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An Assessment of Alternative Monetary Regimes for a Future Palestinian State: Dollarization versus a National Currency

Selected Literature Review with Case Studies of Ecuador and El Salvador

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This paper discusses the advantages and disadvantages of dollarization, occurrence in emerging economies, and economic performance of dollarized countries, especially Ecuador and El Salvador. The paper discusses dollarization in the Palestinian context and assesses the advantages and disadvantages of dollarizing the Palestinian economy compared to issuing a national currency (i.e., the Palestinian Pound) under a currency board or under a managed float regime. The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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1. INTRODUCTION AND POLITICAL CONTEXT

As the Palestinian Authority (PA) prepares the legal and institutional framework for governing as an independent sovereign state, it must begin to address a broad range of issues related to national economic policy. One key issue that will need to be resolved relates to the management of monetary policy. Specifically, the PA must decide whether a future Palestinian State would issue its own currency with presumably the Palestinian Monetary Authority (PMA) as the implementer of an independent monetary policy or whether an externally issued currency would serve as the official legal tender for economic transactions.

The latter option would be a *de facto* outsourcing of monetary policy to another country's central bank; which in some respects is the *status quo*. How the PA resolves this issue will have long-term ramifications on the ability of future governments to manage macroeconomic issues such as inflation and deal with external shocks to the economy.

Newly independent nations have historically sought total sovereign control over government functions and policy decisions including management of monetary policy. In fact, it has been mostly the newly independent states from the former Soviet Union that have in recent years established new currencies and an independent monetary policy. For these newly established nations, the decoupling of their economies from a weak currency (i.e., ruble) and the desire to demonstrate independence from Moscow likely played a large factor in the decision to pursue an autonomous monetary policy through the use of a national currency.
However, an objective analysis will reveal that such a decision involves tangible trade-offs and the balancing of economic and political risks.

The challenges facing future PA government and its Central Bank will be significant as indicated by the very mixed performance of small and emerging countries autonomously directing monetary policy. Central banks in newly independent countries are often vulnerable to external political pressures and are not provided with sufficient independence to resist the pressure to rapidly expand the money supply during economic recessions. History shows that the case for independence of central banks from domestic political pressures is powerful. Governments have a natural preference for cheap finance from their own Central Bank, particularly in times of crisis. Unfortunately, most governments have the power and incentive to force their Central Bank to give priority to their immediate needs. This can lead to tension between the Central Bank and government.[1]
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In the case of Palestine, the political context under which decisions to dollarize can be made are unique. It should be noted that under the Oslo Agreements the Palestine Authority is debarred from issuing its own currency and is constrained to remain dependent on a number of externally issued currencies. These are primarily the US Dollar (with estimated deposits amounting to 43%); the Jordanian Dinar (28%) and the Israeli Shekel (22%) and the balance

[1] What therefore constitutes independence? We define independence as the right of a central bank to change operating variables without challenge or prior approval from government.

(7%) in other currencies. All other models for dollarization in other national economies that we researched were predicated on the fact that they were already sovereign states.[2]

The PMA is faced with the dilemma of how best to control money supply and protect the banking sector both in the West Bank and Gaza. With the advent of seizure of control of Gaza by Hamas in 2007 money supply in the form of Israeli shekels (the predominant currency used for daily transactions) is controlled by the Israelis. Subsequent restrictions on money supply imposed by the Israeli Government and the IDF mean that the PMA is unable to effectively manage and control money supply into the territory which compounds and weakens the ability of the PMA to effectively supervise banking operations, particularly in Gaza.

If the PA is to regain its standing and authority in Gaza a primary instrument will be the use of the banking sector to extend credit to besieged businesses and households. Presumably, if effectively implemented, the full conversion to the US Dollar combined with increased lending and the reconstruction of Gaza will result in significant gains to the PA in terms of public acceptance and a diminishment of Hamas standing in the community.[3]

2. THE ROLE OF CENTRAL BANKS AND MONETARY REGIME OPTIONS

What is the purpose and role of central banks? In essence their operation can be reduced to macroeconomic and microeconomic functions. The macroeconomic function is to preserve the value of the currency, that is, to maintain price stability. The microeconomic function is to maintain stability and confidence in the banking system. The maintenance of price stability is generally achieved by using the central bank's discount rate. Maintaining price stability was much simpler during the gold standard era because the value of central bank notes was expressed in terms of their metal (usually gold) content. However, maintaining price stability since the demise of the gold standard has been difficult to achieve. Comparisons between the gold standard and subsequent monetary regimes show that while neither fully stabilized prices, the gold standard outperformed subsequent monetary regimes. The microeconomic function requires the central bank to supervise, monitor and regulate the banking system by applying well defined prudential standards.

