
Exchange Rate Unification:

The Case of Cuba from an International Perspective

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Structure of presentation

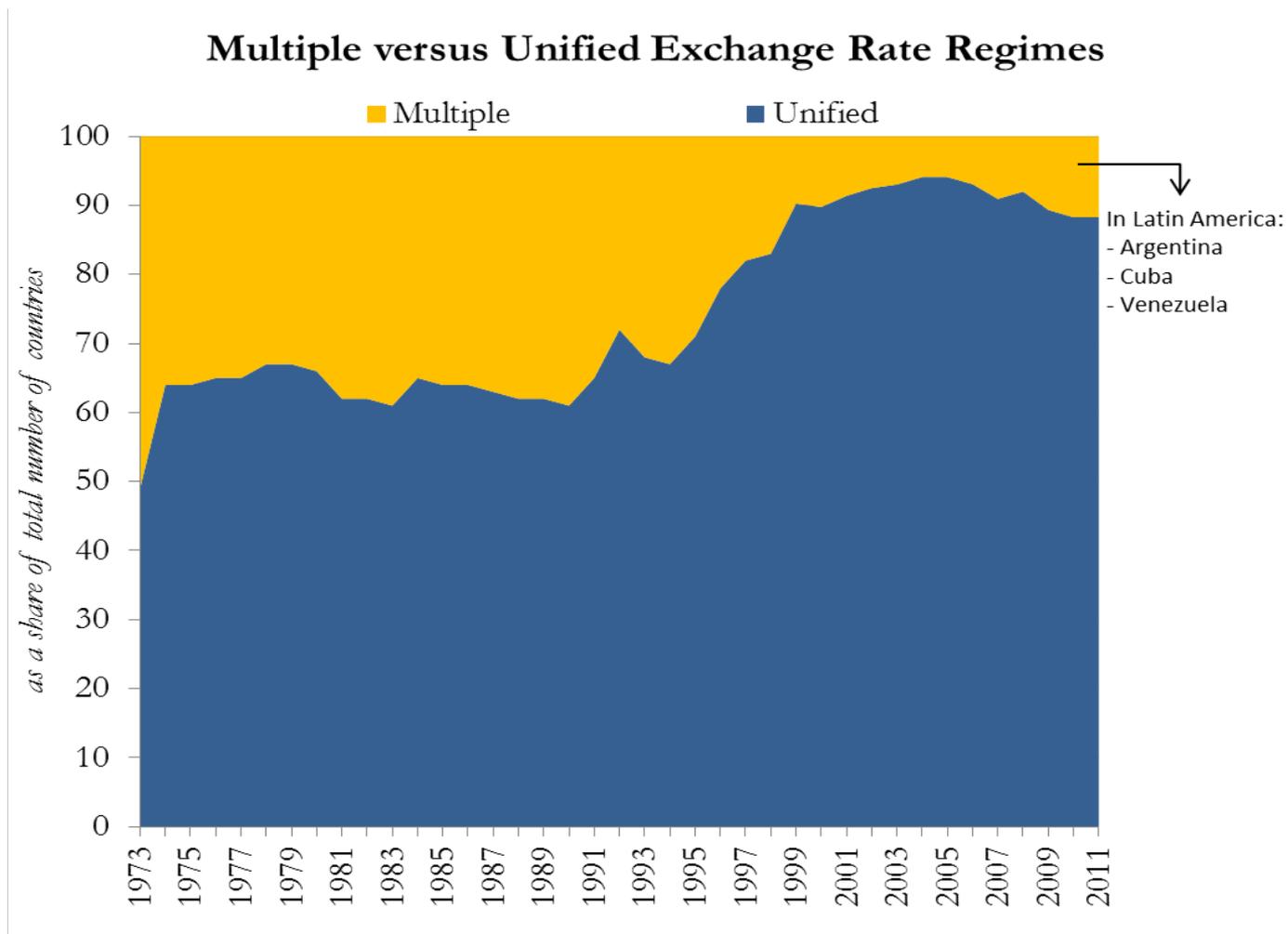
- A few lessons from international experience
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Lessons from International Experience

Why do dual exchange rate systems typically arise?

