De-Dollarization:
A Cross-Country Perspective
Nicholas Staines, IMF
Background
Types of dollarization

- **Unit of account**: use foreign currency for pricing & accounting

- **Real dollarization**: indexation of G&S transactions to FX rate.

- **Transaction dollarization** or currency substitution: use of foreign currency as medium of exchange for transactions.

- **Financial dollarization** or asset substitution: use of foreign currency as a store of value – deposit or loan dollarization.

- **Capital flight** as an alternative to deposit dollarization.

Focus on **deposit dollarization** – because of lack of data on FX currency and because FX loans are correlated with FX deposits.
Currency substitution: FX held as store of value – lack of credible sustainable macro policies i.e. fiscal and external imbalances, inflation and FX depreciation.

Portfolio motives: FX held as hedge against volatility and driven by risk profile of returns, including interest rates.

Market development: dollarization driven by imperfections and externalities not addressed by regulatory framework – poor financial intermediation, lack of domestic investment vehicles e.g. debt markets, market/regulatory biases hiding costs of dollarization e.g. reserve requirements, deposit insurance, credit provisioning.

Institutional: weaknesses favoring dollarization – credibility of FX peg and FX flexibility, political stability.

Capital flight: an alternative to deposit dollarization
## Pros and cons of dollarization

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<th><strong>Pros</strong></th>
<th><strong>Cons</strong></th>
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<tr>
<td>Allows hedging against inflation and FX risks and supports portfolio diversification.</td>
<td>Reduces effectiveness of monetary policy.</td>
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<td>Appeal of FX as anchor for monetary policy by forcing macro policy discipline.</td>
<td>Exposes public and private sectors to FX changes when asset and liabilities are mis-matched – liquidity and solvency risks.</td>
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<td>Provides vehicle for domestic investment as alternative to capital flight, supporting financial deepening.</td>
<td>Complicates lender-of-last-resort function to stabilize bank system.</td>
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<td>Reduces seigniorage revenues.</td>
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Deposit dollarization - 2001
Deposit dollarization - 2012
Level and dispersal of dollarization fell over 2001-12 in all regions except SSA. What’s driving dollarization? Why the increase in SSA?
Determinants of dollarization
Explaining dollarization levels

- **Dependent variable:** FX deposits/total deposits

  - **Direction & statistical relevance:**
    - **World**
    - **SSA**

- **Currency substitution**
  - Inflation
  - FX depreciation

- **Portfolio model**
  - Lending rate spread to US
  - Real lending rate

- **Market development**
  - M2/GDP
  - GDP pc

- **Access to FX financing**
  - External debt/GDP
  - Export/GDP

- **Institutions**
  - De jure peg
  - Polity

**Forthcoming IMF study by Mecagni.**

- Annual data 2001-12 with 42 countries, 16 in SSA.

- Excludes countries with zero dollarization and currency unions & others because of limited data.

- Study does not consider administrative measures.

- Two estimates: ‘World’ and SSA.

- Results as expected – all factors significant - with differences between World & SSA.
Estimates are good fit for SSA & Angola (less so for World).

SSA: Deposit dollarization, 2001-12 avg.
Observed versus estimated over SSA countries only

Angola: Deposit Dollarization 2002-11
Observed versus estimated over SSA countries only
Factor contributions relative to average across all periods & countries. Contributions LHS/RHS push dollarization down/up relative to average.
Fundamentals generally benign – except in MENA

- De-dollarization driven by market development.
- Surprisingly, other factors played minor role.
  - Currency substitution (inflation/depreciation) beneficial in Lat.Am. and adverse in Asia.
  - Portfolio considerations (interest rates) and institutional factors were adverse but minimal.

BUT there are large residuals (unknown) pushing up dollarization – especially SSA.
Fundamentals supported de-dollarization

- Market development gave large support to de-dollarization.
- Dollarization held up by portfolio considerations and access to FX.
- Currency substitution played little role. SSA already had moderate inflation.

BUT: Dollarization rose because negative residual in 2002 was reversed in 2011.
It’s inflation AND market development AND diversification

- Dollarization in 2002 supported by high FX access (exports), inflation/FX depreciation, and institutions (FX regime, political).

- Fundamentals supported de-dollarization - market development (financial deepening, growth), lower inflation/depreciation, and smaller role of exports (diversification).
Drivers of de-dollarization
Indicators of success

- 42 countries (8 in SSA) with high dollarization (> 30%) in 2001-03
- Only 11 de-dollarized more than 20% by 2012; 2 in SSA - AGO & MOZ
- Differences between un/successful countries:
  - Initially: inflation, political index.
  - After: disinflation/depreciation, fiscal consolidation (debt), politics.

