



THE BRICS AND ASIA, CURRENCY INTERNATIONALIZATION AND INTERNATIONAL MONETARY REFORM

PAPER NO. 8 — JANUARY 2014

Promoting the International Use of Emerging Country Currencies: The Case of Local Currency Debt Issuance for Latin America and the Caribbean

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Author's Note

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ABOUT THE PROJECT AND PAPER SERIES

The BRICS and Asia, Currency Internationalization and International Monetary Reform

The disjuncture between global markets and an international monetary system (IMS) based on national currencies generates instability for global trade and finance. As the BRICS (Brazil, the Russian Federation, India, the People's Republic of China [PRC], South Africa) and Asian countries have become more integrated into the world economy, their governments have become increasingly aware of fundamental problems or challenges in the current IMS.

In December 2012, the Asian Development Bank (ADB), The Centre for International Governance Innovation (CIGI) and the Hong Kong Institute for Monetary Research (HKIMR) co-hosted a conference in Hong Kong, China. The conference examined: a range of views on the fundamental systemic problems that are a catalyst for international monetary reforms; views from the BRICS and Asian countries, as well as regional considerations regarding the measures that key countries are already taking to respond to the challenges of the IMS, including currency internationalization; and options and preferences for orderly adjustment of the IMS.

The nine papers in this series, authored by esteemed academic and policy experts, were presented at the conference in Hong Kong, China and were subsequently revised. These working papers are being published simultaneously by all three partners.

ABOUT THE AUTHOR

Andrew Powell is the principal advisor in the research department of the Inter-American Development Bank (IDB). He holds B.A., M.Phil. and D.Phil. degrees from the University of Oxford. He won the Deloitte Prize for the best economic papers in the B.A. and was Prize Research Fellow at Nuffield College, Oxford. He was then lecturer (associate professor) at the University of London and subsequently at Warwick University.

On moving to Buenos Aires, he became head of research (March 1995–June 1996) and then chief economist (June 1996–April 2001) of the Central Bank of Argentina, and represented Argentina in G20 meetings and many other international events. He was subsequently professor at the Universidad Torcuato Di Tella, Buenos Aires, until September 2005 and then joined the research department of the IDB. He moved to be the regional economic advisor for the Caribbean region at the IDB and then returned to the research department in November 2010 to take up his current position.

He has published numerous academic papers in leading economic journals on commodity markets, risk management, the role of multilaterals, regulation, banking and international finance. He was the coordinator of the Latin American and Caribbean Macroeconomic Report published by the IDB in March 2012 and March 2013, and contributed chapters to recent flagship reports such as *More than Revenues* (on taxation in Latin America and the Caribbean) and *Beyond Facts* (on quality of life issues). Current areas of interest include capital flows, credit ratings, the pros and cons of financial innovation, monetary and prudential policies, debt restructuring and the taxation of commodity industries. Most recent papers have focussed on the dangers of capital inflow surges, sudden stops, inflation targeting and the long-run behaviour of commodity prices.

ACRONYMS

ADB	Asian Development Bank
BIS	Bank for International Settlements
BRIC	Brazil, the Russian Federation, India and the People's Republic of China
BRICS	Brazil, the Russian Federation, India, the People's Republic of China and South Africa
CIGI	The Centre for International Governance Innovation
CPI	consumer price index
EM	emerging markets
HKIMR	Hong Kong Institute for Monetary Research
IDB	Inter-American Development Bank
IMS	international monetary system
LAC	Latin America and the Caribbean
OTC	over the counter
PRC	People's Republic of China
RMB	renminbi
TCX	The Currency Exchange Fund
UK	United Kingdom
US	United States

INTRODUCTION

There are many dimensions to the international use of a nation's currency. These include the use of a currency for trade invoicing and settlement, the use of a currency to denominate assets to be held as a store of value, for example, as central bank reserves, and the use of a currency to denominate liabilities such as loans or bonds.¹

The focus of this paper is on this latter role and, more precisely, the value of being able to issue debt externally in one's own local currency. The paper considers, in particular, the countries of Latin America and the Caribbean (LAC). In this sense, this paper is related to recent literature on what has been

termed "original sin."² It is argued below that being able to issue external debt in domestic currency is valuable principally for risk-sharing motives and that while some LAC economies have indeed been able to issue in local currencies abroad, the amounts remain relatively modest.

In order to understand the reasons why this may be the case, it is important to consider the currency composition of global currency markets more generally. Global spot and derivative trading remain dominated by a few currencies — in particular, the United States (US) dollar. This implies that dollar bond issues enjoy attractive rates for liquidity motives while countries that may wish to issue in their own rather illiquid currencies may be faced with large liquidity premiums. This means that policy makers in those currencies may continue to issue external debt in US dollars and a few other currencies, further exacerbating these liquidity effects.

The following section of the paper details the composition of global currency markets and the composition of global debt issuance using a detailed database and with a focus on LAC. Section three then considers the value of being able to issue external debt in one's own currency. Section four then moves on to consider potential solutions. In particular, the diversification benefits of a portfolio of currencies, including LAC and BRIC (Brazil, the Russian Federation, India and the People's Republic of China [PRC]) currencies is considered. These diversification benefits imply that there is an advantage to global coordination and some preliminary ideas are discussed. Section five concludes with a brief summary of the arguments presented and a further policy discussion.

