The Limits to Governance: Assessing Alternative Exchange Rate Regimes for Emerging Markets, the Case of Latin America

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#### **Abstract**

The maintenance of a competitive exchange rate is important for an emerging market economy. At the same time, certain regime types have become harder to sustain under the current global economy, reflecting a move towards more market-friendly approaches. This paper critically assesses whether an alternative exchange rate regime – a Currency Transactions Tax (CTT) – can feasibly be implemented in emerging market economies, using Latin America as a test region. This paper finds that the international system creates limits on regime choices and a CTT is faced with challenges that mitigate its feasibility. This paper concludes with the notion that managed floating is a more sustainable regime given the limits to governance that the region faces but there also exists a possibility of improved policy space as trends in the global economy continue.

#### 7 Introduction

Emerging market economies face major challenges when selecting exchange rate regimes. The management of the exchange rate is considerably important; as Davidson notes, "[a] fixed, or at least very stable, exchange rate whose movements are tightly constrained is a necessary condition encouraging entrepreneurs to engage more freely in international production, investment and trading transactions" (2002, p. 177). At the same time, managing exchange rates through intermediate regimes has become more complicated under conditions of capital mobility; commitments can be subject to speculative attack as investors test the central bank's credibility in maintaining the exchange rate, creating a major run on the currency and the need to drain precious foreign exchange reserves or hike interest rates, the latter of which can spark a recession. The maintenance of an exchange rate is all the more complicated the smaller the state is; simply put, a smaller economy is more subject to pressure from major states and powerful investors and the maintenance of an intermediate regime is therefore more complicated, if not impossible.

The usual argument is for a state to liberalize the capital account and adopting a floating regime with inflation-targeting; this would allow capital to go to its most efficient use and the inflation-targeting provides stable expectations on prices. However, the Latin American experience shows that, while the past use of intermediate regimes such as crawling pegs has a mixed economic record, floating regimes are not completely adhered to either. But considering the issues associated with previously-tested regimes, one needs to consider whether a new regime is capable of providing both the management of a stable, competitive exchange rate as well as practicability in the global economy. The idea of a two-tiered Currency Transactions Tax (CTT) needs to be considered as a potential regime since it has been proposed as a means to reduce exchange rate volatility, especially for developing countries (Spahn 2002).

This article will critically assess whether a two-tiered CTT makes sense for an emerging market economy; larger, developed states have not given much thought to a CTT so this paper will assess whether it is a viable regime for Latin American states. The assessment of a CTT is relevant because it tries to provide many of the positives of intermediate regimes while minimizing the negatives. Its usefulness will be based on its ability to stabilize an exchange rate, its capability of being enforced, and its capability of existing in an international environment that favours other types of managed regimes. Section one will demonstrate the move towards either hard fixes or towards managed floating regimes. Section two will outline the challenges an emerging market economy faces in trying to select a regime given pressures from the international system. Section three will analyze the sensibility of using a CTT as a new intermediate exchange rate regime.

This paper will argue that, while a CTT regime could work to stabilize an exchange rate, it would be incredibly challenging for an emerging market economy to institute a CTT.

# 7.1 The Great Policy Convergence? The Dilemma of Emerging Market Economies

The days of intermediate regimes are over for most countries; these are differentiated since they are neither completely fixed nor floating regimes. The maintenance of such regimes has receded and states have moved to more mainstream and internationally 'acceptable' regimes. Maintaining intermediate regimes under capital mobility inherently has major costs; one is reminded of the policy trilemma of open economies. Fischer (2001) notes that intermediate regimes, such as crawling bands, crawling pegs, etc, have been phased out in favour of either of two poles: hard fixes/pegs or floating, thereby creating a 'bi-polar' view of regimes (these will hereby be referred to as 'traditional' regimes).

For hard fixes, we can see this in the cases of countries joining the Eurozone or the adoption of the dollar in several Latin American states. For floating, most of the developed world has moved towards this style of regime since it allows for the adapting of the exchange rate to new information that is quickly translated into price changes. Edwards (2011) finds that countries with more flexible exchange rates have been able to grow better in the long run than countries with more rigid or fixed regimes and they are better able to respond to external shocks, although misalignments are still not eliminated under flexible rates.