- A shock requires a major depreciation of the equilibrium real exchange rate
 - Supply shock – e.g., terms of trade loss, a sharp rise in world interest rates
 - Demand shock – e.g., capital flight induced by unsustainable macro policies
- Faced with a politically explosive fall in real wages & rise in the cost of imported inputs, the government introduces a dual exchange rate regime
 - Official rate: “basic” imports and “must-surrender” export proceeds
 - “Parallel” rate: capital account transactions and “non-basic” imports
- In theory
 - This can protect socially sensitive economic activities, channel resources to developmental priorities, and redistribute income progressively
- In practice
 - Huge efficiency losses => resource misallocation, growing wedges between private and social interests, enforcement nightmares, rent seeking, opacity, etc.
 - Over time, dual rates can result in increasingly costly economic segmentations

Partly reflecting improved macro management in EMs, multiple exchange rates have become a vanishing breed



Key lessons from exchange rate unifications

- In principle, the unified rate should lie somewhere within the spread...
 - By reducing the demand for preferential imports, the “official” (stronger) rate’s depreciation makes room for the “parallel” (weaker) rate to appreciate
- ...but, in practice, it often ends up close to the “parallel” (weaker) rate
 - The demand for basic imports tends to be highly inelastic
- A one-time price *level* increase may be followed by runaway inflation *rate* if there is a loss of monetary control, reflecting:
 - Fiscal deficits (demand-side inflation)
 - Wage/price spirals (supply-side inflation)
- Absent compensatory schemes, unification is typically regressive on impact
- The unified rate may overshoot, reflecting financial asset demand shifts
 - Private: expectations of post-unification inflation induce a shift towards the dollar
 - Public: the central bank accumulates reserves after the unification

Post-unification inflation appears to depend on pre-unification spread & inflation (good/bad news for Cuba?)

Country	Beginning of Unification Process	Pre-Unification Premium	Phasing	Point-to-Point Annual Inflation			
				3 months before unification begins	...3 months after	...12 months after	... 24 months after
<i>Venezuela</i>	Mar. 1989	200%	Fast	36%	103%	81%	36%
<i>Argentina</i>	Feb. 1989	50%	Gradual	372%	460%	8163%	232%*
<i>Peru</i>	Jun. 1989	165%	Gradual	3414%	5704%	1968%	207%*
<i>Ecuador</i>	Sept. 1992	30%	Gradual	50%	64%	46%	27%
<i>Dominican Rep.</i>	Oct. 2003	10+%	Fast	26%	40%	52%	0%
<i>Cuba</i>	?	2300%	?	4%	?	?	?

Notes: *Premium* is defined as the average spread between the parallel and official rates as a percent of the official rate in the last quarter before unification starts.

Phasing is defined by the duration of the coexistence of official and parallel rates after unification starts—"Fast" is defined as less than 3 months. * 28 months after, to capture the effects of the formal introduction of Convertibility in April 1991 (Argentina) and the final currency unification in August 1991 (Peru).

Sources: EIU, World Currency Yearbook (several publications), AREAER (several publications), Pick's currency yearbook (several publications), Kiguel and O'Connell (1995), Marion (1999), Reinhart and Rogoff (1999), Kamin (1991), IFS database.

The Cuban Case

Exchange rate unification vs. currency unification

- The dual exchange rate system in Cuba overlaps with a dual currency system
 - Two *official* exchange rates for the Cuban peso, CUP
 - 1 CUP per 1 USD for the state enterprise sector and public institutions
 - 24 CUP per 1 USD for the rest
 - Two currencies: CUP and the convertible peso, CUC, at 1 CUC per 1 USD
- This overlap has led many observers to see them as “joined at the hip”
- However, the two systems respond to different motives...
 - The CUC as a currency was created to limit dollarization
 - The dual exchange rate was introduced to protect basic imports and the BOP
- ...and their unification can be conceptually and practically de-linked

What is special about the case of Cuba?