1 See, for example, Kenan (2009).

2 See, for example, Eichengreen and Hausmann (2003) and Hausmann and Panizza (2003; 2010).

INTERNATIONAL CURRENCY COMPOSITION OF TRADING AND DEBT ISSUANCE IN EMERGING AND LATIN AMERICAN CURRENCIES, SELECTED FACTS

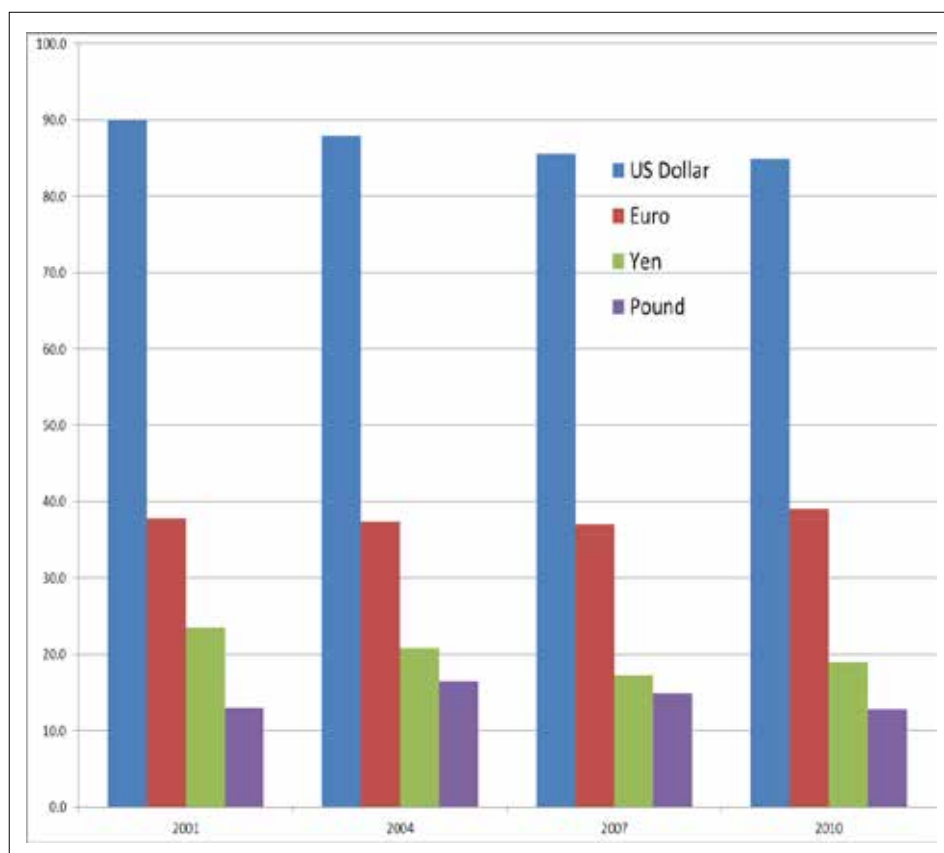
One of the most notable features of the use of international currencies has been the relatively stable share in foreign exchange trading of the top currencies. Figure 1 plots the shares of the US dollar, euro, yen and pound since 2001.³ The dollar's share has hovered between 84 percent and 89 percent over

3 Data comes from the Bank for International Settlements (BIS) triennial survey. Shares add to 200 percent. Data is average daily turnover in April of each year.

that period, while the euro had a share of 38 percent in 2001, and despite much speculation regarding the eventual popularity of the new currency, this only rose to 39 percent by 2010, with the yen and the pound some way back with, again, relatively stable shares of 19 percent and 13 percent, respectively.⁴ Given the yen and the pound's one third of the market, this can hardly be described as a duopoly, but the dominance of these currencies in international trading is marked and outstrips the relative shares of the four currencies in many other markets.

4 Considering the data of 1998, the shares of the currencies making up the euro appeared to have a total share greater than that of the euro, although much of that may have been trading within those currencies.

Figure 1: Market Share in Currency Trading, Top Four



Source: BIS Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity.

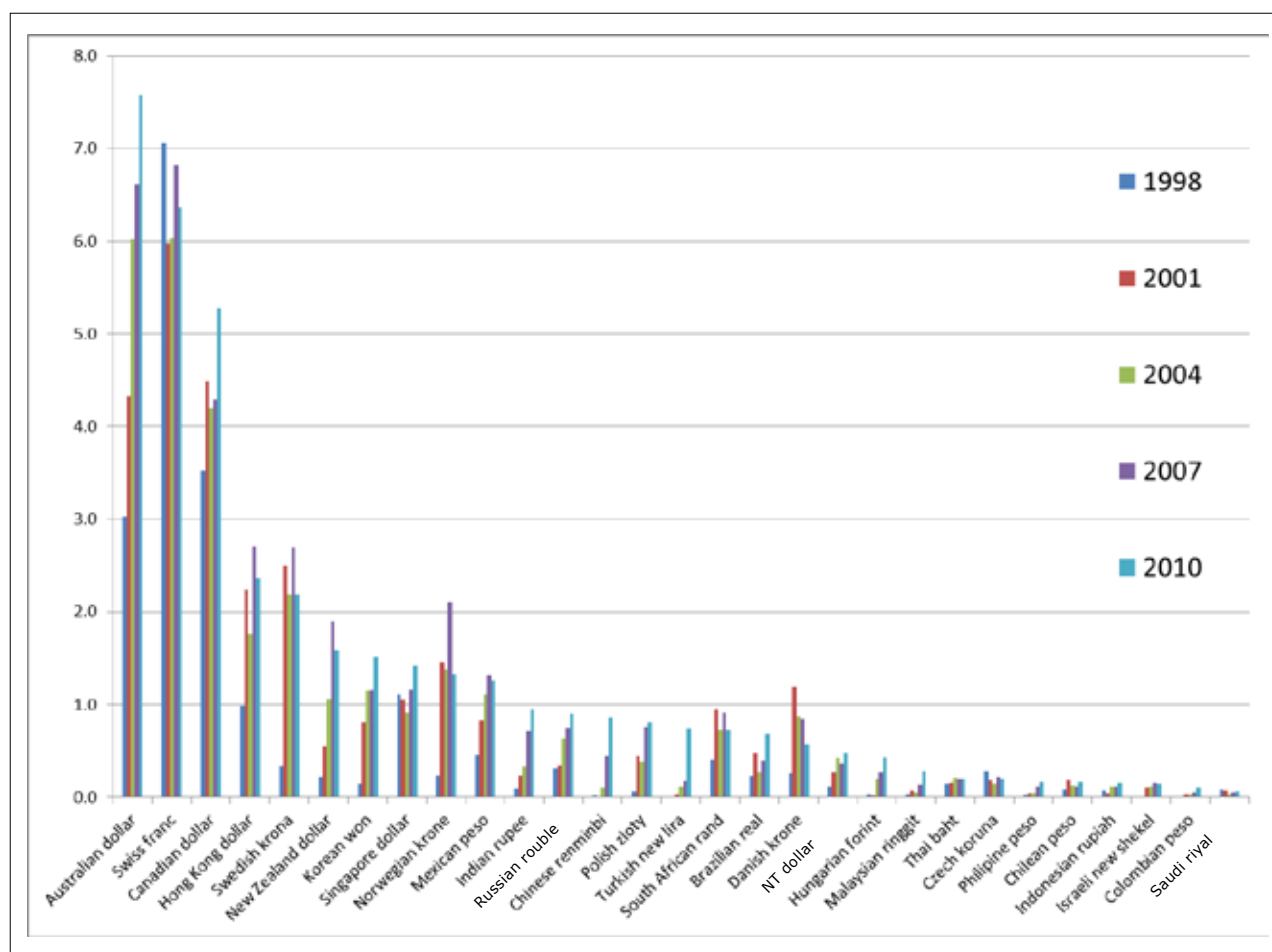
Interestingly, there has been somewhat more movement in the shares of the currencies outside of the top four, although from a low base. Figure 2 plots the market share in foreign exchange trading of all the other currencies covered by the BIS’s triennial survey. In particular, the Australian and Canadian dollars have increased their market shares to join the Swiss franc in the five percent to eight percent range.