The realities of the post-Bretton Woods global financial system provide incredible challenges to the maintenance of fixed exchange rates. Investors will try and challenge a state's capability to maintain its target exchange rate, it's so-called 'credibility' in maintaining the regime, and will do so by speculative pressure. Between January 1960 and April 1999, 308 speculative attacks occurred in 75 countries; 105 succeeded, resulting in a depreciation of the exchange rate of more than ten percent in a month, and 203 failed (Jetin 2003). A survey of these speculative attacks (Kraay 2003) shows that several Latin American countries have been subject to attack, both successful and failed. Regardless if whether the attack was successful, the country in question must increase interest rates or drain reserves to stop the depreciation, causing a recession, and these responses are not always successful at stopping capital flight (Jetin 2003). The usually-prescripted policy responses of higher interest rates and tighter monetary conditions did little to prevent capital flight and depreciations (Kraay 2003). Therefore, the maintenance of traditional intermediate regimes comes with incredible potential social and economic costs if a state is unable to maintain the regime, but those costs are apparent even if the central bank responds. The costliness of managing the exchange rate is the use of precious FOREX reserves.

While states have nominally moved to either of the two poles, their actual practice differs. Reinhart and Rogoff (2004) reconsider the actual practice of exchange rate regimes and classify many of them as being intermediate in practice according to their 'natural' classification, rather than 'official' classifications such as those defined by the IMF. While commitment to floating with inflation-targeting is explicitly made, many countries have demonstrated what Calvo and Reinhart (2002) call a 'fear of floating,' whereby states are unwilling to accept the fluctuations inherent with pure floating regimes and will intervene as they need to. In Colombia, the Banco de la Republica stated that floating rates were to be instituted to encourage dis-inflation, but authorities also noted they reserved the right to intervene in order to prevent unwanted volatility and to help build reserves (Chang 2008) and Chile's post-crawling band regime echoes similar arguments (De Gregorio et al. 2005).

The overall picture in Latin America shows that in spite of real and financial shocks, central banks use flexibility sparingly and while interest rates have been used aggressively, flexibility has gone with higher instability in interest rates rather than lower (Hausmann et al. 1999). This implies that flexibility comes with its own problems.

Even major currencies with ample liquidity are not completely stable; Bartolini and Giorgianni (2001) note that traditional models of rational expectations have been hard to fit to recent periods of volatility. Frenkel and Rapetti (2012) measure the volatility of Latin American currencies and find that the volatility of exchange rates has actually increased under floating regimes; the switch to floating from crawling bands in Chile has resulted in a 65% increase in volatility for the peso. This is affirmed by Hira and Gaillard (2011), who found that as an economy is more open to trade, the exchange rate is heavily depreciated and more volatile.

Finally, floating regimes and capital mobility require the existence of developed financial systems. Hira and Gaillard (2011) show that Latin American financial systems lack certain structural necessities, such as local currency bonds. This shows that efficient financial sectors do not necessarily come with liberalization; the latter's effectiveness is *dependent* on the former. The effectiveness of monetary policy would be tied to the development of local bond markets since "central banks will lower interest rates to avoid a recession without fearing the weakening of the exchange rate, capital flight and increase in spreads" (Hira and Gaillard p. 171).

While speculative attacks occur under fixed regimes, increased volatility is present under floating. On the one hand, flexible exchange rates are able to respond quickly to new information and adjust accordingly, but on the other, information and its interpretation may not always be accurate and the exchange rate will not always be stable. While it is assumed that exchange rates are stabilized under speculation, realities such as herd behavior can be a credible challenge to this (Palley 2003). The fundamentals of an exchange rate, such as a nation's resource endowment and prospects for growth, are relatively stable and so exchange rates should be stable, yet floating regimes have been more volatile than warranted by fundamentals (Palley 2003). The overall challenges an emerging market faces when managing the exchange rate can be summarized as such in Table 1.

**Table 7.1** Emerging Market Challenges to Regime Choice

Component	Pro	Con
Stable Exchange Rate	Certainty in trade	Must be maintained through reserves
Open Capital Flows	Access to capital markets	Reduced policy autonomy for traditional intermediate regimes
Independent Monetary Policy/Floating Exchange Rate	Inflation reduction, respond to shocks	Volatility, requires developed financial system
Fixed Peg (Dollarization)	Inflation reduction, stability	Loss of monetary sovereignty, importing of economic conditions

We can expect that Latin American states will continue to practice a fear of floating and intervene as they see fit. Talk of the bi-polar view of regimes does not make sense when the reality is that states manage their exchange rates. While by definition, Latin Americans states are managing their exchange rates through reserve changes, they are doing so under floating regimes and are not instituting traditional intermediate or more radical ones such as a CTT.

