Os desafios da
Desdolarização

13 DE MAIO 2014 - HOTEL EPIC SANA

De-Dollarization: A Cross-Country Perspective

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Outline

Background

Types of dollarization

- **Unit of account**: use of FC for pricing & accounting.
- **Real dollarization**: use of FX rate to index G&S transactions.
- **Transaction dollarization** (currency substitution): use of FC as medium of exchange.
- **Financial dollarization** (asset substitution): use of FC as a store of value – deposit or loan dollarization.
- **Capital flight:** an alternative to deposit dollarization.

Focus on **deposit dollarization**.

Explaining deposit dollarization

- **Currency substitution**: FC held as store of value against inflation and FX depreciation.
- **Portfolio motives**: FC held as hedge against volatility - driven by risk profile of returns, including interest rates.
- **Market development**: dollarization driven by market imperfections and also by externalities not addressed by regulatory framework:
  - Market/regulatory biases hiding costs of dollarization e.g. reserve requirements, deposit insurance, credit provisioning.
  - Poor financial intermediation, lack of domestic investments e.g. debt markets
- **Institutional**: weaknesses favoring dollarization – credibility of FX rate peg and FX availability, political stability.
- **Capital flight:** an alternative to deposit dollarization

Pros and cons of dollarization

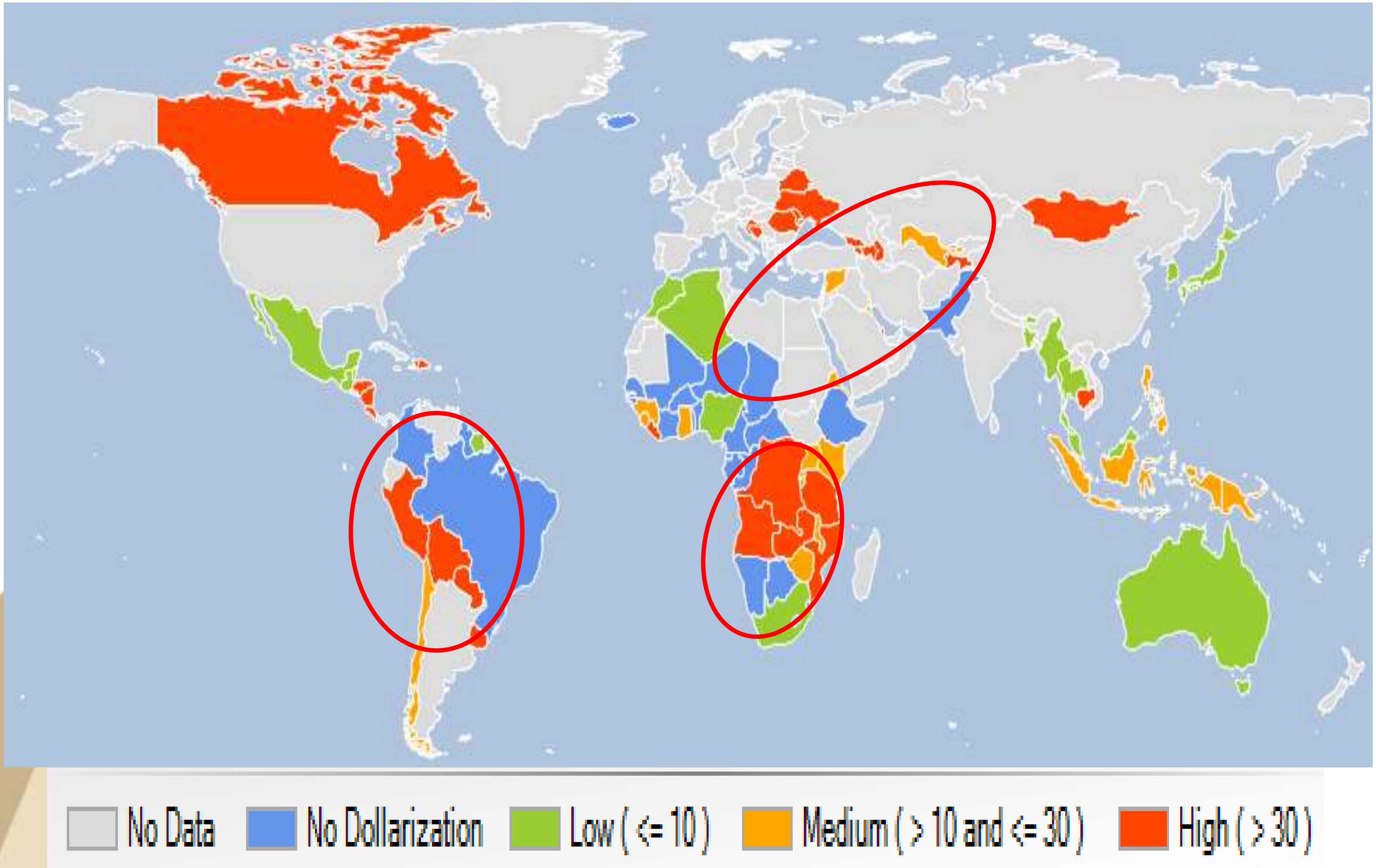
Pros

- **Hedging**: Allows hedging against inflation and FX risks and supports portfolio diversification.
- **Policy anchor**: Appeal of FX rate as anchor for monetary policy, forcing macro discipline.
- **Financial deepening**: Provides vehicle for domestic investment as alternative to capital flight, supporting financial deepening.