Within Latin America, the focus of this paper, the Mexican peso has almost tripled its market share from 0.5 percent to 1.3 percent and the Brazilian real has more than tripled its share from 0.2 percent to

0.7 percent. These are large proportional increases, albeit from a low base.

Considering specific currency pairs, a very significant 28 percent of the average US\$1.1 trillion per day of currency trading through April 2010, was accounted for by the US dollar/euro pair, followed by 14 percent for US dollar–yen trades and nine percent for US dollar–pound trading. The largest volume for a currency pair not involving the dollar is a tie between the euro–yen and the euro–pound, each with a share of just three percent of the total market. The US dollar–renminbi (RMB) and US dollar–real market shares are equal at just one percent of the total market. And

Figure 2: Currency Composition of Currency Trading, Excluding Top Four



Source: BIS Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity.

perhaps most tellingly, the entire market of residual currency pairs (i.e., those not specifically identified by the BIS, which includes all trading within emerging markets [EM] currency pairs) is just some two percent of the total market.⁵

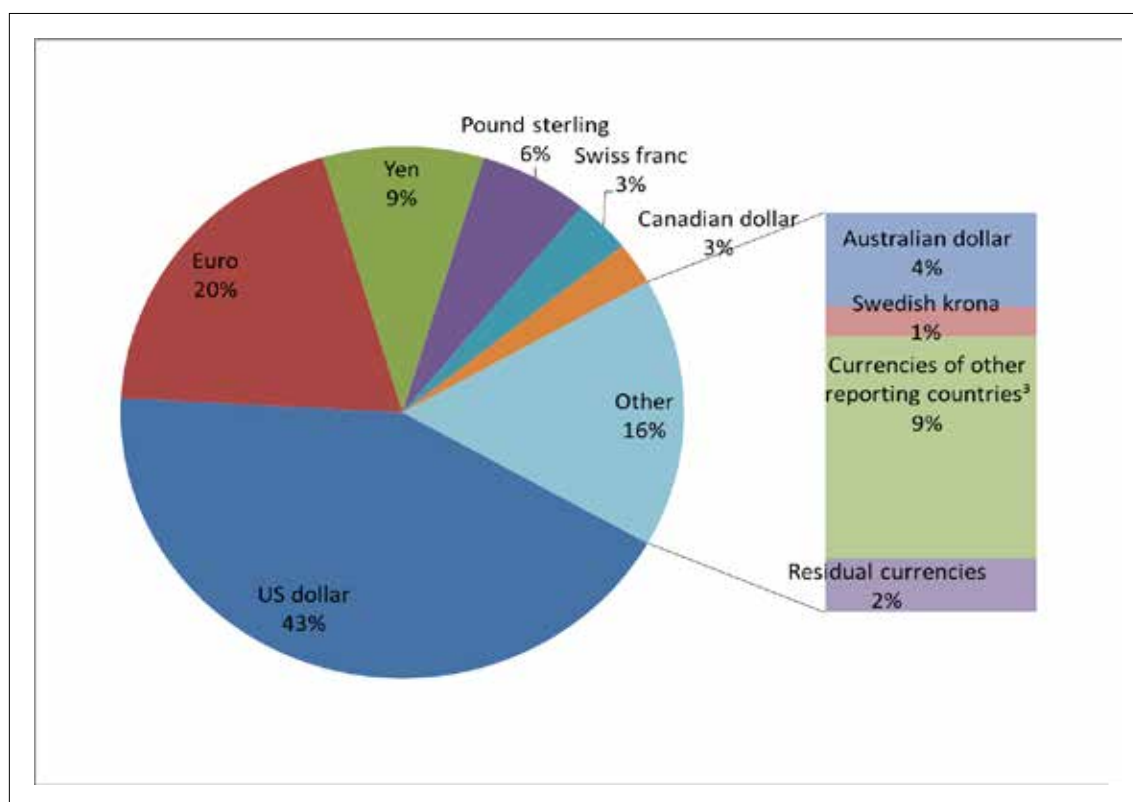
A similar picture emerges considering derivative trading. For example, Figure 3 illustrates the market share of a set of currencies in global over the counter (OTC) currency derivative trading (swaps, options and forwards) for April 2010. The US dollar had a

43 percent market share with the euro capturing 20 percent of these markets. Other reporting countries, which included the RMB and the Brazilian real and also many other currencies amounted to only nine percent of the total market, and the residual currencies, which included the currencies of smaller Latin American countries, held only some two percent of the total global market in these instruments.

Turning to bond issuance and using a detailed database of bond issuance across the world, Figure 4 plots the currency composition of bond issuance over time. The country and currency coverage of this database is excellent for international issuance, but is likely quite patchy in the earlier years of this graph for issues in some jurisdictions and currencies, but by 2006 or so coverage had improved

5 Source is BIS triennial survey on currency trading. Note that all residual currency trading against the US dollar is 11 percent of the market (which includes all EM currencies except the RMB and the real) and that all the trading of the euro against residual currencies (which includes all EM currencies) is three percent of the total market.