Smaller states, such as Ecuador, El Salvador, and Guatemala have adopted the dollar, representing a move to one pole, while larger ones such as Brazil and Colombia, have instituted managed floating, representing a move to the other pole while acting in-between. But macroeconomic considerations are not the only factors considered; the international system plays a role in constraining a state's choice.

## 7.2 You Lack Discipline! The International Challenges to Regime Choice

The degree of openness to international capital flows has drastically changed over the past decades and exchange rate regimes have gone hand-in-hand with this. One is reminded of the days of 'financial repression' in the Bretton Woods era and the maintenance of fixed-but-adjustable pegs. The collapse of the Bretton Woods system in the late 1960s and early 1970s, the repeated crises of the European Monetary System in the 1980s, and the crises of emerging markets between 1994-2000 all show the lesson that maintaining fixed exchange rates is especially problematic for states that are more open to international capital flows (Fischer 2001). Indeed, it was the Nixon administration's ending of the dollar peg to gold that was the beheading of Bretton Woods. The volatility present after the move to floating regimes prompted moves to go back to more fixed arrangements, such as the then-European Monetary System, although its effectiveness was greatly reduced because of mobile capital (Aldcroft and Oliver 1998).

The Bretton Woods arrangement that permitted financial repression and the maintenance of fixed-but-adjustable pegs was created and maintained by the Anglo-American bloc in the postwar order. As such, the leadership and credibility of the system relied on the continued commitment of these states in maintaining it. As these states came out in the postwar world as the most powerful, they were able to dictate the agenda of what the financial architecture was composed of and what was permitted. Intermediate regimes were permitted so long as these states maintained to the system.

But even in today's more open world, the influence of Northern states persists. The global economy is reliant on the more powerful states to regulate the system and the preferences of the most powerful influence the agenda during both stable and crisis periods (Held and McGrew 2003). More powerful governments retain considerable bargaining power with corporations because they control access to vital economic resources (Held and McGrew 2003). Major states therefore shape the system and influence the environment in which the hounds of finance work; in the post-Bretton Woods environment, the Nixon administration had to convince American banks to go forth and participate in the new dollar-centric system (Gowan 1999). The acceptance of capital mobility and a freer international financial system, alongside major moves to liberalize the FOREX market, was largely dependent on the actions of major states, thereby shaping the greater international environment for those with relatively less power. States are therefore both the enablers and the benefactors/losers in globalization; the global financial economy would not have been possible had it not been for states encouraging the increase of financialization (Patomäki 2000).

Today's international environment is largely a reflection of Americanization. The weakened position of states in the South strengthens the bargaining power of Wall Street firms in decisions regarding future financing, and these decisions result in short-term loans rather than long-term (Gowan 1999).

Short-term financing has a negative effect on planning for borrowers since the need to finance long(er)-term projects relies on the accumulation of more short-term financing.

Southern states therefore faced a precarious choice: they could either borrow abroad under the American monetary regime or they could enact domestic macroeconomic adjustments, tightening fiscal policies and devaluing their currencies; borrowing was considered the easier option since the Anglo-American banks were eager to lend and borrowing allowed Southern states to avoid the domestic social conflicts arising from adjustments (Gowan 1999).

This does not mean that Northern states are not subject to similar disciplinary forces; one is reminded of Black Wednesday and the attack on the United Kingdom's commitment to the European Monetary System, or the attack on the franc for the Mitterand government in France. While these states have been subject to disciplinary action, it must be remembered that the financial architecture is still maintained by Northern, mostly American, financial norms and institutions. Again, both cases were under conditions of capital mobility while each state was committed to fixed regimes.

From a macroeconomic standpoint, international forces have had a profound effect on Latin American countries. Conditions in the North, such as lowered interest rates, private savings, and capital flows eager to seek out returns, have had effects on Latin American exchange rates (Calvo et al. 1993). It wasn't until the 1980s, when world interest rates increased, did capital flows to Latin American decrease (Frenkel and Rapetti 2012). The choice of exchange rate regime was therefore influenced by both changes in the international financial system and domestic macroeconomic agendas (Frenkel and Rapetti 2012), the latter of which will be dealt with in the next section. The debt crisis in Latin America, according to James (1996, p. 347, as quoted in Aldercroft and Oliver, p. 134):

Brought home the consequences of the internationalisation of finance; the vulnerability of producers in Latin America (and elsewhere) to interest rate changes decided by the Federal Reserve System in Washington and to alterations in sentiment in the banking community.