- The origin of the Cuban dual exchange rate is real (negative terms of trade shock) rather than financial (capital flight)
 - This mitigates concerns about speculative financial turbulence during unification
- The spread between exchange rates is unusually large
 - This highlights the importance of tight monetary control during & after unification
- The dual rate system is a ***fiscal scheme of large but implicit taxes & subsidies***
 - A “raw” exchange rate unification would require fundamental fiscal reform...
 - ...and would have a major re-distributional impact: the net sellers of CUC or dollars would win big time, the net buyers would lose big time
- The responsiveness of economic actors to price signals is weaker
 - This can delay efficiency gains, which are the *raison d'être* of unification
- Cuba's limited access to international finance is an additional complication
 - Concessional finance could greatly facilitate unification

The problem is the transition to a better medium-term equilibrium—how to mitigate pain and maximize gain

- The raw initial impacts of unification can be quite painful
 - Major fiscal revenue losses, productive dislocations, inflation outbursts, regressive distributional effects
- Over time, efficiency gains should provide room to offset the pain – by boosting the size of the cake, they should result in a win-win for all
 - *Progress towards a market economy and credible rules of the game are needed for significant gains to materialize*
- However, in the short-run, the size of the cake is largely given
 - Increases in capital stock and reallocations of labor and capital take time
- A successful transition should appropriately balance pain and gain
 - **Cushion the short-term adjustment pains until efficiency gains materialize**
 - **Boost the pace at which efficiency gains materialize**

Exchange Rate Unification Options

Option one: raw big bang

- **Policy**

- Unify on day one the two exchange rates, at 24:1 (to limit BOP pressures)

- **Pros**

- Most simple
- Potentially most credible (all done on day one)

- **Cons** – does not address the pain/gain balance at all

- The initial credibility may soon be eroded
- In principle, a raw big bang maximizes the gains...
- ...but, in practice, by concentrating all the pain at the beginning...
- ...it may be so traumatic (socially and politically)...
 - Enormous re-distributional and reallocation frictions
- ...as to unleash de-stabilizing macroeconomic (especially fiscal) responses...
- ...which may render the whole experiment unviable

Option two: sector-by-sector gradualism

- **Policy**
 - Gradually depreciate the 1:1 rate towards the 24:1 rate on a sector-by-sector basis, in different degrees and at different speeds
- **Pros**
 - Less traumatic than option one, as the pain is spread over time
- **Cons** – addresses the pain/gain balance only minimally
 - Pain is distributed in time; hence, of lower-intensity than in option one...
 - ... but it is protracted, lasting a prolonged period of time...
 - ...during which it is unlikely to be offset by sufficient efficiency gains...
 - ...because much of the supply response would be postponed
 - Policy uncertainty (discretionary adjustments with risk of incomplete reform)
 - Even greater multiplicity of exchange rates (that would segment markets and so distort price signals as to impede efficient resource allocation across sectors)

Option three: economy-wide gradualism

- **Policy**

- Preannounce a path of gradual convergence of the 1:1 rate to the 24:1 rate

- **Pros**

- Much simpler than option two
- It is less traumatic than option one (pain is spread over time)...
- ... and avoids the additional distortions of option two during the transition

- **Cons** – addresses the pain/gain balance to an insufficient extent

- The pain is of lower intensity than option one but lasts over a prolonged period (broadly similar in this respect to option two)...
- ...during which the gains are greater than in option two but are likely to be insufficient to offset the pain...
- There is a clear risk of a self-fulfilling failure: investors wait => raises transition costs => forces abandonment of preannounced path => justifies waiting

Option four: fiscally-cushioned big bang

■ **Policy**

- Unify on day one the two exchange rates, at 24:1 (to limit BOP pressures)
- Replace on day one the (dual rate-based) shadow taxes and subsidies with equivalent but efficient *lump-sum* taxes and subsidies for *existing* enterprises
- Allow all economic actors (new and old) to operate under the new rules and a consistent (even if partial) set of efficiency-oriented incentives
- Preannounce a gradual phase down of the lump-sum taxes and subsidies

■ **Pros** – adequately addresses the pain/gain balance

- Lump-sum taxes and subsidies cushion the pain and distribute it over time
- Relative price changes work their way to maximize efficiency gains from day one
 - Investment/production decisions are totally independent of the lump-sum

■ **Cons** – requires non-trivial preparation and major changes in economic policy