Figure 3: The Composition of OTC Currency Derivative Trading



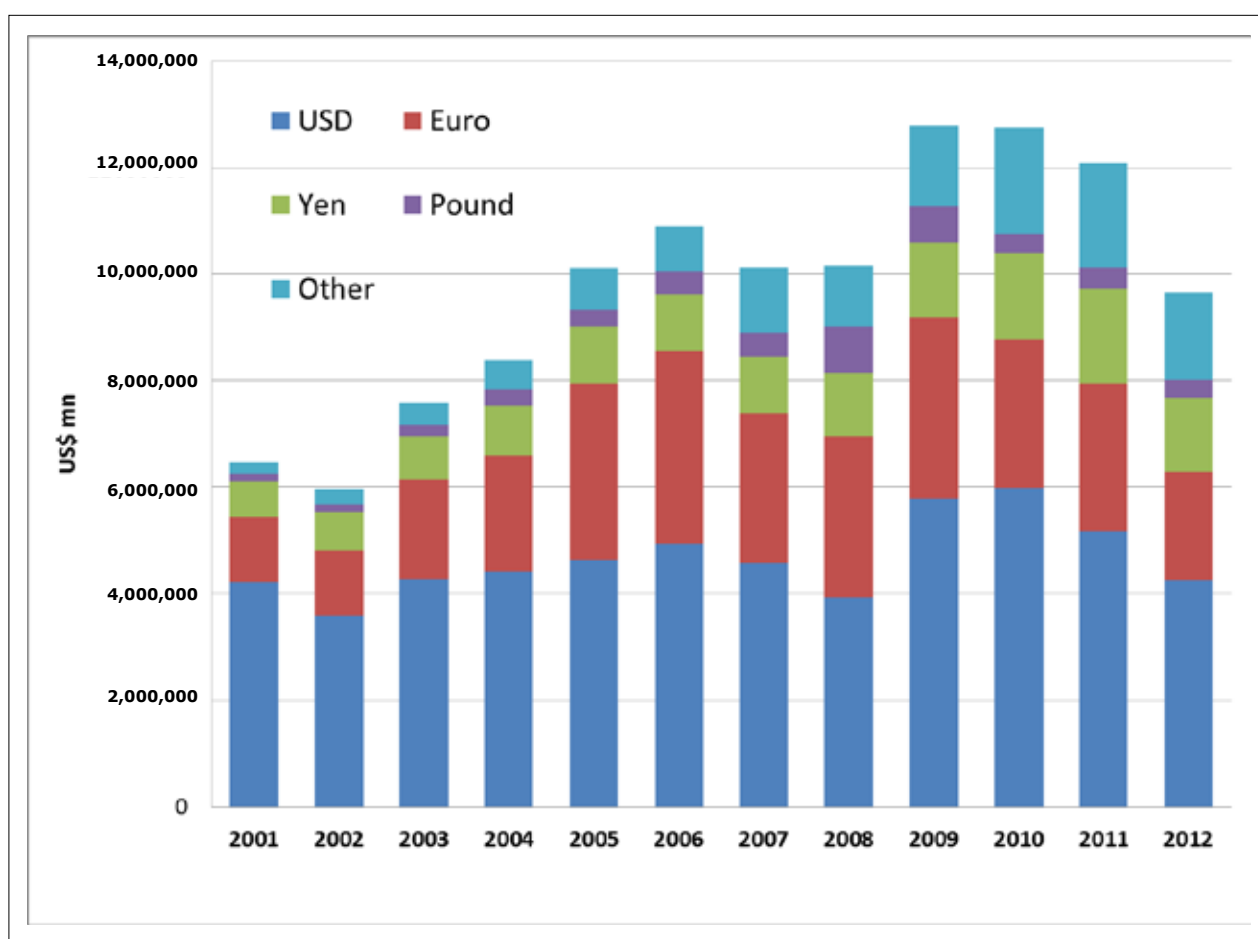
Source: BIS Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity.

substantially. Still, there are notable gaps in this database. In particular, while corporate issuance appears to have reasonable coverage, many emerging countries' sovereign domestic issuance in domestic currency appears to be absent. The following remarks should then be considered carefully given these significant data problems. The total amount of bonds issued in the world in 2011 was US\$12.1 trillion,

including both public and private debt issues.⁶ In 2011, about 43 percent of this issuance was in US dollars, 23 percent was in euros, 15 percent was in yen, seven percent was in RMB and 3.5 percent was in pounds.

6 The source of this data is Dealogic. Coverage of international security issuance in this database appears very comprehensive, but the data appears to miss some issues in local jurisdictions in local currency aimed at local investors.

Figure 4: Currency Composition of Global Bond Issuance



Source: Dealogic data and author's calculations.

The most popular Latin American currency for debt issuance was the Brazilian real, with about 0.25 percent of this market, followed by the Mexican peso with 0.15 percent of the market.⁷ The

Colombian peso had some 0.02 percent of the market. Focussing further on Latin America, there was some US\$139 billion of bond issuance in 2011 where the “deal nationality” was considered as from Latin America or the Caribbean. Table 1 gives the currency breakdown of these issues and their “deal nationality.”

7 This does not include issues in MNV (a Mexican inflation linked index, which accounts for a further US\$2.3 billion of issues in 2011).

Table 1: LAC 2011 Bond Issuance

Currency	US dollars (billions)	Currency	US dollars (billions)
ARS	436	MXN	16,026
Argentina	436	Chile	410
BRL	22,606	Mexico	15,616
Argentina	255	MXV	2,249
Brazil	22,173	Mexico	2,249
Mexico	178	PEN	356
CHF	741	Chile	13
Brazil	409	Peru	343
Mexico	332	USD	82,278
CLF	2,737	Argentina	3,032
Brazil	47	Brazil	32,538
Chile	2,690	Chile	5,599
CLP	716	Colombia	5,330
Chile	716	Costa Rica	250
COP	2,808	Dominican Republic	750
Colombia	2,724	El Salvador	654
Peru	84	Jamaica	694
EUR	4,844	Mexico	17,762
Brazil	3,455	Panama	545
Mexico	1,389	Paraguay	100
GBP	1,889	Peru	2,055
Brazil	1,092	Trinidad and Tobago	175
Mexico	797	Uruguay	200
JPY	156	Venezuela	12,594
Mexico	156	UYU	1,275
		Uruguay	1,275
		Total	139,117

Source: Author.