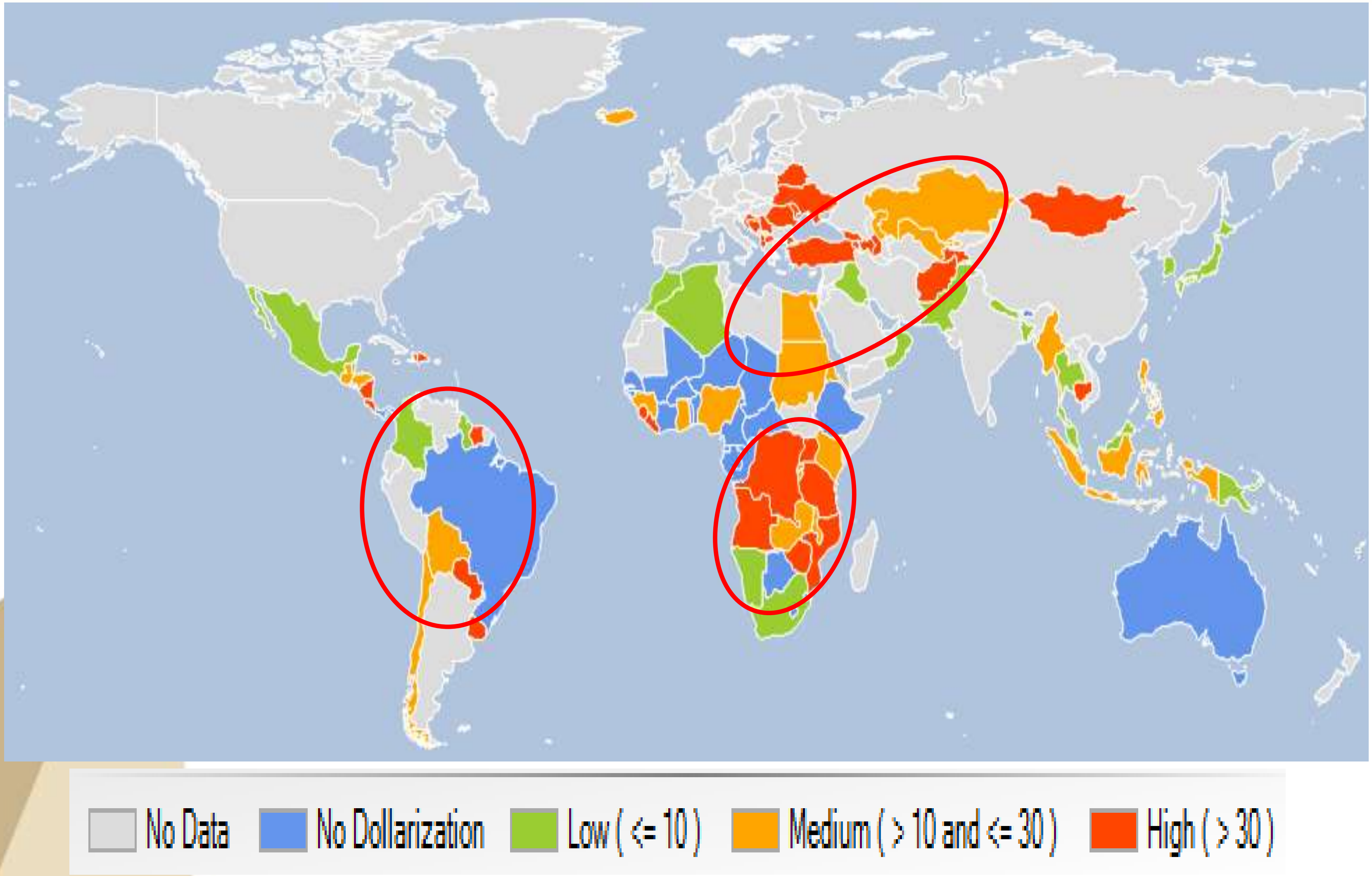
Cons

- **Monetary policy**: Reduces effectiveness of monetary transmission mechanism.
- **Fiscal**: Reduces seigniorage.
- **Balance sheet risks**: Exposes public and private sectors to FX rate changes when asset and liabilities are mis-matched – liquidity and solvency risks.
- **Lender-of-last-resort**: Complicates LoLR role to stabilize bank system.