Illustrating the Fiscally-Cushioned Unification

The foreign-managed tourism industry

The challenge

- The current system entails huge efficiency losses...
 - The 2,300% spread implies a heavy tax on local labor, hence high labor costs for the foreign owned (or managed) tourism industry...
 - ...while allowing the Cuban government to capture and redistribute the rents
 - It discourages employment, undermines quality of service, hinders new FDI, reduces tourism inflows, and promotes stealth employment in the sector
- ...but a “raw big bang unification” would be traumatic on impact
 - Major windfall gains would accrue to foreign hotel operators while average wages would remain low and fiscal revenue would collapse...
 -undermining the government’s ability to compensate the losers and generating (via a widening fiscal deficit) demand-side upward pressures on prices
 - It will also likely weaken the BOP on impact (foreign companies would have more dollars to repatriate), while new exports would only emerge in the medium-term

Using lump-sum taxes/subsidies to balance pains & gains

- The policy
 - On day one, unify the exchange rate at 24:1, so as to limit BOP pressures...
 - ...replace the current inefficient labor tax with a **dollar-equivalent lump-sum tax** that neutralizes the short-run fiscal, BOP, and inflationary impacts
 - If the company sold Y dollars or CUC at 1:1, the lump-sum tax would be 23xY
 - ...and pre-announce a gradual, multiyear phase-down of the lump-sum tax
 - The lump-sum tax would be payable by each existing company, under an internationally binding contract
- On impact (with the stock of FDI taken as given)
 - Employment and service quality should rise, thereby raising tourism inflows, and BOP and fiscal pressures should decline
- Over time (as new FDI and local investment flow in)
 - Efficiency gains would materialize, improving the BOP and fiscal accounts, thereby facilitating the phasing down of lump-sum taxes
 - Labor productivity/wages should rise; the real exchange rate should appreciate

Illustrating the Fiscally-Cushioned Unification

Non-exporting state enterprises

The challenge

- The current system entails huge efficiency losses...
 - Using the 1:1 rate for basic imports and the 24:1 rate for wages amounts to subsidizing basic imports and penalizing consumption of non-basic imports
 - (This may contribute to evening out welfare across Cubans)
 - The implicit subsidization scheme weakens the central government finances...
 - ... penalizes the employment-generating production of importables...
 - ...and promotes imports of basic goods, putting pressures on the BOP

- ...but a “raw big bang unification” would be traumatic on impact
 - While it would improve the BOP and central government finances...
 - ... it would generate cost-pushed price increases on the goods produced or imported by import-intensive state enterprises...
 - ...thereby triggering supply inflation and contractionary pressures on output
 - By eroding the purchasing power of low-paid workers, it would raise inequality

Using lump-sum taxes/subsidies to balance pains & gains

- The policy
 - On day one, unify the exchange rate at 24:1, so as to limit BOP pressures...
 - ...replace the inefficient import subsidy with a **dollar-equivalent lump-sum subsidy** that neutralizes the fiscal, BOP, and inflationary impacts...
 - ...and **pre-announce a gradual, multiyear phase-down of the lump-sum subsidy**
 - Direct state enterprises decisions towards cost minimization/profit maximization, conditional on maintaining affordable prices during the transition

- The pain/gain balance
 - It would immediately enhance budgetary and public sector transparency
 - Existing loss making enterprises will come out into the open
 - **All** enterprises (existing state enterprises and the new private or public competitors) would operate under new rules of the game...
 - ...thereby maximizing the scope for efficiency gains from day one
 - Gains would continue to build up overtime as market price signals improve

Summing up...