Currency codes used in table: ARS = Argentine peso, BRL = Brazilian real, CHF = Swiss franc, CLF = unidad de fomento (Chile), CLP = Chilean peso, COP = Colombian peso, EUR = euro, GBP = pound sterling, JPY = Japanese yen, MXN = Mexican peso, MXV = unidad de inversion (Mexico), PEN = Peruvian nuevo sol, USD = US dollar, UYU = Uruguayan peso.

As can be seen, some US\$82 billion (60 percent) of these issues were in US dollars, followed by US\$22 billion (16 percent) in real and US\$16 billion (11.5 percent) in Mexican pesos — not including US\$2.2 billion in Mexican inflation indexed debt. Interestingly, the euro only captured US\$4.8 billion (about 3.5 percent) of LAC “deal nationality” issues.

It is also notable that there are some bond issues within Latin America in other currencies from the region. For example, there were US\$255 million of issues in real, where the deal nationality was Argentine, and some US\$178 million of Mexican nationality deals in real. There were US\$84 million of Peruvian nationality issues in Colombian pesos and US\$13 million of Chilean nationality issues in Peruvian soles. It should also be noted that there are two currency codes from Chile — Chilean pesos (CLP) and unidad de fomento (CLF). The only issues in CLP are where the deal nationality is Chilean, but interestingly there are Brazilian issues in CLF, which is an issue in Chilean pesos but inflation indexed.

Table 2 gives some statistics on Latin American currency issues outside of the region, and the

governing law of those issues. There were only some US\$10 billion of issuance in LAC currencies where the governing law was identified in the database as being outside of the region.⁸ Of that, US\$6.2 billion was issued in the United Kingdom (UK) (with some US\$5.6 billion of that in real), and US\$3.5 billion in the United States.

Hence, while there has been some activity in local currency issuance in international markets from LAC, this remains quite limited. According to this database, only US\$10 billion of issuance from Latin America has been registered under the foreign law in local currencies, including the United Kingdom and the United States, during 2011, compared to some US\$139 billion of total issuance in these currencies. Moreover, bonds in only seven LAC currencies have been employed in these issues. Some US\$90 billion of that US\$139 billion were issues in US dollars, euros, pounds and yen. LAC still appears to strongly

8 A large number of issues did not identify governing law, but given the other characteristics of those deals it is likely that these were local jurisdiction issues.

Table 2: Bond Issuance in 2011 by Currency and by Governing Law of the Issue (Latin American Currencies)

Currency	Governing Law of Issue							Total
	Canada	United Kingdom	Germany	Japan	The Netherlands	Norway	United States	
ARS		14						14
BRL	225	5,587	77	56		4	430	6,379
CLP		153					515	668
COP		9					1,075	1,084
MXN		337			37		181	555
PEN		72					5	77
UYU							1,275	1,275
Total	225	6,172	77	56	37	4	3,481	10,052

Source: Author.

ARS = Argentine peso, BRL = Brazilian real, CLP = Chilean peso, COP = Colombian peso, MXN = Mexican peso,
PEN = Peruvian nuevo sol, UYU = Uruguayan peso.

favour these international currencies rather than local currencies when issuing abroad. Therefore, there appears to be ample room to increase the use of Latin American currencies internationally.

ON THE VALUE OF BEING ABLE TO ISSUE INTERNATIONALLY IN LOCAL CURRENCY

As stated in the introduction, the literature on “original sin” has identified several advantages of issuing in one’s own currency abroad rather than in one of the few highly traded international currencies on global markets, or, in particular, the US dollar. The main benefit, as detailed below, may be risk sharing.

A country that issues internationally in US dollars runs the risk that US dollars will move in a fashion uncorrelated with movements in domestic prices. Perhaps the most notable example of this was the tremendous appreciation of the US dollar, in part fuelled by the higher US interest rates that preceded the Latin American debt crisis in the 1980s, and that have been heralded as one of the causes of that crisis. Coupled with a collapse in commodity prices, the principal exports of many LAC countries, the debt crisis then plummeted the region into recession and the so-called “lost decade.”

As noted by Hausmann and Rigobon (2003), it is interesting to note that countries’ real GDP (i.e., nominal GDP in local currency deflated by a domestic price index — the GDP deflator) is considerably more stable than countries’ GDP as measured in US dollars. This comparison is one way to see the potential problem of issuing debt in US dollars rather than in a domestic price index. Table 3 reproduces this comparison for a number of countries in LAC and the other BRICs.

Table 3: Volatility of US dollar GDP versus Real GDP

	US dollar GDP Growth (%)	Real Growth (%)
LAC		
Bolivia	7.4	1.4
Brazil	17.6	2.2
Chile	11.8	2.4
Colombia	11.8	1.8
Costa Rica	11.8	1.8
Dominican Republic	6.5	2.8
Guatemala	6.2	1.1
Guyana	8.1	3.3
Haiti	16.0	4.8
Honduras	4.5	2.6
Jamaica	6.2	1.8
Mexico	15.3	3.5
Nicaragua	4.2	2.3
Paraguay	14.3	4.4
Peru	9.5	3.6
Suriname	18.3	3.3
Trinidad and Tobago	18.3	3.3
Uruguay	18.9	4.9
Venezuela	17.6	6.5
BRICs		
Russian Federation	22.9	5.3
India	8.7	1.9
PRC	8.4	1.9
Brazil	17.6	2.2
Average LAC	11.8	3.0
Average BRIC	14.4	2.8

Source: Author’s calculations.