A properly functioning market economy needs a stable currency. Reforming countries therefore should establish a comprehensive commercial code covering the operation of the monetary sector. In particular, the code should specify the provision of currency and this requires involvement by the central bank. Today's banking system necessitates a central bank, in large part due to the monopoly rights of issue granted to central banks and its role as lender of last resort. Central banks are needed because of the unique nature of the banking business. Banks hold deposits that are redeemable for money on an instant demand basis. In a fractional reserve banking system there can be a run on deposits which can lead to a collapse in the money stock.[4] The practice of fractional reserve banking expands money supply (cash and demand deposits) beyond what it normally would be. Because of the prevalence of fractional reserve banking the broad money supply is a multiple larger than the base money created by the country's central bank. That multiple (called the money multiplier) is determined by the reserve requirement or other financial ratio requirements imposed by

[2] With the possible exceptions of Kosovo and East Timor which elected to dollarize but even those countries it can be argued had sovereign status or were about to be granted sovereign status at the time of dollarization.
[3] The key constraint is the physical supply of Israeli Shekels. Even if the supply of US Dollars is increased it cannot be converted into Israeli Shekels due to artificially induced shortages of the Shekel by Israel, particularly in Gaza.
[4] Fractional reserve banking is the banking practice in which banks are required by their regulator to keep only a fraction of their deposits in reserve and lend out the remainder.

the financial regulator. Some observers claim that fractional reserve banking creates a potentially unstable situation by increasing the quantity of bank deposits above the amount of currency circulating in the economy.

To prevent a run, bank assets should ideally be marked to market at all times. However, because of the nature of the assets held by banks it is virtually impossible to mark them to market. Thus central banks, the provider of the ultimate means of settlement, are essential for maintaining the stability of the financial system.

In addition, history has taught us one key lesson – that independence of the central bank from government is important – it is essential in establishing reputation and credibility – which is everything in banking.

To fulfill its role as lender of last resort, central banks should not conduct commercial activity on a scale that forces it to compete with commercial banks. Central Banks should be seen as non-competitive with the sector it regulates.

In countries with high inflation and expansionary money supply some experts advocate the creation of currency boards and the maintenance of fixed exchange rates. Currency boards act like an independent central bank. Domestic currency is tied to a strong foreign currency (in today's fiat money regime, does one exist?) and all reserves are held in that currency.[5] Historically, these arrangements have been quite successful. However, most operated during the period when the Pound Sterling was strong and most of their trade was conducted with Britain. There are drawbacks with currency boards – they require a considerable sacrifice in national sovereignty and are essentially a holdover from the post colonial era.

As will be discussed in this paper there are economic costs to managing the independent monetary policy of a small/emerging economy. However, other factors including social and political forces, including nationalism, can strongly influence a country's decision on whether to issue their own currency and retain control of national monetary policy. In addition, there are clear advantages to have the capacity to manage one's own money supply. Hence, the PA will need to carefully evaluate the alternatives available to them and weigh the costs and benefits of each approach. The failure of other emerging nations to adhere to a disciplined and independent monetary policy offers powerful lessons on how to avoid some of the pitfalls of currency risks and if those lessons are assimilated by future policy makers in an independent Palestine, there is no inherent reason why a national currency could not be successful.

Essentially, the PA will need to choose from two alternatives as it prepares to define its future monetary policy framework. They are as follows:

- Fully dollarize the economy by adopting the US dollar as the official currency
- Issue a national currency (i.e., Palestinian Pound)[6]

For a variety of reasons both political and economic, the PA appears to be leaning towards the formal disengagement of the Palestinian economy from the Israeli Shekel for use in daily transactions. This leaves the PA with the option of fully dollarizing or issuing its own currency. Moreover, in the near term and prior to full sovereignty only the dollarization option can be on the table. Theoretically, the PA could use another external currency as legal

[5] As evidenced by the current crises of lack of confidence in the Euro caused by profligate fiscal policies in Greece and other member countries
[6] Which must be deferred until full sovereign status is achieved

tender such as the Euro, the Yen, or even the Jordanian Dinar. However, the adoption of any one of these currencies does not appear to be under consideration by the PA and will not be discussed further. It would be also possible for the Palestinian government to adopt "partial dollarization" and officially or unofficially use multiple currencies.

However, this paper focuses on the potential advantages and disadvantages of fully dollarizing the Palestinian Economy compared to issuing a national currency and managing an independent monetary policy. It discusses the current technical economic and policy literature and describes selected cases of other nations that have dollarized in the last decade.[7]

3. DEFINITION OF FULL DOLLARIZATION, PARTIAL DOLLARIZATION AND THEIR OCCURRENCE IN EMERGING ECONOMIES

The concept of dollarization as discussed in this paper refers to the full and official adoption of the United States Dollar as the currency used as legal tender for public and private transactions, contracts, and bank accounts.[8]

Full dollarization differs from the concept of partial dollarization, which refers to the condition "when at least two currencies are being used, to differing extents, to perform the different functions of money, as a unit of account, medium of exchange, and store of value".[9] Partial dollarization typically occurs in economies with prolonged and/or frequent periods of economic instability. Such volatility often wreaks havoc with currency valuation and strongly incentivizes individuals and businesses to conduct transactions as well as put their savings in more stable external currencies, such as the Dollar or Euro.

It should be noted that partial dollarization encompasses a spectrum of conditions ranging from unofficial and low dollarization rates to official and high dollarization rates. For example, some countries have semi-official dollarization policies in place, where a foreign currency is legal tender and may even dominate bank deposits, but is not used for such transactions as paying wages, taxes, or normal household expenditures.[10] In other countries, dollarization is the reflection of large numbers of individuals holding a foreign currency as a hedge against the official currency. In such cases, the country allows the use of the foreign currency in private transactions but does not officially adopt it as legal tender.