We can therefore see that international pressures can shape the choice of exchange rate regime for states, especially for emerging market economies. The move away from capital controls and towards openness can explain the policy movements away from traditional intermediate regimes and the move to nominal fixed or floating. Simply put, the smaller an emerging market is, the harder it is to manage its exchange rate under alternative regimes. Dollarization presents another challenge: while the adoption of the dollar would import American inflationary conditions into the adoptee country – and inflation in the United States is almost always lower than that found in developing countries – the domestic economic conditions would be subject to the movements of the dollar and the conditions of the American economy; adopting country needs may differ.

Even supposedly counter-hegemonic approaches to exchange rate regimes do not deviate from the international environment. Leiva (2008) notes that neostructuralism, a new development paradigm in Latin America, is the first coherent challenge to neoliberal ideas, although it advocates modernization through international integration. This challenge to neoliberalism is in reality having the state as a supply-side intervener promoting public employment and exports while retaining commitments to open capital accounts (Kurtz and Brooks 2008).

These neostructuralists agree with the neoliberal critiques of the inefficiencies of importsubstitution industrialization (Hira and Gaillard 2011); the ISI phase saw the widespread use of intermediate regimes. Simply put, even 'moderate' policy approaches made at the domestic level seek to normalize financial architectures with that of the international system.

Taking everything into account, we can therefore outlay the exchange rate regime challenges for emerging market economies as such:

- States desire a stable exchange rate for competitiveness
- States desire capital mobility in order to receive funds for development and participate in international trade
- Traditional intermediate regimes are harder to maintain under conditions of capital mobility; they are subject to speculative attack and carry social and economic costs
- Floating regimes are acceptable in practice yet come with their own problems of volatility
- The international system imposes restrictions on the ability of smaller states to adopt regimes that deviate from the norm

From this, we can see why states are moving away from traditional intermediate regimes and towards nominal bi-polar ones that are intermediate in practice; the managed floating regimes provide the ability for states to intervene as they must and are maintainable under the current financial architecture. It is hard for smaller states to manage their exchange rates through traditional intermediate regimes and therefore they move towards 'acceptable' floating regimes. However, it must be asked whether a different intermediate regime is capable of being implemented under the current system. As Ffrench-Davis (2005) notes,

[T]he ability of a flexible exchange-rate regime to contribute to efficiently smoothing-out the effects of externally-induced boom-bust cycles, depends on the capacity to effectively manage a counter-cyclical monetary policy, without enhancing pro-cyclical exchange rate patterns. This is only possible under intermediate exchange rate regimes-cum-capital account regulations...These intermediate regimes, of managed flexibility, thus provide the best opportunity to respond to the dual demand on exchange-rate policy (p. 202).

Since states are fearful of floating, and floating comes with its own problems, can a new regime that enables exchange rate stability and be acceptable in the international system be implemented? Will it be effective? The next section will analyze this.

#### 7.3 The Currency Transactions Tax: The Way Ahead?

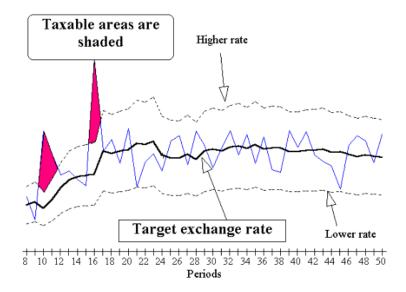
We can classify a Currency Transactions Tax (CTT) as an intermediate regime since it does not rely on either a hard fix or complete float. It is a regime that takes advantage of several different properties from different regime types and builds a composite that attempts to stabilize an exchange rate while still allowing for a degree of capital mobility; in fact, in order to institute a CTT, capital convertibility is a necessary condition. First, we must describe what a CTT is.

Originally, the idea was proposed by James Tobin – and thereby named the Tobin Tax – the logic of which was to reduce the excessive movements of short-term private capital flows while leaving the longer flows relatively untouched, although by definition all transactions would need to be taxed (Tobin 1978). As states need to compete for international capital, monetary policy has become exchange rate policy as it has become harder for states to stimulate their economies via interest rate changes for fear of capital flight (Tobin 1978). Implicit in this argument is the notion that policy autonomy would be increased by taking away the 'disciplinary' power of mobile capital.

Recent developments have shown that the original Tobin Tax would be problematic; either the tax would be set too high and damage a highly sophisticated network of hedging and liquidity trading and increase volatility, or it would be set too low and have no effect on curbing speculation (Spahn 2002).