Deposit dollarization - 2001

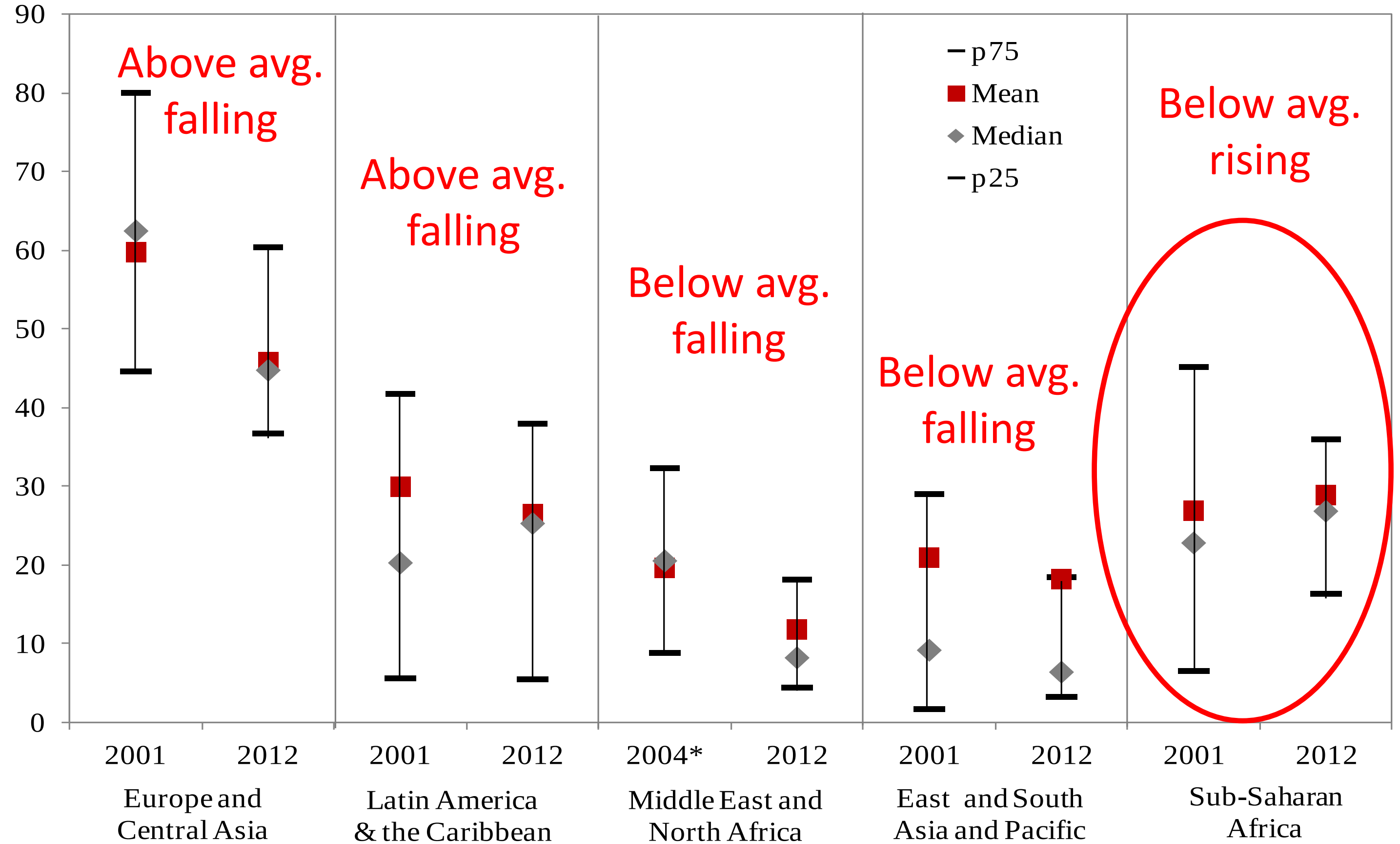


Deposit dollarization - 2012



Evolution of deposit dollarization

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

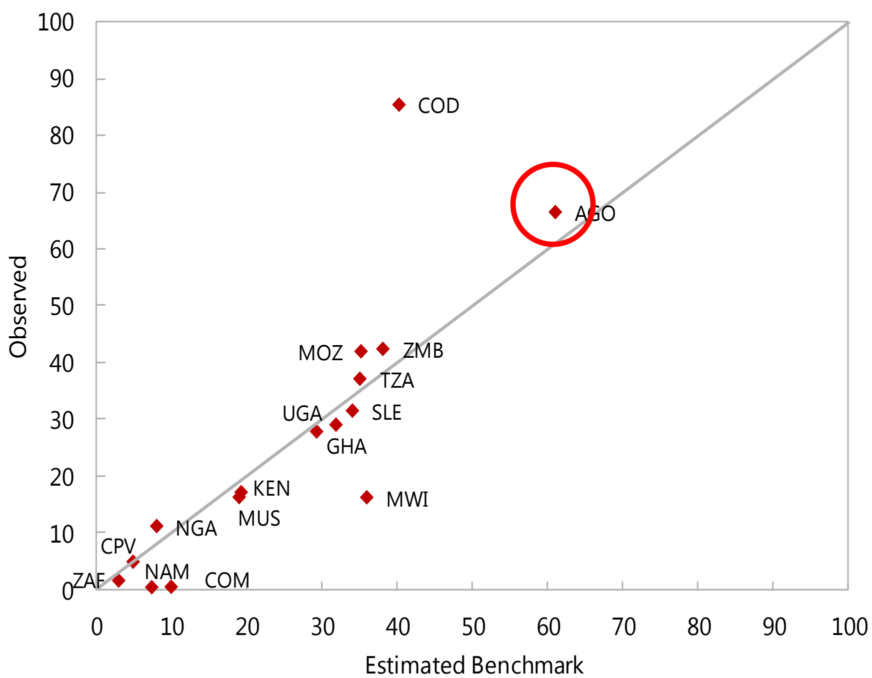
Dependent variable: FX deposits/total deposits	
Direction & statistical relevance	
Currency substitution	
Inflation rate	↑
FX rate depreciation	↑
Portfolio model	
Domestic interest rate spread to US	↓
Real domestic interest rate	↓
Market development	
Broad money/GDP	↓
GDP per capita	↓
Access to FX financing	
External debt/GDP	↑
Export/GDP	↑
Institutions	
De jure FX peg	↓
Political stability	↓

- Forthcoming IMF study by team led by Mauro Mecagni.
- Annual data 2001-12: 42 countries, 16 in SSA (sample limited by data).
- Study does not consider administrative measures.
- Results as expected – all factors significant.