On the basis of this type of analysis and other statistics, Hausmann and Rigobon (2003) argue that the International Development Association should lend using a consumer price index (CPI) loan contract and Eichengreen and Hausmann (2000) argue that the International Bank for Reconstruction and Development should kick-start a market in CPI indexed debt for emerging economies more

generally.⁹ However, as discussed earlier, some LAC countries are actually issuing in international markets in nominal currency units (not inflation indexed), which may be even more valuable, as the ability to pay is really associated with nominal local currency values.¹⁰

In order to investigate the value of issuing in nominal currency units rather than US dollars, a historical simulation exercise was performed. This involved building up a particular debt structure and assuming a particular amortization schedule and rollover strategy. It is assumed that debt has, on average, a maturity of five years and amortizes over the life of the bond with equal annual capital payments, and that new debt is issued rolling over all debt that comes due at its nominal amounts. The simulations are calibrated to the average debt levels of each country.¹¹ The results are illustrated in Table 4.

In summary, it was found that if external debt had been issued all in local currency rather than in US dollars, the volatility of the debt to GDP ratio would have been reduced to less than half for LAC countries and for the BRIC countries. This represents a very substantial reduction in volatility as well as risk.

Table 4: Simulated Benefits of Local Currency Debt

	Local Currency (%)	US Dollars (%)	Volatility Local Currency/ US Dollars (%)
LAC			
Bolivia	2.3	8.1	28.6
Brazil	3.2	7.1	45.6
Chile	0.1	0.4	34.6
Colombia	1.3	5.3	25.1
Costa Rica	0.9	3.1	27.5
Dominican Republic	1.3	4.2	29.8
Guatemala	0.6	1.4	45.1
Guyana	14.7	17.9	81.8
Haiti	1.8	6.7	26.6
Honduras	2.7	4.6	58.4
Jamaica	6.1	11.7	51.9
Mexico	0.6	1.4	43.4
Nicaragua	4.4	5.0	87.8
Paraguay	1.3	9.5	13.4
Peru	3.3	3.9	84.9
Suriname	1.6	2.8	57.3
Trinidad and Tobago	1.1	1.2	90.4
Uruguay	9.0	41.2	21.9
Venezuela	1.7	6.6	25.3
BRICs			
Russian Federation	4.0	17.7	22.6
India	0.6	1.8	35.8
PRC	0.5	0.7	75.1
Brazil	3.2	7.1	45.6
Average LAC	3.0	7.5	46.3
Average BRIC	2.1	6.8	44.8

Source: Author's calculations.

9 While the argument is to create CPI indexed debt, strictly speaking, the comparison in Table 3 would motivate the use of GDP deflator indexed debt. Still, it is likely the CPI and the GDP deflator are correlated, although normally the CPI is considered to be weighted more towards non-tradeables.

10 One argument, for example, is that most taxes are levied on a tax base in nominal currency units.

11 There are plans to carry out some robustness tests to check if the results are invariant to the debt structure adopted.

Considering the actual time paths of the simulated debt to GDP ratios, for the case of debt being in US dollars, then for several Latin American countries there is a sharp increase in debt in the early years of the twenty-first century, 2001–2002. The strong dollar at that time coincided with poor economic results in the region. Countries in the region had low growth — and several were in recession — when the dollar appreciated relative to Latin American countries. Hence, it is not only that having debt in

dollars is risky, in the sense of a more volatile debt to GDP ratio, but also that risk is poorly correlated with growth.

Several important caveats are in order regarding this analysis. Debt management has become much more sophisticated of late in emerging economies and LAC is no exception to this trend. As illustrated above, debt managers issue in several major currencies and not just in dollars, seeking out the best opportunities and, given low world interest rates, debt maturities have also increased. One caveat, then, is that the simulations above are somewhat stark in comparing only all local currency versus all US dollar external debt and with a fixed debt structure that is invariant to developments in global currencies and interest rates.

Surveying the global economic situation today, there are somewhat similar international circumstances to those in the 1970s. The dollar is rather weak, US interest rates are low and commodity prices are relatively high. While LAC countries have much-improved fundamentals, including notably higher reserves backing larger financial systems, high capital inflows and large quantities of debt in US dollars may again be a point of vulnerability. As the PRC slows and rebalances its economy away from investment, commodity prices and, in particular, metals' prices, are likely to fall.¹² As the United States recovers, at some point US interest rates will rise. The dollar will likely appreciate substantially, in particular if the Federal Reserve attempts to reduce its close to US\$4 trillion balance sheet, and LAC and other parts of the world will again face significant balance sheet effects, given that the majority of external debt has been issued in dollars.

¹² See Powell (2012) for analysis and discussion of the effect of the PRC's slowdown and rebalancing on commodity prices.

ROLE OF MULTILATERALS: PROMOTING LENDING IN LOCAL CURRENCY

It has been argued earlier that the IMS remains heavily focussed on the use of the US dollar and a select few other international currencies. These currencies dominate spot trading, derivative trading and bond issuance, as well as trade invoicing and reserve assets. It is likely that these roles mutually reinforce each other, in particular through the benefits of liquidity and information. Since the dollar is so widely used, it can be traded in large quantities at low bid-ask spreads, and this adds to its value and, hence, to its continued use; spot markets in that currency will reflect a great deal of information and derivative markets will reveal fair estimates of future valuations and risk. As there is such a tremendous amount of information available, little time or effort has to be spent by any individual actor to investigate the US dollar's prospects and potential risks; therefore, it is used more, generating yet more interest and information.

These liquidity and information externalities imply that the focus on one or a select few currencies is likely to be economically efficient for the world as a whole. That does not mean, however, that it is necessarily efficient for each individual actor or country, relative to, for example, a world where the currencies of many countries are used. The dollar standard may, under some circumstances, imply a net benefit for the world, but this may represent a net cost for some individuals or countries.

This paper has focussed on how the ability of a country to issue debt in international markets in its own currency may be extremely valuable for that particular country. Currently, only a small number of LAC countries issue in their own currencies in international markets. In these cases, the

additional benefits of issuing in local currencies was, presumably, considered to outweigh the costs.

As a recent example, in September 2011, Chile reopened a global 2020 issue in pesos and issued in New York some US\$349 million worth of peso bonds at a yield of 4.4 percent. About one year later, Chile issued US\$750 million in 2022 US dollar bonds in New York at a 2.4 percent yield and a 2032 maturity for a yield of 3.7 percent.¹³ Abstracting from the different issue dates, this gives a recent pricing point for Chile, suggesting a premium of around two percent for issuing in pesos rather than in US dollars. This premium may reflect different components: that the dollar is expected to appreciate against the peso, risk and liquidity.