	Foreign-managed tourism services	Non-exporting state enterprises
Immediate impact of unification at 24:1	Fiscal losses causing demand inflation	Price adjustments causing supply inflation
Immediate policy response	Lump-sum tax on <i>existing</i> enterprises	Lump-sum subsidy on <i>existing</i> enterprises
Over time policy response	Phase out the lump-sum taxes	Phase out the lump-sum subsidies

Fiscal, State Enterprise Governance, and Market-Oriented Reforms

Fiscal reforms

- Prepare replacement of shadow taxes/subsidies by transitional lump-sum taxes/subsidies
 - *Offsetting fiscal arrangements will be needed in all sectors affected by exchange rate unification*
- Prepare further fiscal reforms
 - Revisit and adapt the tax system, from the perspective of a new long-term and market-oriented environment (VAT, foreign trade taxes, FDI taxation, etc.)
 - Create a system of (cash or coupon) transfers targeted to the lowest income households to support basic consumption
- A healthy fiscal position would facilitate the transition
 - *A pre-unification* fiscal surplus – to underpin initial int’l reserve accumulation that would subsequently “finance” temporary post-unification BOP deficits
 - *A strong post-unification* fiscal position – to facilitate monetary control

Governance and market-oriented reforms

- Governance reforms are needed to make state enterprises more responsive to market signals
 - Enterprises should be given market-compatible mandates (i.e., cost minimization/profit maximization) and their performance assessed accordingly
 - Based on emerging market prices, accounting practices should be revisited to identify unviable state enterprises and facilitate their closure or restructuring
 - Inter-enterprise claims across balance sheets should be netted out and restructured as needed

- These governance reforms should ideally be accompanied (or followed as soon as possible) by market-oriented reforms
 - Encourage entry of private firms to boost supply, both directly and indirectly (i.e., by exerting competitive pressures on state enterprises)
 - Disengage public firms from intermediating the business activities of private firms and citizens (e.g., allow foreign-owned hotels to hire workers directly)

Currency Unification and Post Unification Monetary Regime Sequencing

Currency unification

- Full dollarization would be unwise, as it would
 - Increase Cuba's vulnerability to adverse terms of trade or other large shocks
 - Promote inflation as the main channel for real appreciation
- Maintaining the CUC as a currency board-based *electronic unit of account* might help re-monetize into CUC deposits while confidence builds up...
- ...however, as long private citizens prefer dollars in cash, the shift of savings towards CUC-denominated deposits is likely to be limited
- Instead, by fragmenting credit and reducing market depth, the dual currency can hinder the strengthening of monetary management capacity...
- ...and, as long as state enterprises remain as the main depositors, there is little risk of a depositor flight into dollar cash
- **Therefore, all things considered, full peso-ization (mandatory conversion of CUCs into the new currency) is arguably preferable from the outset**

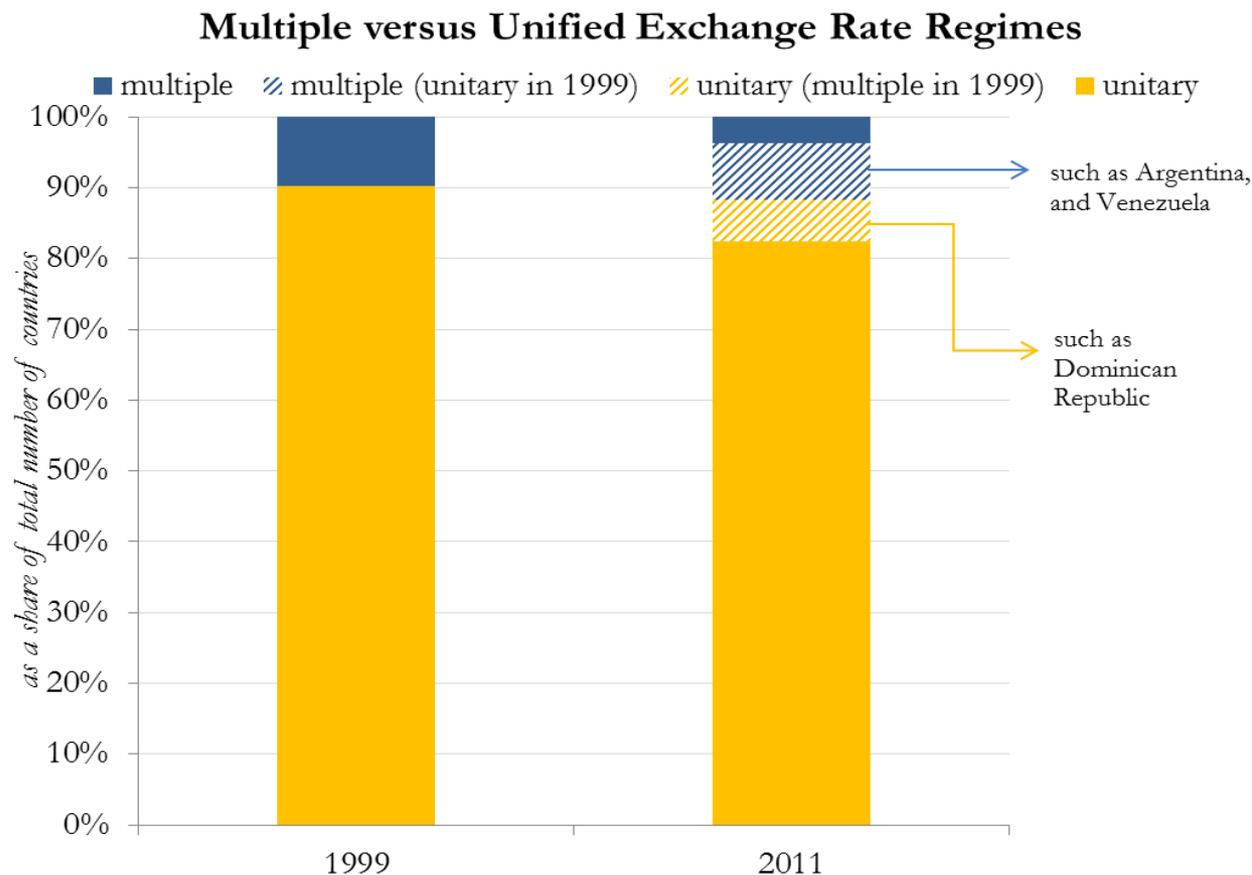
Post-unification monetary regime sequencing