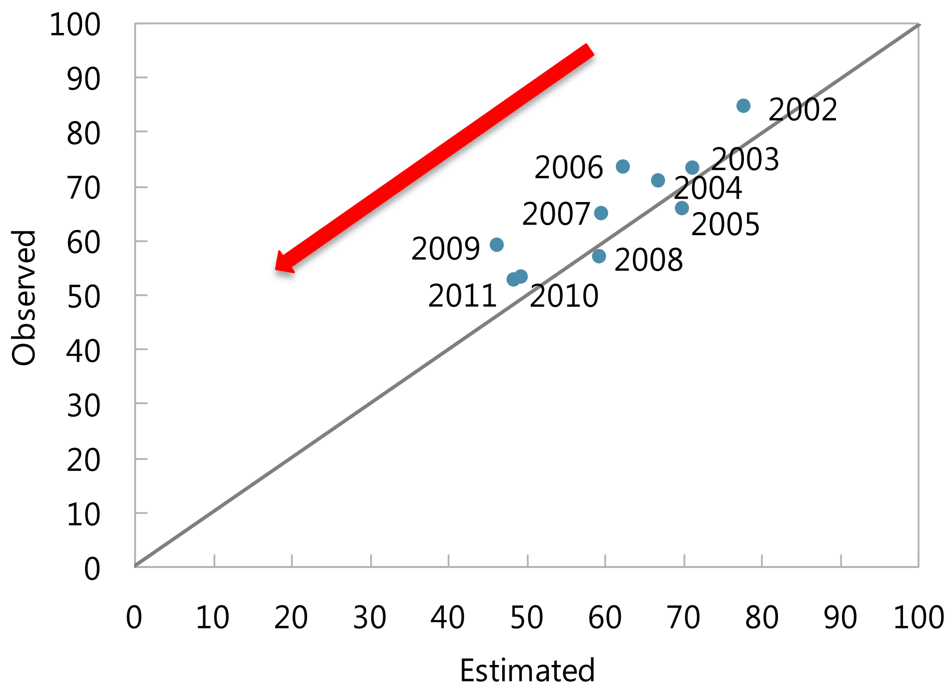
Results – SSA and Angola

Estimates are good fit for SSA & Angola (less so for World).

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

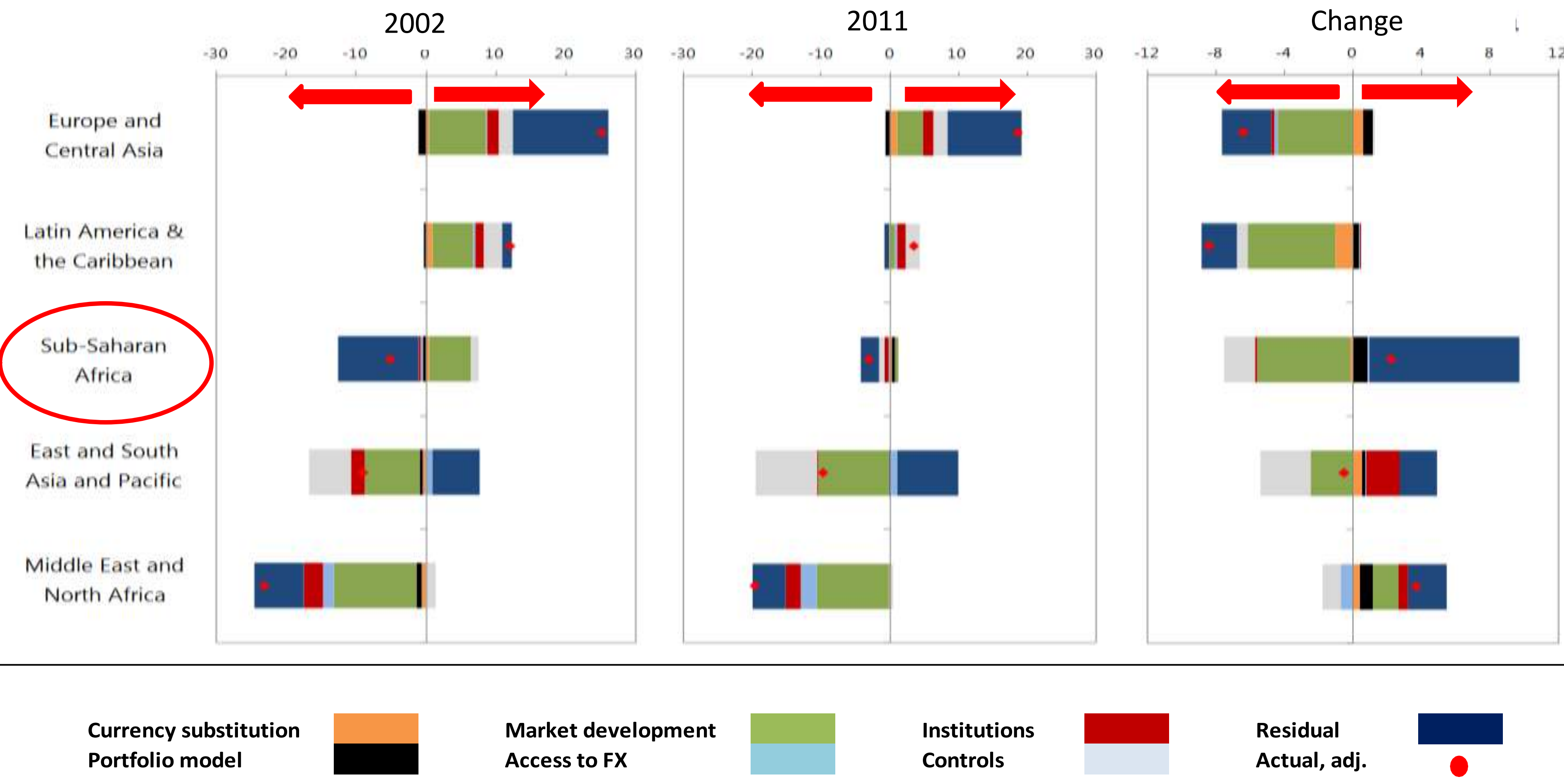


Angola: Deposit Dollarization 2002-11
Observed versus estimated over SSA countries only



World – explaining variations

Factor contributions relative to average across all periods & countries.