The Chilean peso market is, however, considerably more liquid than several other currencies of the region. For countries with less liquid currency markets, given the dominance of the US dollar, the interest rate premium to issue in local currency rather than in US dollars will be much larger. Those countries, therefore, will tend to issue in US dollars in external markets rather than in their own currencies. As reviewed earlier, this choice may lead to poor risk sharing.

Multilateral development banks tend to be US dollar-based institutions, with their accounts reported in that currency. This suggests that contracts written in other currencies imply a currency risk that needs to be managed. For example, the standard loan contract of the IDB, the single largest lender to LAC, is a Libor-based floating rate contract in US dollars. In recent years, the IDB has introduced much more

flexible arrangements, allowing countries to borrow in any currency or index when there is a swap or other means available for the IDB to hedge the currency risk this implies to the IDB balance sheet.¹⁴ But this indicates that the ability of the IDB and other multilaterals to lend in local currency is dependent on the same liquidity parameters that may determine if the country finds it economically beneficial to issue in local currency or not.

There is something of a Catch-22 here. Multilaterals are able to lend in local currencies to those emerging economies that already have some degree of liquidity in their local currency markets, such that the multilateral can issue in that same currency or purchase a currency swap to hedge the risk out of that currency and into US dollars. The IDB, for example, is able to offer loans to Brazil in real or to Mexico in pesos, as these currency markets are reasonably well developed, but as we have seen, Brazil and Mexico can already issue in local currency. In their local markets, these sovereigns are considered Triple A credits and so given current policies, while a multilateral may be a lower risk Triple A, the difference is marginal and so the gain in yield borrowing from a multilateral versus issuing in local currency is minimal. However, for those sovereigns that do not have liquid local currency markets, a multilateral development bank finds it difficult to lend in local currency, as it may not be able to issue in that currency or find the relevant swaps to hedge — as the market is not liquid.

The IDB lends to 26 borrowing countries in LAC. If lending was in local currency to these borrowers, there would be substantial diversification benefits. To see this, consider an equally weighted portfolio of currencies to LAC countries. The Brazilian real

13 This was 55 and 75 basis points over US Treasuries, respectively. See www.latinfinance.com/Article/3108918/Chile-Taps-Tight-Dollar-Funds.html and <http://en.mercopress.com/2012/10/26/chile-places-1.5bn-dollar-bonds-at-lowest-financing-cost-of-any-emerging-country>.

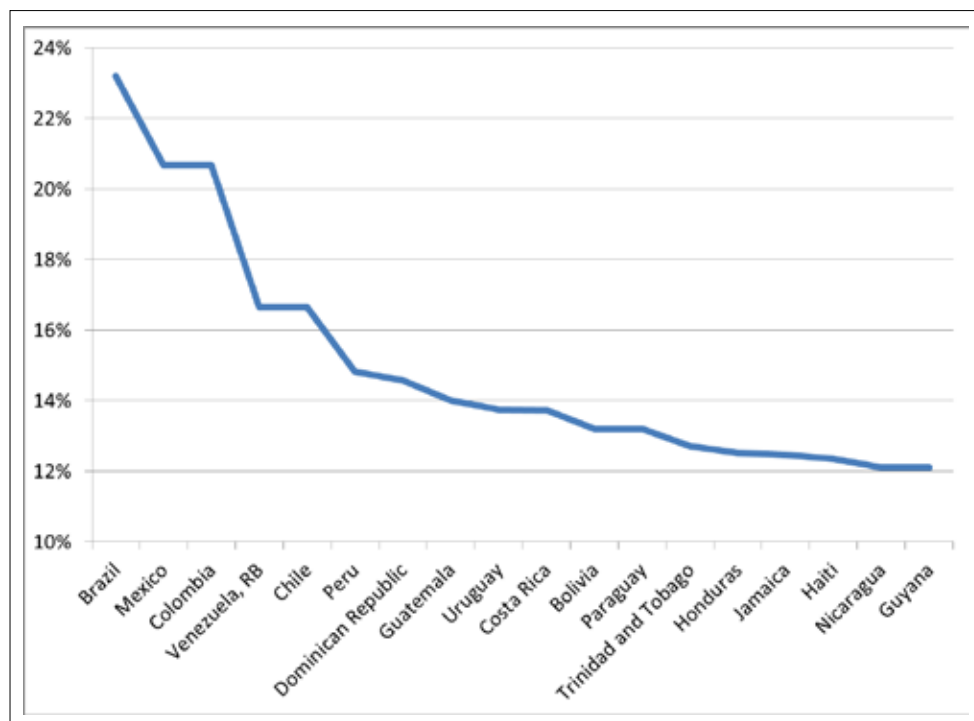
14 Any residual currency risk remaining on the balance sheet must then be deducted from capital, leading to a reduced amount of total potential lending to the region.

had an annualized standard deviation of around 23 percent over the sample analyzed, but if that portfolio had been in real and Mexican pesos, the standard deviation would have fallen to 21 percent. With just five countries, this would have fallen to around 17 percent. These diversification benefits are illustrated in Figure 5.