- The fiscally-cushioned unification will require a gradual strengthening of the central bank's monetary instruments and management capacity...
- ...in tandem with a gradual development of interbank and exchange rate markets, and sound financial intermediation
- Hence, while a flexible exchange rate would reduce the risk of undue real appreciation, help absorb shocks, and limit de facto dollarization...
- ... a realistic post-unification exchange rate regime could follow three phases
 - **Initial:** a fixed exchange rate with control of central bank credit expansion and of excess liquidity in the interbank market
 - **Intermediate:** a flexible (but managed) exchange rate with money targeting
 - **Final:** a flexible (but still managed) exchange rate with inflation targeting

Thank you

Extra slides

Significant churning within the small set of countries with multiple exchange rate regimes

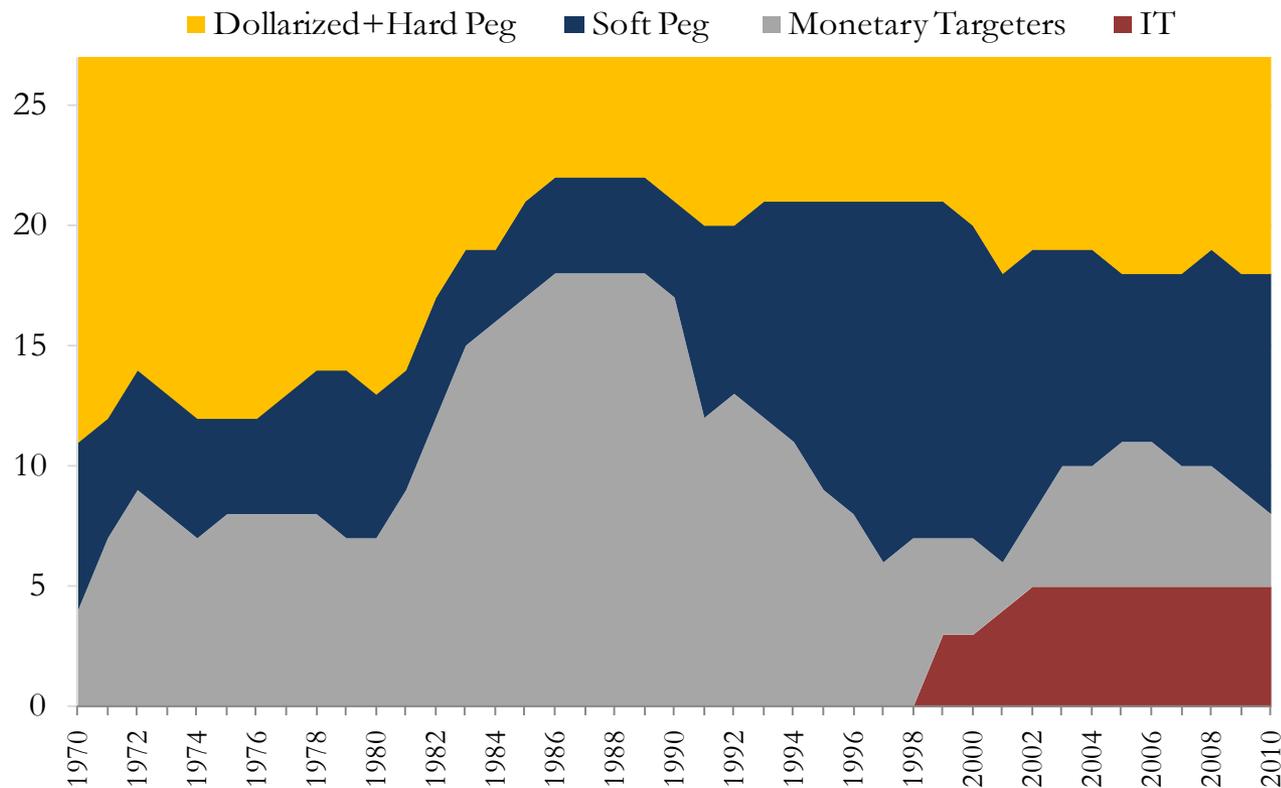


Notes: Countries with multiple exchange rates in 2011 but with a unified rate in 1999 are Angola, Argentina, Eritrea, Georgia, Guinea, Kyrgyz Republic, Malawi, Maldives, Mongolia, Nigeria, Sao Tome and Principe, Sudan, Ukraine, Uzbekistan, and Venezuela. Countries with a unified rate in 2011 but with multiple rates in 1999 are Afghanistan, Belarus, Botswana, Cambodia, Dominican Republic, Egypt, Iran, Lao, Libya, Russia, Turkmenistan. Source: AREAER online database