World – explaining variations

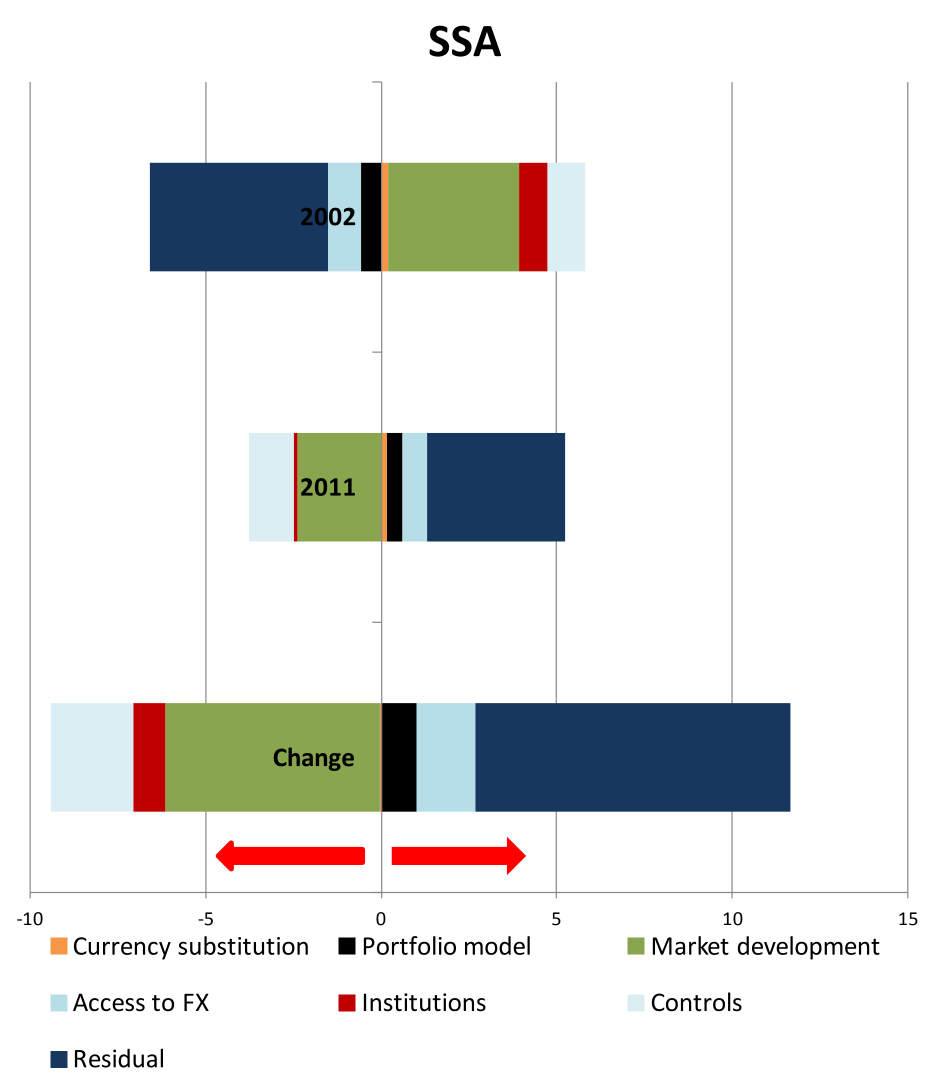
Fundamentals generally benign – except in MENA

- De-dollarization driven by market development.
- Surprisingly, other factors played minor role.
  - Dollarization persisted despite global disinflation in 1990s.
  - Squeezing of interest rate spreads during crisis.

BUT there are large residuals (unknown) pushing up dollarization – especially SSA.