Recent simulation results show this ambiguity further (Aliber et al. 2003, Ehrenstein et al. 2005, Westerhoff 2003, Westerhoff and Dieci 2006, Mananro et al. 2008, Hanke et al. 2010); in short, the Tobin Tax would be reliant on too many conditions in order for it to confidently work. Because of this, a modification is needed.

German economist Paul Bernd Spahn has proposed a two-tiered CTT – and hereby simply referred to as a CTT – in order to make up for the shortcomings of the Tobin Tax. The tax has two primary components: a constant tax, the equivalent of a single-tier Tobin Tax, of between 0.5 and 1 basis points would be applied to all transactions, the primary function of which is to raise revenue although it could also crowd out destabilizing noise trading (Spahn 2002). A second-tier tax – the so-called Exchange Rate Normalization Duty (ERND) – would be applied to the portion of a transaction that lies outside of the tolerable bands and would be up to 100 percent; its function would be to prevent excessive fluctuations rather than raise revenue since it would not raise revenue if successful in curbing speculation (Spahn 2002). This option is attractive since it necessarily imposes a tax on speculative flows and heavily taxes transactions when the exchange rate moves outside of the tolerable bands. Since it would necessarily be a tax on capital inflows due to the need to change currencies, the CTT can be expected to mitigate capital-induced fluctuations, giving policymakers some room for pursuing domestic economic agendas. Figure 1 shows the operations of the tax.



**Figure 7.1** Workings of the Two-Tiered CTT

Source: Spahn (2000)

As Figure 1 shows, the exchange rate is allowed to fluctuate on a day-to-day basis within the tolerable bands, but once the nominal exchange rate moves out of the band, a tax is applied to keep it within. The target rate and the bands would be announced on a daily basis (Spahn 2002) and because it is based on a fiscal instrument, it somewhat relieves monetary policy of short-term interventions and constitutes a gain in revenues rather than a loss of reserves (Spahn 2000). Since the target exchange rate would be measured as a parity rate against a foreign currency (Spahn 2002), the move towards the upper band would imply depreciation of the home currency as it takes more of it to buy a single unit of the foreign, so the ERND's function would be to prevent major depreciations.

While its functionality means the CTT would be able to prevent excessive fluctuations, several challenges are present in its applicability for emerging markets. It provides an emerging market with exchange rate stability via taxation and does not require the massive change of reserves in order to defend the exchange rate, yet it maintains a heavy logistical footprint that relies on already-developed institutions and infrastructure. The next section will detail the challenges for CTT implementation.

## 7.4 Practical Analysis for CTT Implementation

There are several pros and cons to the overall workings of the CTT. These issues can be found across three major components: the parallels with crawling bands and capital controls, and the use of taxation as a stabilizer. Overall, while a CTT has some practical feasibility, the logistical strain and enforceability would be problems for emerging market economies and would constitute a rich country's policy option rather than an emerging one's. This section will conclude with a comparison of the CTT with a managed float regime since the CTT's desirability is dependent on whether it can make up for issues arising from a managed float.

# 7.5 Crawling Bands

As Figure 1 showed, the CTT uses crawling bands to establish a tolerable range in which the exchange rate is allowed to fluctuate. The primary objective of crawling bands is to forestall or limit misalignments; this is achieved because authorities are under no obligation to defend a single rate when changing circumstances mean the rate needs to change but they are also not complacent when a floating rate is detached from fundamentals (Williamson 2001). Central banks can then take action to limit misalignments and so the bands would do better than either extremes of hard pegs or pure floating in avoiding misalignments; they solidify market expectations of what range the equilibrium rate lies in (Williamson 2001). Bands are viewed as introducing enough flexibility for the nominal exchange rate to respond to internal and external shocks while still being able to commit to long and medium-term policies of maintaining the central parity (Helpman et al. 1994). Perhaps states get to have their exchange rate cake and eat it too. Chile's use of crawling bands provides an example on the workability of the regime. On a bright note, the performance of Chile's economy was impressive, with the crawling bands coinciding with Chile's strongest and most sustained growth period (Frenkel and Rapetti 2012) which included drops in the unemployment rate, growth in GDP, an average inflation rate of 16%, and near fiscal discipline, with a budget deficit only being ~1% of GDP between 1985 and 1992 (Helpman et al. 1994). But numerous changes to Chile's bands had to occur and the changes did not fully stop downward trends; between 1990 and 1997, the peso saw a cumulative decline of 32 percent (De Gregorio et al. 2005).