<table>
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<th>Indicators of successful de-dollarization</th>
<th>2001-03</th>
<th>2004-12 change from 01-03</th>
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<tbody>
<tr>
<td></td>
<td>Successful</td>
<td>Unsuccessful</td>
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<tr>
<td>Real GDP growth, percent</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Inflation, percent</td>
<td>22</td>
<td>9</td>
</tr>
<tr>
<td>Exchange rate depreciation, percent</td>
<td>-2</td>
<td>33</td>
</tr>
<tr>
<td>Current account balance, percent GDP</td>
<td>-5</td>
<td>-6</td>
</tr>
<tr>
<td>Fiscal balance, percent GDP</td>
<td>-3</td>
<td>-3</td>
</tr>
<tr>
<td>Stock of public debt, percent GDP</td>
<td>60</td>
<td>55</td>
</tr>
<tr>
<td>Stock of external debt, percent GDP</td>
<td>64</td>
<td>59</td>
</tr>
<tr>
<td>Democracy index</td>
<td>5</td>
<td>3</td>
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Narrower focus on 17 candidates, of which 8 successful
Results suggest thresholds for successful de-dollarization:
Inflation below 9% and fiscal deficit below 2% deficit.
Policies for de-dollarization
Failure - forced de-dollarization

- **Peru**: Hyperinflation in 1980s pushed deposit dollarization above 60%. Forced de-dollarization in 1985 caused capital flight and financial disintermediation. Policy abandoned in 1990 leading to re-dollarization around 80%.

- **Bolivia**: Exports and external FX loans supported high dollarization in 1970s. BoP crisis in 1981 triggered forced de-dollarization in 1982 accentuating the economic crisis, hyperinflation and capital flight. Policy abandoned leading to re-dollarization around 90% that persisted despite macro-stabilization starting in late 1980s.
Success - market de-dollarization


- **Israel**: Macro instability in 1980s (fiscal deficits and hyper-inflation) pushed dollarization to 90% (inc. indexed). *Macro* – 1990s fiscal stabilization and disinflation, but de-dollarization slow. *Prudential* – discriminatory LRR, restrictions on FX credit. **Debt**: issuance of Gvt non-indexed LT LC bonds.

- **Poland**: Macro instability in late 1980s (large fiscal deficits and hyper-inflation) pushed dollarization to 80%, that was almost eliminated in 1990s. *Macro* – stabilization to address fiscal imbalances and disinflation. FX market flexibility. **Debt**: issuance of LC Gvt. debt.
The most critical component of a de-dollarization strategy is bringing back confidence in the value of the domestic currency.

- Cutting inflation and a stable exchange rate to preserve purchasing power.
- A sustainable and credible fiscal policy reduces the Government’s need to borrow in foreign currency and to resort to inflationary central bank financing.
- A stronger fiscal balance encourage local investors to purchase long-term government bonds in local currency, facilitating the extension of the yield curve and the development of the local financial market.
- Economic diversification helps reduces dollarization.
Financial development

Financial markets can be strengthened to reduce need and incentive for dollarization.

- Issuance of LT government LC bonds provides vehicle for domestic investment. Also promotes financial development by extending yield curve, providing benchmark for investors and LC credit.

- Well-functioning FX market backed by adequate reserves and market access reduces the need for FX for precautionary reasons.

- Developing LC interbank market promotes financial development.

- Financial innovations - hedging instruments and indexed local-currency bonds - reduce the need to use FX to hedge against FX or inflation risk.
Prudential measures can be used to make dollarization less attractive – including internalizing cost of dollarization.

- FX exposure limits.
- Discriminatory bank reserve requirements and remuneration.
- Discriminatory deposit insurance
- Constraints on FX credit.
- Bank provisioning for FX credit to reflect currency risks.
- Mandatory use of local currency for pricing and transactions.
Deposit dollarization driven by mix of factors – not just inflation.

De-dollarization strategy requires mix and sequencing – forced de-dollarization backfires.

Macro component relies on both monetary and fiscal elements supporting sustained macro stability.

Market development component relies on developing market instruments, especially FX and debt markets.

Administrative measures can be supportive but not lead.

**BUT** Remember: investors’ default option is capital flight.
Obrigado