SSA – explaining variations

SSA-only estimates



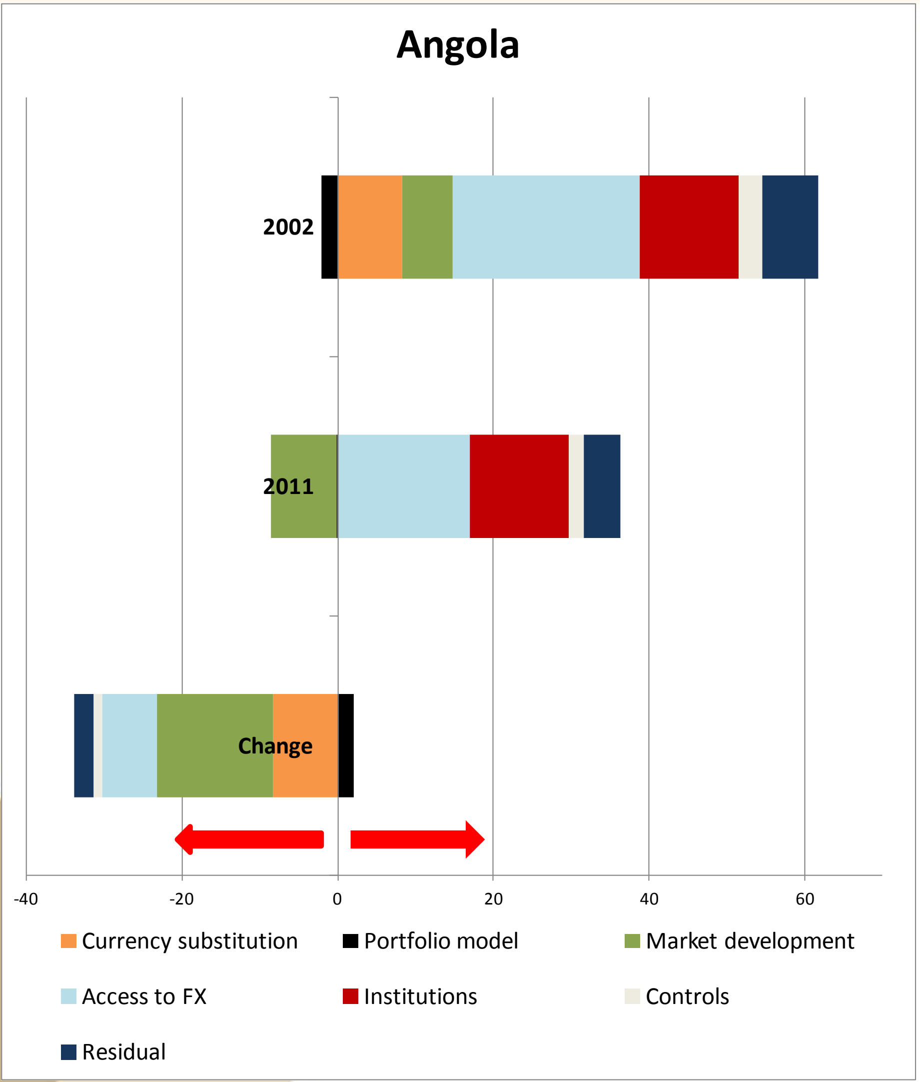
Fundamentals supported de-dollarization

- Market development supportive.
- Adverse impact of portfolio considerations and access to FC (commodity exports).
- Inflation played little role because already moderate.

BUT: Dollarization rose because negative residual was reversed.

Angola – explaining variations

SSA-only estimates



It's inflation AND market development AND diversification

- Dollarization in 2002 supported by high FC 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

Macro 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 SSA - AGO & MOZ
- Differences between un/successful countries:
  - Initially: inflation, political index.
  - After: inflation, fiscal consolidation (debt), politics.