The Israeli economy underwent a high degree of partial dollarization in the 1970s, and by the early 1980s dollar deposits amounted to more than 50 percent of total deposits. However, with significantly improved economic performance and greater overall economic stability over the last two decades, deposit dollarization decreased dramatically to just 15 percent in 2004.[11] Some transactions, especially for large asset items such as real estate are still often quoted in dollars, but the Shekel is unquestionably the currency of choice by Israelis and whose value has remained remarkably steady in recent years.. The reinvigoration of the Shekel is the product of prudent monetary policies designed to achieve macroeconomic

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[7] Again with the caveat that the Palestinian context is unique in that the case study countries presented in this paper were already full sovereign states with international recognition.

[8] In the broadest definition, dollarization can refer to the adoption of any external currency, but as noted above, the Palestinians have not considered using the Euro or Dinar as alternatives to the Shekel or Dollar.

[9] Stanley Fischer, Governor, Bank of Israel. Keynote Address at the 75th Anniversary Conference of the Central Bank of the Republic of Turkey, Istanbul, December 13-15, 2006.

[10] Kent Schuler. "Basics of Dollarization" January 2000. Global Policy Forum

[11] P. Alvarez-Plata and A. Garcia-Herrero. "To dollarize or de-dollarize: Consequences for Monetary Policy, Asian Development Bank, September 2007.

stability, rather than through administrative measures, such as rigid currency controls, which as in the case of Argentina almost invariable proved ineffective or even counterproductive. Measures such as currency controls are poor instruments to limit partial dollarization of an economy because they do not address the root problems that drive economic agents to hold alternative currencies. Clearly the most effective route to de-dollarization is through the use of effective macroeconomic policies that encourage citizens to save, invest, and conduct transactions using their own national currency

Full dollarization, in contrast, results not directly from the desire of residents to hedge against their own currency, but is the consequence of a major policy decision by a government to replace its own currency as the official means of exchange for all transactions. Because of the large impediments to reverse course once it is implemented, official or full dollarization is considered a permanent decision.

It should be noted that full dollarization, is a relatively rare phenomenon. Only 7 countries outside the United States have officially adopted the dollar as legal tender. These countries are East Timor, Ecuador, El Salvador, Marshall Islands, Micronesia, Palau, and Panama. The first three countries dollarized their economies in the last decade, the South Pacific Islands at the end of WWII, and Panama in 1904.[12] All of the dollarized countries are relatively small in population and GDP, and Panama, El Salvador, Marshall Islands, and Micronesia are highly integrated into the US economy.

Countries that have abandoned their national currency for the dollar are closely linked to the US economy with American imports and exports typically accounting for more than a third of the trade balance.[13] A country such as El Salvador is not only closely tied to the United States through major trade agreements, but a large component of its GDP derives from dollar denominated remittances. Other countries that have not officially dollarized, but which have highly dollarized economies include Cambodia, Bolivia, Uruguay, Ecuador, Laos, Peru, and Argentina. Their economic performance over the last decade has varied significantly, but for reasons that likely go well beyond the currency they use.

A recent report by the IMF indicates that at least in 3 countries, Peru, Bolivia, and Paraguay, dollarization has significantly declined in recent years, with the share of deposits in foreign currency having been reduced by up to 40 percent.[14]

4. BENEFITS ATTRIBUTED TO DOLLARIZATION

A review of the research literature indicates that there is a general consensus on the potential categories of benefits and costs to a country that dollarizes its economy. However, there is less agreement on the magnitude of some of these costs and benefits leading different analysts to arriving at different conclusions to the question of whether or not a particular country should dollarize or not.

(i) Reduced Administrative Costs

A country that outsources its monetary policy and production of its legal currency would obviously have fewer administrative costs associated with these activities. Under such a regime, the government would not have to develop or maintain the administrative and

[12] Alexandre Minda Full Dollarization: A Last Resort Solution to Financial Instability in Emerging Countries? European Journal Research, Vol 17, No 2. June 2005, pp. 289-316

[13] Minda, ibid. 2005

[14] Jose Cartas, Dollarization Declines in Latin America, Finance and Development, International Monetary Fund, March 2010.

physical infrastructure associated with circulating a national currency. Beyond these costs of course would be the cost of maintaining the monetary policy team. While the costs associated with these activities would not be overwhelming, they are not inconsequential. Because of diseconomies of scale, these costs should be carefully taken into account for a small and emerging economy which would characterize a future Palestinian State.

(ii) Reduced Risk of Inflation

Small and emerging economies tend to more vulnerable to high levels of inflation. Monetary discipline is always challenging, but more so in a developing economy where pressures to achieve short-term growth are especially strong. Often the operation of the Central Bank as an independent actor is made difficult in countries with weak institutions and volatile politics. By adopting a stable international currency such as the US dollar, inflation would be explicitly managed by the US Federal Reserve with price changes in the dollarized economy being closely linked to United States monetary policy. The success of inflation control of course would be contingent on continued prudent monetary policy of the United States.