Fears of inflationary pressures, more modification of the band widths, and speculative pressure started mounting against the peso after the Russian crisis and by September 1999, with world turmoil coming to a close, the crawling band regime was ended in favour of inflation-targeting (De Gregorio et al. 2005). Unless a state has the ability to compute the parity rate and the accurate tolerable rates for the bands, the excessive or insufficient range of the bands could cause the market to see the parity rate as unknown and doubt the central bank's credibility. Decisions about the appropriate midpoint of the bands are difficult and pressure may mount once the exchange rate gets close to either band; softening the commitment to protect the bands may decrease these pressures but would increase uncertainty about the central bank's actual monetary commitment (Bailliu and Murray 2002).

While this is true of standard crawling bands, the use of taxation rather than reserves to defend the exchange rate mitigates this, although the logistical problem of trying to compute the parity and bands persist. This implies that the information processing and calculation requires the systems of more developed states and as earlier noted, the development of financial systems in Latin America has been lackluster.

# 7.6 Capital Controls

Another point to consider is the CTT's parallels with the use of capital controls. Because it is a tax on transactions, it is by definition a form of control on capital flows. Furthermore, it is a tax on short-term flows that can cause destabilization. Chile's use of capital controls provides a parallel. The controls were effective in changing the composition of flows; between 1988 and 1998, short-term flows with maturity of less than one year declined steeply relative to longer-term flows (Edwards 2001). Studies by Soto (1997) and De Gregorio et al. (1998), as cited in Edwards (2001), show that a tax on capital movements discouraged short-term flows but these were offset by increases in long-term flows; aggregate capital moving into Chile was not altered.

This is precisely the logic of a CTT as Tobin earlier mentioned; the use of finance for real development is put through while speculative flows are discouraged. The main attraction of a CTT over traditional capital flows is a real cost in terms of taxation. But this does not mean flows can go unmonitored. The prevention of real exchange rate appreciation from major inflows, regardless of maturity, is needed in order for the central bank to maintain a competitive exchange rate that may need to be lower than what the market causes it to be.

Keeping this in mind, net increases in capital flows can alter the exchange rate, meaning the central bank needs to intervene based on the proximity of the nominal exchange rate to the bands. Stopping short-term flows may be able to crowd out destabilizing hot flows for a state wanting to implement a similar regime, but other adjustments need to be made in order to keep the exchange rate in line in the face of constant net flows. A CTT is not a one-policy-fixes-all solution, but it does encourage the changing of flows to promote fundamentals, implying that exchange rate appreciation can be from real economic fundamental changes rather than hot money.

#### 7.7 Taxation as a Stabilizer

There are two major ways in which a CTT can be collected. While the tax acts as a stabilizer, it must also be collectable in order for the regime to work. A tax on a market basis means it is collected on all trading within the geographical area regardless of the nationality of the trader while a nationally-administered tax is based on taxing the head office of a bank (Kenen 1996). Table 2 shows the daily FOREX turnover for major Latin American countries from 1998-2013.

Table 7.2

Daily FOREX Turnover, Major Latin American Countries, 1998-2013

				Country			
Year	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Totals
1998 \$	_ 2	5	1	-	9	-	17
1998 %	0.1	0.2	0.1	-	0.4	-	0.8
2001 \$	-	6	2	-	9	-	17
2001 %	-	0.3	0.1	-	0.5	-	0.9
2004 \$	1	4	2	1	15	-	23
2004 %	0	0.1	0.1	0	0.6	-	0.8
2007 \$	1	6	4	2	15	1	29
2007 %	0	0.1	0.1	0	0.4	0	0.6
2010 \$	2	14	6	3	17	1	43
2010%	0	0.3	0.1	0.1	0.3	0	0.8
2013 \$	1	17	3	3	32	2	58
2013 %	0	0.3	0.1	0.1	0.5	0	1.0

Source: Bank for International Settlements statistics Note: All \$ in billions of USD; all % is percentage of global turnover

As Table 2 shows, Latin America sees very little daily FOREX turnover. This means a tax in a Latin American market would generate little potential revenue. Furthermore, the costs of maintaining the incentives for traders to stay in a small(er) market may outweigh the benefits from the revenues generated (Kenen 1996). A national tax is easier to collect given that most countries have linked Real Time Gross Settlement Systems (RTGS) and FOREX trading is moving towards being settled by the Closed Link Settlement (CLS) system (Spratt 2006, Schmidt and Bhushan 2011). The effectiveness of such a tax would require that Latin American countries' banks trade on enough of a regular basis to generate revenues and the 2013 survey from Euromoney shows that American banks have the largest combined market share in the world, with Citigroup dominating the trading of emerging market currencies (Martin 2013).