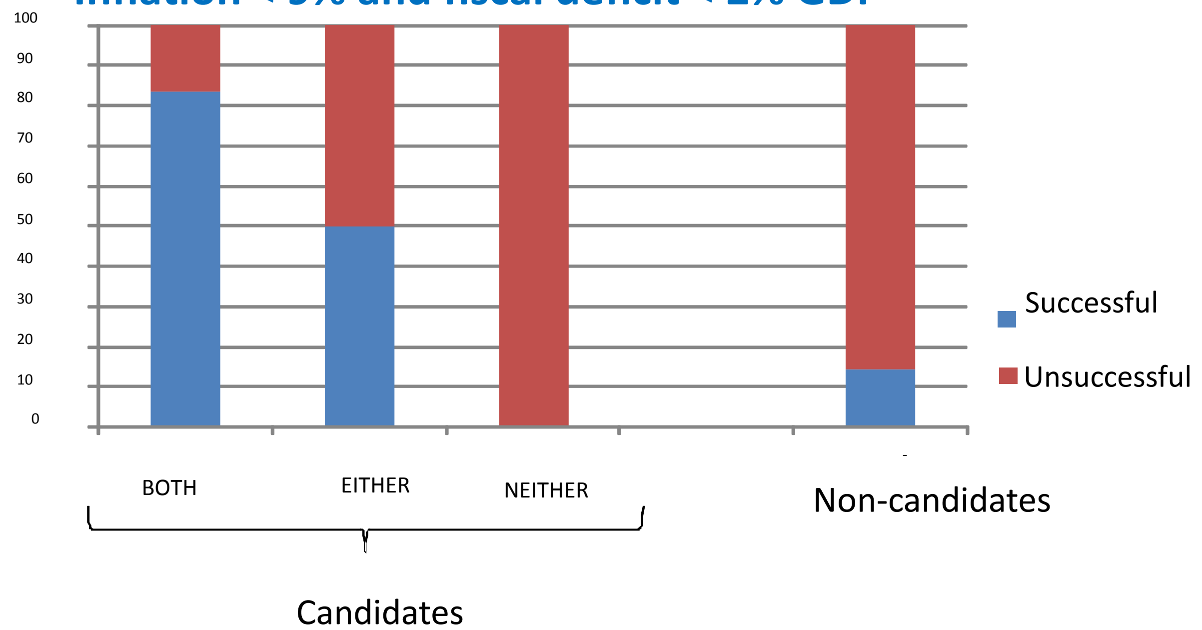
Indicators of successful de-dollarization
Change from 2001-03 to 2004-12

	2001-03		2004-12 change from 01-03	
	Successful	Unsuccessful	Successful	Unsuccessful
Real GDP growth, percent	5	4	2	0
Inflation, percent	**22**	**9**	**-14**	**0**
Exchange rate depreciation, percent			**-2**	**33**
Current account balance, percent GDP	-5	-6	5	-2
Fiscal balance, percent GDP	-3	-3	**4**	**0**
Stock of public debt, percent GDP	60	55	-26	-16
Stock of external debt, percent GDP	64	59	-23	-10
Democracy index	**5**	**3**	**0**	**-2**

Macro thresholds for success

- Narrower focus on 17 candidates, of which 8 successful
- Results suggest thresholds for successful de-dollarization:
  - inflation below 9% and fiscal deficit below 2% of GDP.

Probability of success
Inflation < 9% and fiscal deficit < 2% GDP



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 FC loans supported high dollarization in 1970s. BoP crisis in 1981 led to ***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

- **Peru**: Dollarization eliminated in 2000s. ***Macro*** - fiscal surpluses and disinflation to 2%, GIR buffer. FX market flexibility. ***Prudential measures*** – discriminatory LRR, remuneration and provisioning requirements, FX net exposure limits. ***Debt*** : Introduction of LT Gvt bonds, private debt market.
- **Bolivia**: Dollarization in 2000s reduced to 25%. ***Macro*** – disinflation in 90s. ***Prudential***: discriminatory LRR and credit provisioning, FC net exposure limits, FX financial transaction tax. ***Debt*** : issuance of LT Gvt bonds.
- **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 FC 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.

Macroeconomic policies

Most critical component of de-dollarization strategy is restoring confidence in value of the domestic currency.

- Cutting inflation and a stable exchange rate to preserve purchasing power and reduce risks of holding LC.
- Sustainable and credible fiscal policy reduces Government's need for inflationary central bank financing. Stronger fiscal balance encourages domestic LC and LT debt 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 need for FC for precautionary reasons.
- Developing LC interbank market promotes financial development.
- Financial innovations - hedging instruments and indexed LC bonds – reduce need for FC to hedge against FX or inflation risk.

Prudential regulation

Prudential measures can be used to make dollarization less attractive – including internalizing cost of dollarization.

- FC exposure limits.
- Discriminatory bank reserve requirements and remuneration.
- Discriminatory deposit insurance.
- Constraints on FC credit.
- Bank provisioning for FC credit to reflect FX risks.
- Mandated use of LC and exclusion of FC for pricing & transactions.

Conclusions

- Dollarization driven by **mix of factors** – not just inflation.
- De-dollarization strategy requires **mix of policies** and **sequencing** – forced de-dollarization backfires.
- **AND** Remember: investors' have the option of capital flight.

Obrigado

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