Assuming the continued stability if not robustness of the US dollar, a dollarized economy would eliminate currency exchange risk and would send a strong signal to foreign investors that government policy is geared to long term growth and stability. This could lead to increased foreign direct investment and additional growth compared to a scenario where a national but unstable currency is the medium of exchange.

(iii) Reduced Interest Rates

Countries with marginal and volatile currency values pay a premium for their monetary policy independence when borrowing abroad. Foreign lenders to both governments and private sector businesses and individuals of an emerging economy typically charge higher interest rates as a hedge against currency devaluation. The adoption of a more stable currency would eliminate currency risk and result in lower costs of borrowed capital, and could serve to promote additional investment and economic growth. It should be noted that even the full adoption of the dollar might not totally remove premiums placed on government loans, if foreign lenders perceive a risk of sovereign default.

(iv) Stability and Integration

The primary objective of dollarizing the Ecuadorian and El Salvadoran economies was to achieve greater overall economic stability as well as better integration with the US economy. These countries had experienced numerous currency crises and Ecuador in particular was experiencing uncontrollable inflation. The conversion to the U.S dollar allowed them to focus on fiscal reforms and other measures targeted to liberalizing their economies.

The primary benefit of dollarization is that for a country experiencing a currency crisis, the source of the crisis is removed. For countries vulnerable to currency crisis, this risk is significantly reduced, although such risk does remain positive. Even a currency as historically strong as the dollar, is not completely immune from future crises, especially given the huge current accounts deficits that that the United States has incurred over the past two decades. Nonetheless the risk is relatively low compared to almost all other currencies. It should be noted that the economic cost of a currency crisis should not be underestimated. Mexico's currency crises in 1995 contributed to a GDP decline of 7 percent in 1995. The loss of confidence in various Asian currencies in 1998 contributed to GDP losses of 7 to 15 percent.[15] It is difficult to argue the counter factual that the economic crises in the affected nations would have been fully averted if their economies had been dollarized since the

[15] Andrew Berg and Eduardo Borensztein - "The Pros and Cons of Full Dollarization" International Monetary Fund Working Paper WP/00/50 March 2000

severe recessions in those countries resulted from a multiplicity of problems, including in most cases real estate bubbles. Nonetheless, if these countries had used an external currency such as the dollar, it is likely that the severity of the effects would have been mitigated.

Economic integration is also considered a major benefit of the dollarizing. The notion that trade with an external country is facilitated when using the same currency was clearly a major factor in El Salvador's conversion to the dollar. Similarly countries in Central and Eastern Europe have sought membership in the EU as a means for integrating their small economies into the huge European Union. It must be emphasized, however, that sharing a common currency is only one of many factors relating to economic integration. Upon accession to the EU joining countries are required to open up borders to allow the free movements of goods and services. Hence, the elimination of transaction costs for conducting economic transactions under a multi-currency regime is only one of many factors that facilitate regional integration.

5. COSTS ATTRIBUTED TO DOLLARIZATION

(i) Loss of Seigniorage Benefits

This is the forgone profit a Central Bank obtains from the printing of it national currency. The profit derives primarily as a result of the difference between the material costs of producing currency and its face value. The term is frequently used in reference to the US Treasury's earnings from producing coins and notes; as the producer of the world's major reserve currency and black market currency, the US can obtain considerable gains from printing money. But all countries with a national currency derive benefits from the sale of its currency to its users and these benefits are lost when a country outsources its currency to another country. There are two ways to mitigate this impact including issuing coinage to supplement the main currency being used and to seek reimbursement from the country's Central Bank that issues the currency being used. The former is used in countries such as East Timor and Ecuador. To date, however, the United States had not provided seigniorage reimbursement to any of the dollarized economies. Countries that have issued coinage in conjunction with the dollar typically lose money because the production cost in minting coins (due to their metal content) outweighs any seigniorage benefits.

(ii) Loss of Independent Monetary Policy

In the absence of a national currency, a country's Central Bank loses the ability to set interest rates and employ other policy measures to mitigate the effects of economic recession. Obviously, the government cannot devalue another country's currency to stimulate demand for its exported goods and services. If dollarized economy is counter cyclical to the United States upon whose currency and monetary policy the dollarized country is dependent upon, monetary policy adjustments in the United States could proved detrimental to the dollarized economy. Unlike a monetary union, where even the interests of the smaller members are taken into account, the United States has no equivalent obligations for dollarized countries.

(iii) Diminished Role in Preventing Domestic Bank Failures

Central Banks such as the United States Federal Reserve can play a vital role as "lenders of the last resort" to rescue banks during major economic crises. This role was made highly visible during the 2008 "financial meltdown" during which the United States Federal Reserve was able to take an aggressive and proactive role in rescuing numerous banks that were about to fail or at high risk of doing so. These actions, along with other regulatory safeguards are widely credited with preventing a further collapse of the financial sector. A country that does not have a fully operative Central Bank would have far less capacity to conduct these types of interventions.