It is interesting to consider whether LAC currencies might be complemented by other emerging country currencies in such a portfolio. In Figure 6, the larger LAC currencies are combined with those of the BRICs to consider the value of adding further currencies to

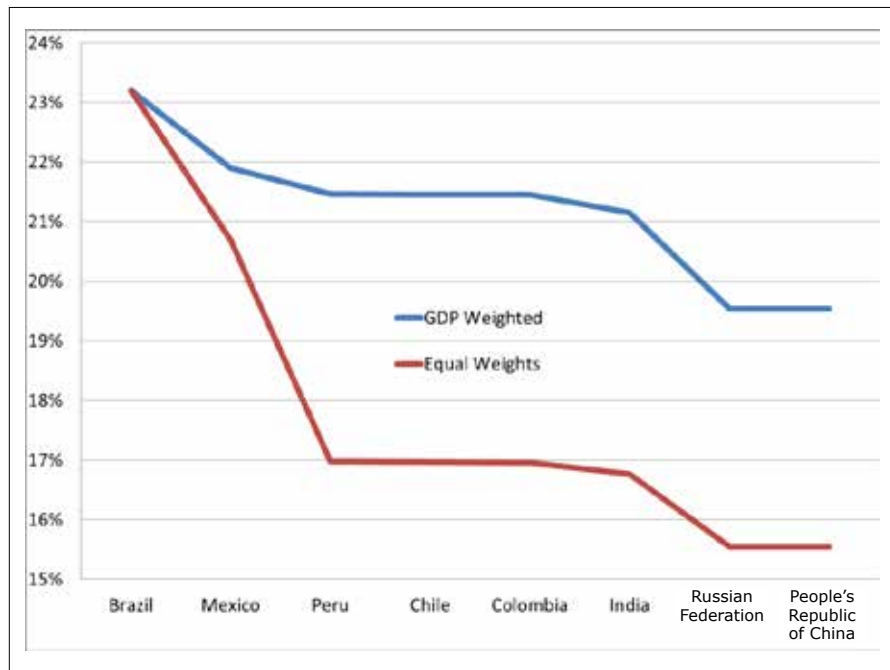
the portfolio. For an equally weighted portfolio over the period of analysis, there are some, albeit rather small, gains to the global approach. However, it is perhaps unrealistic to consider an equally weighted portfolio (or restrictive in the sense that this would surely limit lending to the larger economies). If one considered a GDP weighted portfolio, then the benefits of diversification across LAC are smaller (as, given its size, Brazil dominates) and the benefits of introducing other BRICs are, consequently, greater. This suggests cooperation across multilaterals might be valuable to diversify currency risks.

Figure 5: Volatility of Latin American Currency Portfolios



Source: Author's calculations.

Figure 6: Diversification Benefits Currency Portfolios of Major LAC Economies and BRICs



Source: Author's calculations.

Cooperation of this sort has already taken place, with the creation of an entity known as The Currency Exchange Fund (TCX), following an initiative of the Dutch aid agency.¹⁵ TCX is a fund that is set up with its own capital and whose objective is precisely attempting to solve the Catch-22 referred to above. The idea is that the IDB or other multilaterals might continue to lend in US dollars, but the borrower may then apply to TCX for a currency swap. TCX accepts the currency risk onto its books (it tends not to hedge), but benefits from the type of diversification risk illustrated above, as it conducts these types of operations across the globe. However, compared to the large sovereign lending operations, TCX remains relatively small. It focusses on those currencies where multilaterals would find it hard to hedge currency risk anyway, but even so, its size makes it appropriate

for relatively small private sector operations and not for general sovereign lending.

Still, the TCX example illustrates one way forward to exploit global risk sharing and diversification benefits. A second way forward may be through the use of guarantees. As the capacity to pay debt is related to nominal GDP, debt in nominal local currency units is most correlated with the ability to pay; this is simply another way of stating that debt in local currency implies a less volatile debt to GDP ratio. In turn, this implies that a guarantee on such a contract will operate more on the willingness of the borrower to pay than the ability to pay. Given their preferred creditor status, multilaterals have a comparative advantage in guaranteeing willingness-to-pay risks, rather than ability-to-pay-type risks,

¹⁵ See www.tcxfund.com for further information on TCX. See IDB (2007) for further information and details of IDB support to TCX.

which are best diversified through market means.¹⁶ A more efficient use of multilateral development bank capital may be to guarantee contracts that share risks, including local currency instruments, rather than lending in dollars. With judicious pricing, this may tip the balance of a sovereign to issue in local currency by reducing the relevant premium versus dollar issuance. However, this proposal requires addressing the currency risk that multilaterals would then need to either maintain on their books or hedge, as discussed earlier, and would also require further analysis, for example, regarding the appropriate pricing of such guarantees.

CONCLUSIONS

In this paper, it has been argued that the global currency markets remain dominated by the US dollar and a very few other global currencies. Such currencies make up the vast majority of spot trading, derivative trading and bond issuance. It is likely that the massive liquidity advantage that these currencies maintain is one driver for why emerging economies continue to find it economically efficient to issue external debt in foreign currency rather than in local currency. Emerging economies have been issuing in nominal domestic currencies in foreign jurisdictions. There was at least US\$10 billion issued in seven LAC currencies in seven non-LAC jurisdictions in 2011, but the premium that was required presumably did not justify reducing the US\$82 billion or so of LAC dollar issuance in the same year.

In other words, it appears that the premia that emerging economies must pay to issue external debt in their own currency, in the eyes of domestic policy makers, rarely warrants the benefits. As a recent

example, Chile issued recently in New York in dollars and in pesos, paying roughly a two percent premium for peso issuance (only marginally less than the actual dollar yield). While it is hard to disentangle this premium into constituent elements, a significant part is surely related to liquidity.

The benefit of domestic currency issuance for emerging economies is largely related to risk sharing. As the capacity to pay debts is related to nominal GDP, issuing in nominal local currency units ensures that debt is most closely correlated with ability to pay and debt to GDP ratios will be more stable.

Multilateral development banks tend to be US dollar-based institutions and their standard lending contracts are typically US dollar-based ones. In recent years, however, they have certainly become more flexible and most may now lend in domestic currency, but must then manage the currency risk that this implies in some fashion, either through hedging or through the use of extra capital. Ironically, multilaterals may be able to lend in local currencies only where those sovereigns can already issue in local currencies, as those are the markets where hedging may be feasible.

Some creative thinking is required in order to escape from this Catch-22. One approach is for a third entity to take on the relevant currency risk. There have already been some initiatives along these lines, and these could potentially be scaled up, to allow local currency lending in greater quantities to sovereigns. Alternatively, guarantee instruments might be developed on local currency instruments to tip the balance in favour of local currency issuance by reducing the premium to issue in local currencies versus in US dollars.

¹⁶ Ability-to-pay risks refers to the risk that a debtor's income level falls or that the amount owed rises, rather than willingness to pay risks, which refers to a decrease in the borrower's willingness to pay even if income or amounts owed remain constant.

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