It is argued that RTGS can feasibly settle all transactions for a national currency, such as the UK's CHAPS being able to settle and tax all sterling transactions (Spratt 2006), so settlement of currencies such as the real or the Chilean peso would be handled through STR (Sistema de Transferência de Reservas) or LBTR (Liquidación Bruta en Tiempo Real), respectively. Hira and Dean (2004) provide a comprehensive analysis of the effects of dollarization in Latin America and this development poses a major challenge to a CTT. Since national RTGS settle transactions denominated in a national currency, it would be complicated, if not impossible, for a state using a different country's currency to collect a CTT; dollar transactions are settled by the American Fedwire system.

This means that a market-based tax would be the most realistic option for the dollarized states, but their size as markets – the BIS statistics do not even have their market shares – means they could be subject to evasion, although Schmidt and Bhushan (2011) argue that the track record of Financial Transactions Taxes (FTTs) largely show they are hard to evade.

Furthermore, since a tax by definition may distort the market – at least in the short run – the effectiveness of the tax would be based on the liquidity of Latin American currencies if administered as a national tax; more liquid currencies would face fewer distortions and therefore less volatility, showing that currencies from larger states are more capable of sustaining the tax. The effectiveness of a CTT would be contingent upon the international environment and willingness of major states to tolerate a tax; even the EU's FTT, while slated to be implemented in 2015 and fulfilling more neoliberal goals such as balance sheet restoration for heavily indebted members (Holehouse 2014), has faced major opposition by the world's two biggest financial players, the UK and the US (Monaghan 2009, Godfrey 2012, Delamaide 2013).

# 7.8 Managed Float as a Rival

Since managed floating is one of the major regimes in Latin America, the CTT needs to be compared to it in order to understand whether it is desirable. While the extra benefits of tax revenue and a reduction of speculation can come with a CTT regime, the complications for a smaller state may prevent its adoption as previously argued. The capability of defending the exchange rate through interventions is easier today than it was under previous regimes; a managed float does not require the same amount of commitment to a single target rate that traditional intermediate regimes did nor does it produce the same macroeconomic distortions that plagued Latin America. Its operation is based on the use of FOREX reserves to mitigate excess volatility and there is ample room for intervention; Table 3 shows the foreign reserve assets of the major Latin American states for 2014.

Table 7.3

Foreign Reserves, Major Latin American Countries, Millions of USD, 2014

Country	Official Reserve Assets	Convertible Foreign Currency		
Argentina	22,007.32	21,100.09		
Brazil	363,913.70	352,882.76		
Chile	40, 969.68	39,085.89		
Colombia	43,549.15	43,549.15		
Mexico	183,004.13	171,166.93		
Peru*	66,789.00	64,102.00		

Source: IMF Statistics, Data Template on International Reserves and Foreign Currency Liquidity

\* Data from 2013

There is considerable debate on the motivations behind the accumulation of reserves, split between mercantilist and precautionary motives. Chang (2008) argues that Latin American central banks' accumulation of reserves is geared towards preserving competitiveness since it is too large to justify concerns about liquidity. Delatte and Fouquau (2012) also argue that the management of the exchange rate is the most important motivation, although precautionary motives are still influential.

Cruz and Walters (2008) argue that the stockpiling of reserves is not the optimal strategy for development purposes and that other approaches to financial stability are available. While not forwarding the mercantilist view, by advocating alternative measures to financial stability this can be seen as implicitly interpreting reserve accumulation as mercantilist. Others have argued in favour of the precautionary view. A key variable that accounts for the large hoarding of reserves by emerging markets is the degree of capital account liberalization; a more liberal regime increases the amount of reserves, constituting evidence in favour of the precautionary view (Aizenman and Lee 2007). Trade openness and exposure to financial crises can explain the accumulation of reserves and while mercantilist motives such as increased exports are statistically significant, they are not economically significant in accounting for reserve holding patterns (Aizenman and Lee 2007). The central banks of the region have argued that their interventions are to prevent misalignments and ensure sound fundamentals (Chang 2008) but it is important to keep in mind that actions are discernable from words (Frenkel and Rapetti 2012). According to Frenkel and Rapetti (2012), the real exchange rates of states such as Brazil, Chile, Colombia, and Peru do not behave as they did under regimes that explicitly targeted a competitive real exchange rate, implying that motivations have changed.