(iv) Political and other Symbolic Costs

Although difficult to quantify, the decision to use another country's currency can diminish the sovereign authority of a government *vis a vis* internal and external politics. Currencies; like languages, can serve to promote national unity and are often viewed as tangible symbols of a country's identity as are flags, postage stamps, and anthems.[16] These types of symbols can serve as potent sources of national unity and bolster support to governments facing severe challenges of managing a newly formed country. These positive effects on nation building goals are diminished; when the government adopts a foreign currency as legal tender.

6. TWO CASE STUDIES: ECUADOR AND EL SALVADOR

The past several decades have seen numerous developing countries undergoing hyperinflation and currency crises because of poorly implemented monetary policy (often in complement with and in response to profligate fiscal policy).[17]

To avoid this problem, and as part of an overall strategy to achieve economic stability, several countries have on their own accord dollarized their economies For example, Ecuador and El Salvador have formally adopted the United States Dollar as legal tender for their economies. In addition, a number of small countries in Central Europe have enthusiastically joined the European Monetary Union (EMU) to achieve greater currency stability and to better integrate into the EU economy. Other countries, such as Croatia are queuing up to join in the future. .

Since 2000, countries such as El Salvador and Ecuador, and East Timor have dollarized specifically to address severe deficiencies in their own economic policies. Ecuador, for example, was experiencing very high rates of inflation, and the political forces impeded the government from implementing monetary and fiscal discipline needed to bring inflation under control. The adoption of the dollar served as a means to achieving greater economic stability as well as obtaining greater integration into the global economy, while removing contentious and irreconcilable issues from the domestic polity.

El Salvador's decision to dollarize was driven by a different set of circumstances and one of its key objectives was to further the country's integration with the United States economy. For example, not only has El Salvador developed large free trade zones specifically for exports of goods (e.g., textiles) to the United States market, but El Salvador has an unusually high dependence on remittances from the United States; in 2009 remittances accounted for more than 16 percent of the GDP. In recent years, remittances in the form of dollar transfers exceed 20 percent of El Salvador's DDP.[18] Dollarization was designed to further this integration and foster economic development.

[16] Benjamin Cohen. Dollarization: Pros and Cons, University of California, Santa Barbara. May 2000

[17] Given that the recent world-wide financial crisis originated in OECD countries one would be remiss not to mention that Central Banks in those countries are not immune to the political pressures to maintain low interest rates and "cheap credit" through prolonged periods of excessive monetary expansion

[18] In fact prior to the economic crisis, remittances exceeded 20 percent.

Ecuador

During the 1990s the Ecuadorian economy experienced large fiscal deficits and increasing external debt. The decline of the oil prices, a border conflict with Peru, drought impacts of El Niño's, political instability as well as poorly executed monetary and fiscal policy together resulted in stagnant economic growth, high inflation, and a liquidity crunch.[19] The economy reached a crisis point toward the end of 1998. From June 1998 through December 1999, for example, the national currency, the *Sucre*, was in free fall losing about 80 percent of its value compared to the United States Dollar. The government imposed a deposit freeze in March 1999, and the economic and political crisis intensified.

In response to the economic crisis, Ecuador implemented a number of drastic emergency actions including taking the initial steps in January 2000 towards dollarization in an attempt to avoid the complete collapse of the banking system. Along with dollarization, the government introduced reforms aimed at incentivizing private investment in the energy sector, privatization of state enterprises, and making labor markets more flexible. Ecuador also restructured its external debt in August 2000, reducing the total external debt ratio from 106 percent of GDP at the end of 1999 to around 98 percent in 2000.

It must be noted that dollarization was not a popular with the electorate and within days of the dollar becoming the official legal tender in September 2000, the President was removed from office. The indigenous population and the Central Bank were the most vocal critics of the dollarization plan. Nonetheless, the new President continued the economic reforms and the dollar has remained the official currency of Ecuador.

As shown in Table 1, the overall impacts of the dollarization of the economy together with other reforms had a clear positive effect on Ecuador over the first 5 years of implementation. Real GDP growth increased from 0.9 percent in 2000 to an annual average growth rate of 4.2 percent for the years 2001-2005.[20] In the preceding 5-year annual growth rates averaged only 1.36 percent. In 2005 and 2006 high global commodity prices continued to support economic growth and in 2008 Ecuador experienced a growth of 6.5%. However, Ecuador like most countries has also been negatively impacted by the global economic crisis experiencing an estimated growth of negative 2% in 2009.[21]

Table 1: Key Macroeconomic Indicators for Ecuador: Before and After Dollarization

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Real GDP growth rate	2.1	3.0	5.2	2.2	-5.7	0.9	5.5	3.8	2.3	6.3	3.0
Inflation	22.8	25.6	30.7	43.4	60.7	91	22.4	9.4	6.1	2.0	4.4
Unemployment	7.7	10.4	9.3	11.5	15.1	14.1	10.4	8.6	9.8	11.0	9.7

The sustained impact of the dollarization process on unemployment levels has been much less clear. Overall unemployment rates have dropped slightly from an average of 10.8 percent for the period 1995-1999 to 10.6 percent during the period 2000-2005. Notable is the fact that unemployment decreased from a rate of 15.1 percent in 1999 to a low of 8.6 percent in 2002.

