han dolarizado?” *Semana*, October 17, 2020.
<https://www.semana.com/economia/articulo/como-les-ha-ido-a-los-paises-que-se-han-dolarizado-en-america-latina/303885/>

Daseking, Christina, Atish Ghosh, Timothy Lane, and Alun Thomas (2004), “Lessons from the Crisis in Argentina,” *Occasional Paper* 236, 2004, International Monetary Fund, Washington, DC.

<https://www.imf.org/external/pubs/nft/op/236/op236.pdf>

De la Torre, Augusto, Eduardo Levy Yeyati, and Sergio L. Schmukler (2003), “Living and Dying with Hard Pegs: The Rise and Fall of Argentina’s Currency Board,” *Policy Research Working Paper* No. 2980, March 2003, The World Bank, Washington, DC.

<https://openknowledge.worldbank.org/bitstream/handle/10986/19040/multi0page.pdf?sequence=1>

“El Salvador: Crypto creep,” *The Economist*, September 11th – 17th 2021, 39.

Kiguel, Miguel A. (1999), “The Argentine Currency Board,” *CEMA Working Papers: Serie Documentos de Trabajo*, 152, Universidad del CEMA, Argentina.

<https://ucema.edu.ar/publicaciones/download/documentos/152.pdf>

“Satoshis for cervezas: Bitcoin as legal tender,” *The Economist*, September 4th – 11th 2021, 55-56.