The use of a managed float does not explicitly target a single exchange rate; as such, the central bank is under no real commitment to defend a single parity rate. Rather, as previously mentioned, the logic of the system is to mitigate excessive volatility. This has commonalities with a CTT but requires the use of FOREX reserves to reduce volatility rather than taxation; this means a state needs to have enough reserves built up so that its actions can influence the exchange rate. Both regimes require open capital flows; indeed, a primary condition of a CTT is capital convertibility, but the freer flows of capital in a managed float mean a state can accumulate more reserves and therefore have more room to maneuver in a world governed by floating regimes. While a CTT can work better in principle under the right conditions, its up-front disadvantages prevent its adoption for the time being. Table 4 compares the major issues surrounding each regime.

Table 7.4

Comparison of CTT and Managed Float

Issue	CTT	Managed Float
Volatility Management	Taxation, Crawling bands	Reserve intervention
Feasibility	Low; Requires developed financial infrastructure and minimized tax evasion	Already implemented; managed floating is internationally accepted
Capital Flows	Reduced/Controlled	Open
Primary Advantage	Taxation as stabilizer (generates revenues and does not drain reserves)	Logistically simple
Primary Disadvantage	Logistically complicated (requires constant monitoring of bands and parity rates)	Major reserve changes (more frequent interventions)

Because Latin American states have accumulated such a large amount of reserves, the relative benefits of keeping with the current regime may outweigh the costs to implement a CTT-based one. One could make the argument that the institutional framework of a more liberal floating regime is needed in order to develop the institutions and grow the economy so that the foundations of a CTT regime can be sustained; the CTT relies on liberal-oriented developments such as well-developed financial systems.

Overall, the managed float is easier to implement and sustain given the international environment since it is not a major attempt at changing the discourse on regimes. The CTT is a hybrid of both (relatively) open capital flows and the greater management of exchange rates from the previous era of traditional intermediate regimes. It is both market-friendly and market-skeptic.

In the post-crisis period, the choice of an exchange rate regime was not a majorly important factor for emerging market economies for growth during the crisis period, although floating regimes fared better than pegged in the recovery period (Tsangarides 2012). The non-commitment to pure floating and the decision to absorb capital flows as reserves is what gives Latin America the room to enact counter-cyclical maneuvering; major interventions in the FOREX market may be a characteristic of strength for their economies (Ocampo 2009). In sum, the managed floating regime seems to have given Latin American countries a relatively stronger footing compared to previous regimes and may be the best option given the current environment.

#### 7.9 Conclusión

This paper has attempted to contribute to the literature on Latin American exchange rate regimes by critically assessing whether an alternative regime such as a CTT makes sense given the region's status as an emerging market. Overall, the CTT has technical feasibility under certain conditions, but these are more characteristic of more developed states. Furthermore, the international environment is not conductive to a deviation from the widely-practiced regimes despite the fact that a CTT is market-friendly in principle (Spahn 2002) and even counter-hegemonic paradigms stress internationally-oriented development.

However, this does not mean the CTT is a bad policy option; it simply means that it is possibly something to be considered at later stages; perhaps it is a rich man's policy. But current regimes do not necessarily come with disadvantages; the managed float has provided Latin American states with ample room to maneuver and manage their exchange rates, although this is dependent upon the continued accumulation of reserves. On the one hand, the international system has become a limit to governance for Latin American exchange rate regime choice while on the other the market-friendly managed float still allows for some room to maneuver to manage a less volatile exchange rate.

There are some ways in which the region can further mitigate the issue of exchange rate management. Major players such as Brazil and Chile can take the lead in promoting a more regional focus on capital flows; interregional flows would be easier to regulate for exchange rate management than intraregional, although this could spark accusations of mercantilism from other parts of the world. Brazil and Chile have taken the lead in improving governance (Hira and Gaillard 2011), which is a positive sign for prospective reforms. Major reforms need to be instituted to make financial systems more efficient and capable of sustaining modern finance.

As Hira and Dean (2004) note for the dollarized countries, dollarization can be interpreted as a substitute for enacting meaningful reforms. Skepticism will likely mount since historically, market reforms have led to corruption (Manzetti and Blake 1996). As talk of the decline of American power and the problems surrounding the Eurozone continue, there is a possibility for increased policy space for Latin America, especially if commitment to the BRICS bloc continues and they rise in influence. While the limits to governance may be apparent, they may only be temporary.

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