[19] Bo Young Kim and Jai-Sheen Mah. The Macroeconomic Effects of Dollarization: Ecuador and El Salvador. 2007
[20] Bo Young Kim and Jai-Sheen Mah . The Macroeconomic Effects of Dollarization: Ecuador and El Salvador. 2007
[21] https://www.cia.gov/library/publications/the-world-factbook/geos/ec.html

The most remarkable change to Ecuador's economy since dollarization has been the reduction in inflation, which averaged almost 37 percent from 1995 to 1999 and reached 90 percent in 2000 but which averaged slightly less than 9 percent from 2001-2005. However, the impact of dollarization on inflation lagged almost two years as inflation in 2001 remained quite high at 22.4 percent. By 2004 inflation was reduced to 2.0 percent. Through 2009, inflation has remained under control, with rates remaining in the single digits, a condition not experienced in Ecuador's modern history.

El Salvador

El Salvador's decision to dollarize its economy was driven by very different economic and political conditions and objectives than Ecuador. For example, the average annual inflation rate during 1996–2000 in El Salvador was only 3.36 percent and the country was not facing a major banking collapse. According to Juan Carlos Hidalgo the government hoped to accomplish four basic objectives with dollarization[22]:

- Eliminate the risk of devaluation to protect the cash value of deposits, pensions, and salaries
- Lower interest rates and increase competition in the financial sector
- Encourage private investment
- Minimize the lack of monetary credibility, which is common for emerging economies, through the elimination of independent monetary policy

El Salvador implemented a number of comprehensive structural reforms in the mid-1990s in an attempt to rebuild and stabilize the economy after reaching a peace agreement with Marxist rebels that had waged war since the 1980s. These reforms included the simplification of the tax structure, re-privatization of the financial system, and financial and trade liberalization (IMF 1998). In addition, in 1993, the Central Bank adopted a fixed exchange rate policy with respect to the U.S. dollar to minimize exchange rate risk and to foster price stability.

However, even after a decade of steady growth, most measures of poverty and social conditions had not fully recovered from the effects of the civil war in the 1980s. Since 1992, El Salvador's economy has enjoyed relative stability and a steady decline of inflation rates, from 18.5 percent in 1993 to 2.3 percent in 2000. Interest rates remained high, however, mainly because of the lack of confidence in the fixed exchange rate regime. Interest rates declined slightly from 19 percent in 1993 to 14 percent in 2000. Remittances from abroad also increased significantly, growing approximately 155 percent from 1992 to 2000. In 2000, total remittances reached $1.75 billion, approximately 13 percent of real GDP. GDP growth averaged 6 percent between 1990 and 1995. [23]

In 2001 the government implemented the Monetary Integration Law which established a fixed exchange rate of 8.75 *colones* per U.S. dollar and made the dollar legal tender in the financial system. The government decision to dollarize arose out of an attempt to lower interest rates, increase foreign investment, improve financial conditions, and decrease transaction costs in international trade. In addition, the government argued that dollarization would protect wages and savings against devaluations. Dollarization would also benefit Salvadorans living in the United States by making their remittance transfer costs cheaper.

[22] Juan Carlos Hidalgo - "El Salvador: A Central American Tiger? " Cato Institute March 2009

[23] Myriam Guispe-agnoli and Elena Whisler, Official Dollarization and the Banking System in Ecuador and El Salvador, Economic Review 2009

El Salvador's economy is strongly tied to the United States which added to the benefits of dollarization. According to the Federal Reserve Bank of Atlanta two thirds of total exports are sent to U.S. markets, and the United States is the origin of a large portion of remittances.

Immediately following the adoption of dollarization, El Salvador faced several severe shocks, including two earthquakes, declining international coffee prices, increasing oil prices, and the slowdown of the U.S. economy. These external shocks impacted economic growth. As shown in Table 2, real GDP grew by only 1.8% percent in 2004 and has averaged less than 2.5% since 2001. According to the CIA World Fact Book, El Salvador GDP growth was 2.5% in 2008 but like most countries it experienced a decline of 2.9% rate in 2009. While economic growth has decelerated, interest rates, inflation rates, and remittances have improved since full dollarization was adopted. Most significantly Foreign Direct Investment as a share of GDP actually declined. In the 3 years leading up to the dollarization in 2001, FDI averaged about 2.4 percent. In the successive four years, 2002- 2005, FDI totaled only 1.48 percent of GDP.

Table 2: Key Macroeconomic Indicators for El Salvador: Before and After Dollarization

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Real GDP growth rate	6.2	1.8	4..2	3.8	3.4	2.0	1.7	2.1	2.0	1.8	2.5
Inflation	11.4	7.4	1.9	4.2	-1.0	4.3	1.4	2.8	2.5	5.3	4.74
Unemployment	7.0	7.5	7.5	7.6	6.9	6.5	7.0	6.2	6.2	6.3	6.5

7. SUMMARY OF DOLLARIZATION IMPACTS IN ECUADOR AND EL SALVADOR

Ecuador and El Salvador are the two most prominent countries to have dollarized their economies in the past decade and their economic performance provides some insight on the benefits and limitations of dollarization policies. As described above, the motives behind their actions could not be more different. Ecuador dollarized in response to a major economic crisis that reached its peak after years of prolonged volatility and poor fiscal and monetary policies. El Salvador pursued dollarization as one component of an overall policy to further stabilize and integrate its economy with the United States and promote private investment.