LAC has been a laboratory of monetary policy frameworks...

Monetary Regimes in LAC

Absolute Number of Countries



	1970	1987	1997	2010
<i>Dollarized+ Hard Peg</i>	Argentina	Bahamas, The	Bahamas, The	Bahamas, The
	Bahamas, The	Barbados	Barbados	Barbados
	Barbados	Belize	Belize	Belize
	Belize	ECCB	ECCB	ECCB
	Costa Rica	Panama	Guyana	Ecuador
	ECCB	Guyana	Panama	El Salvador
	Guatemala	Haiti	Bolivia	Honduras
	Guyana	Jamaica	Brazil	Panama
	Haiti	TTO	Chile	Suriname
	Honduras	Argentina	Colombia	Argentina
	Jamaica	Bolivia	Costa Rica	Bolivia
	Mexico	Brazil	El Salvador	Costa Rica
	Panama	Chile	Guatemala	Guyana
	Suriname	Colombia	Haiti	Jamaica
	Uruguay	Costa Rica	Honduras	Nicaragua
Venezuela	Dom. Rep.	Jamaica	Paraguay	
<i>Soft Peg</i>	Bolivia	Ecuador	Nicaragua	TTO
	Dom. Rep.	El Salvador	Paraguay	Venezuela
	Ecuador	Guatemala	Peru	Dom. Rep.
	El Salvador	Honduras	Uruguay	Guatemala
	Nicaragua	Mexico	Venezuela	Haiti
	Paraguay	Nicaragua	Argentina	Uruguay
	TTO	Paraguay	Dom. Rep.	Brazil
	Brazil	Peru	Ecuador	Chile
	Chile	Suriname	Mexico	Colombia
	Colombia	Uruguay	Suriname	Mexico
<i>Monetary Targeters</i>	Peru	Venezuela	TTO	Peru
<i>IT</i>				

... but with the bigger countries clearly going towards inflation targeting