Ecuador's economy has undoubtedly improved since dollarization with much diminished volatility, especially in regards to inflation. Unemployment remains quite high and the economy faces a multitude of challenges to its continued development. The dollarization policy was implemented in the absence of real consensus and some political instability resulted immediately after its implementation. Nonetheless, the adoption of the dollar has mostly fulfilled the stated objectives of its advocates. The sustainability of the dollarized economy in Ecuador seems assured, since the current President Mr. Rafael Correa, an implacable opponent of United States foreign and economic policy has not taken any substantive steps to reintroduce a national currency.

El Salvador dollarized under completely different conditions than did Ecuador and has experienced far more modest results. There has been no significant spurt in GDP growth and unemployment has remained at about the same levels as for the two year period prior to dollarization. Inflation rates are at roughly the same levels. As noted earlier, El Salvador has suffered two earthquakes and reduced prices for its coffee exports. During this period; however, remittances from workers residing mostly in the United States continued to grow and serve as a buffer to these shocks. It is difficult to estimate what these impacts would have been on the economy if El Salvador had not dollarized, but El Salvador's experience demonstrates the limitations of the dollarization as a source of economic growth, which is dependent on a multitude of factors.

In the case of El Salvador, its impediments to economic growth and development were not strongly related to a stable currency and inflationary issues and hence, the adoption of the dollar appears not to have had a significant impact on economic performance over the past decade. The economy was already well integrated into the United States economy via a robust trade and the large volume of remittances from expatriate workers residing in the United States. If the dollarization of the economy reduced transactions costs and further facilitated trade, those benefits are not manifested in the economic statistics. In contrast, Ecuador clearly benefited from the dollarization of its economy. Economic stability and significantly reduced inflation rates, two major objectives of the dollarization policy have been achieved.

Therefore, in retrospect, Ecuador's decision was a good one. It should be noted that at the time, not only was this policy opposed by large segments of the Ecuadorian population but also by Stanley Fischer, who was at the time, Deputy Managing Director of the IMF. Fischer stated at the time that he advised against dollarization, as the banking sector in Ecuador was unhealthy and its fiscal position weak.[24]

8. DOLLARIZATION OR A NATIONAL CURRENCY?

The above discussion summarized the conventional views regarding the advantages and disadvantages of dollarizing an emerging economy. It also highlighted the disparate outcomes of dollarization policies on the economies of Ecuador and El Salvador. At least for these two Latin American economies, it would appear that that dollarization can be a useful antidote to economic insatiability when the main driver of that instability is a poorly executed monetary and fiscal policy that undermines the national currency and engenders persistent high inflation. This was exemplified in the case of Ecuador. In contrast, the salubrious effects of dollarization were much less apparent in El Salvador, likely because the impediments to economic growth are mostly attributable to issues unrelated to currency stabilization problems.

To evaluate the prospects for a future dollarized or non dollarized Palestinian economy using these case studies is especially difficult because of the profound differences between these two Latin American countries and Palestine in almost all aspects—political, economic, cultural, social and geographic location. The strategic challenges beyond managing a national economy confronting the Palestinian government are extremely different from those faced by Ecuador and El Salvador. Most importantly, the evolution of a monetary policy would by necessity be different. Whereas each of these two countries already had an indigenous currency that was renounced in favor of the dollar, the Palestinians are forced to rely upon a mix of externally produced currencies, primarily the Shekel, Dinar and the Dollar. Also these were sovereign states before the dollarization policy was implemented.

The discussions associated with creating a Palestinian national currency have revolved around whether the PA would create a currency board or use a managed float to stabilize currency value and reduce risk. Under a currency board system the Palestinian government would issue its own currency but would not achieve the same degree of monetary autonomy

[24] Noted in Speech by Ms. Jeanette Semeller, President of the Central Bank of Aruba, Opportunities and Risks of Dollarization for the Dutch Caribbean, 24 August 2009

under a currency regime with a free or managed float carried out under the direction of a Central Bank.[25]

A currency board, unlike a central bank, has powers limited to issuing notes and coins, although some currency boards do accept deposits and issue securities. Management of monetary policy by a currency board is purely mechanical and it has no discretionary power. Every unit of domestic currency in circulation must be backed up with an equivalent amount of foreign reserves. The adjustments are mandatory and for many emerging economies this poses a major challenge, as the currency board must proportionately increase reserves when the money supply increases. Based on its management of reserves, however, it is thought, that the PMA would likely be in better position than most newly independent countries in creating sufficient reserves to manage the economy.

A major consequence of operating an economy with a currency board is that it cannot simply print monies to finance a deficit. While this constraint enforces discipline that might not otherwise take place, adoption of a currency board also imposes a rigidity that limits monetary responses to economic downturns and external shocks. Furthermore, if demand for the domestic currency falls and the anchor currency increases (e.g., the dollar), the domestic currency supply is reduced, interest rates will rise, resulting in an increase in demand for the domestic currency.[26] Any significant increase in interest rates would likely be strongly detrimental to economic growth and job creation. This would be particularly damaging to an economy such as Palestine faced with high unemployment rates which averaged about 18 percent in the West Bank and 39 percent in Gaza.[27] Also, in a fully dollarized economy, the monetary authorities would not be able to serve as lender of last resort.

The constraints imposed on issuing a national currency would reduce the benefits of seigniorage that could be obtained under a free or managed float currency regime. However, the reduction would likely be rather modest. In fact, estimates developed about a decade ago, and based on the size of the Palestinian economy at the time indicated that even under a floated currency, the PA would derive only about $15 to $20 million in seigniorage benefits.[28] Even taking into account that the Palestinian economy has grown significantly over that time and now has a GDP of about $6.5 billion, seigniorage benefits would be have little impact on the government's financial health even under a freely floated currency.

The most likely benefit of a currency board would be that it would demonstrate to the international community the PA's intent to maintain a stable currency that in turn would encourage foreign investment. It would also likely reduce the chances of a future economy from experiencing hyperinflation. However, it must be noted that in the last decade, inflation has not posed a serious threat to the Palestinian economy. Except for a short spurt of inflation that reached 11 percent in 2008, annual inflation rates have remained mostly under 5 percent. One likely reason for this, is that the currencies that dominate the Palestinian economy, the Shekel in particular, has been relatively stable against the world's other major currencies.

It should also be noted that given the small size of the Palestinian economy, a national currency could be vulnerable to speculators who would be difficult to defend against since

[25] Moyara Ruehsen. Choosing an Appropriate Palestinian Monetary Regime 2005 Money and Finance in the Middle East: Missed Opportunities or Future Prospects?
[26] Moyara Ruehsen ibid. 2005
[27] International Monetary Fund Macroeconomic and Fiscal Framework for the West Bank and Gaza, Fifth Review of Progress. April 2010
[28] Moyara Ruehsen. Choosing an Appropriate Palestinian Monetary Regime 2005 Money and Finance in the Middle East: Missed Opportunities or Future Prospects?

the currency board cannot adjust supply in response. Given the volatility of the Middle East, this risk to hostile speculation should not be readily dismissed.

A managed float regime presents different challenges to the PMA, (assuming the PMA would become Palestine's equivalent of the United States Federal Reserve). Certainly, it would offer the advantages discussed earlier, since the PMA would have the full authority to issue currency, obtain seigniorage benefits, serve as a lender of last resort, and in general have the capacity to address economic downturns as well as external shocks. To avoid currency risk and the debilitating effects of inflation, the PMA would have to demonstrate political independence, monetary discipline, and maintain a robust reserve.

As a newly independent state that has endured political instability and economic volatility as well as strategic vulnerability, the PA along with the PMA as the implementing monetary authority, would have to establish the precedent conditions necessary to foster a high degree of confidence in their ability to manage not only the money supply but in their willingness to impose a reasonable degree of fiscal discipline. Otherwise attempts to manage the currency's value through intervention would be futile. As seen in other cases from Mexico to Argentina, economies much larger than the Palestinian economy, loss of confidence in those currencies resulted in large devaluations and economic hardship. No intervention on behalf of a country's currency can prevail against international market forces, when there is a consensus against the currency.

The economic disadvantages of dollarization have been enumerated and presented earlier in this paper. The loss of monetary independences and its symbolic impact cannot be overstated. With the recent world financial meltdown and concerns about the dollar's future value, adopting the dollar as legal tender brings new uncertainties to the equation. There are grave concerns about the future value of the United States dollar due to its increasing debt and its inability to significantly reduce its current account deficit. Unless rectified, these factors could lead to high inflation in the United States and a gradual or even a sudden and drastic devaluation of the dollar if a major economic crisis were to occur in the near future.

Conversely, the recent debt crises in certain member states of the EMU has brought into focus serious issues with the euro, both theoretically and practically. The question being raised in some quarters is whether nations such as Greece and possibly Portugal and Spain are poor candidates to adopt an external and strong currency such as the Euro. Because Greece has no independent currency it cannot use monetary instruments such as devaluation to extract itself out of its economic crisis. The rigidity of its labor laws and impediments to labor mobility (unemployed Greek workers moving to Germany) will make recovery more difficult. Palestinians could potentially face the same outcome in an economic crisis under a dollarization regime. From a practical point of view, a prolonged devaluation of the Euro compared to the dollar could render dollarized economies less competitive in world export markets. While it is not likely that an extreme outcome will result in either the dollar or euro, these are factors that have only recently emerged and should be evaluated in the Palestinian decision making process.

A key constant in assuring the stability of any currency is to get the macroeconomic framework in shape. This means first and foremost placing fiscal policy on a sustainable track. Governments usually control the fiscal side of the ledger and adherence to prudent fiscal policies will do more to ensure currency stability than monetary policies devised by the Central Bank. Inflation targeting remains the domain of the Central Bank and if complemented by prudent fiscal policy serves best to ensure international confidence in a national currency, growth in its domestic market, stable prices and increased employment.[29]

[29] See Stanley Fischer, Governor, Bank of Israel article entitled "Dollarization: Consequences and Policy Options" presented as keynote address at the 75th Anniversary Conference of the Central Bank of Turkey, Istanbul, December 13-15 2006.