

EXCHANGE RATE REGIMES IN SUB-SAHARAN AFRICA: EXPERIENCES AND LESSONS

Regional Economic Outlook
African Department, International Monetary Fund

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Motivation

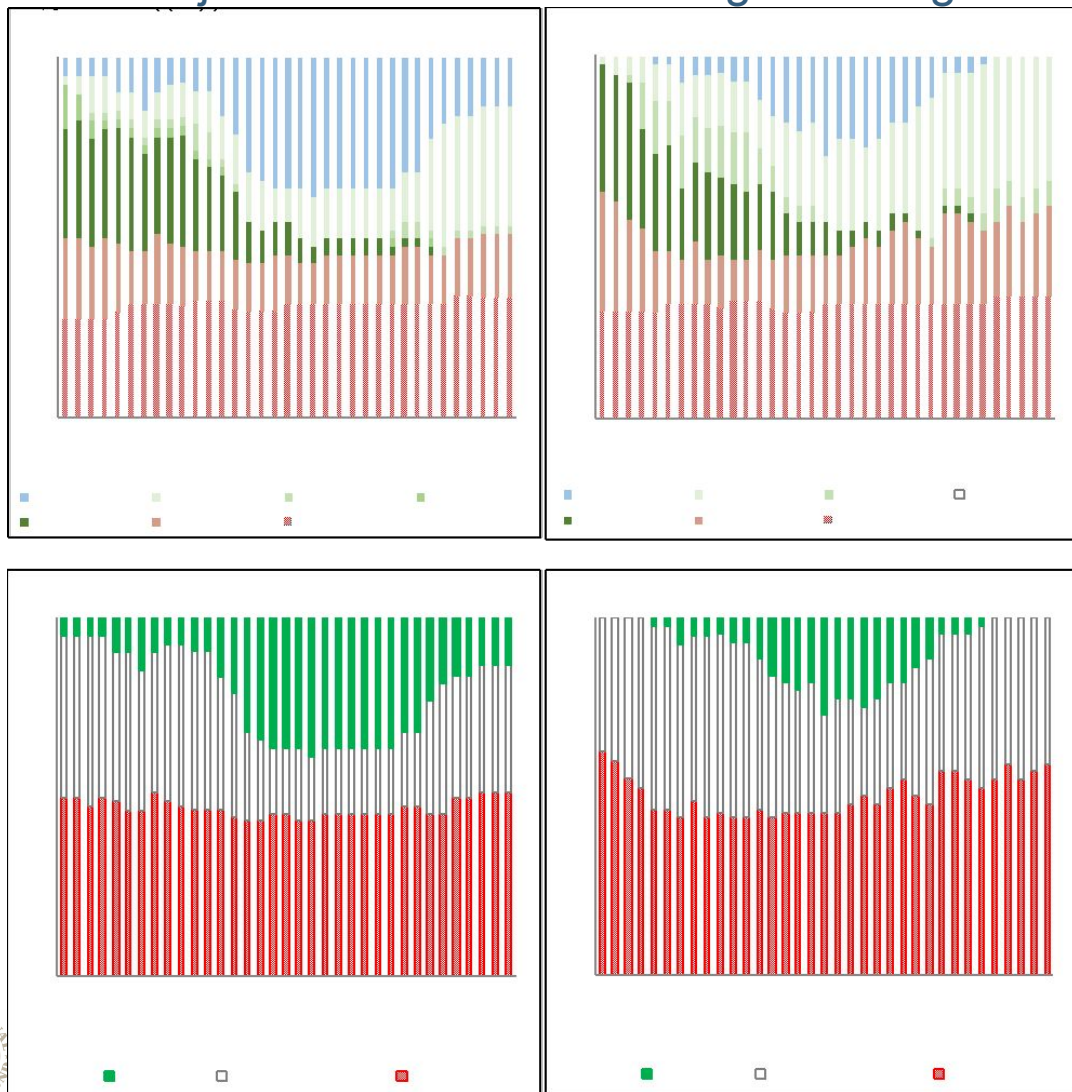
- Exchange rate policy as a tool to meet macroeconomic challenges and particular circumstances
- Recent work and IMF studies
 - Tradeoffs of exchange rate regimes among goals
 - No “single prescription”
- Policy questions
 - What has been the experience of SSA countries in terms of their macroeconomic performance under different exchange rate regimes?
 - How can SSA countries improve their economic performance in the context of the exchange rate regime they have adopted?

Key points

- How has the distribution of exchange rate regimes evolved in SSA?
- How does the exchange rate regime affect macroeconomic performance—particularly inflation, output growth, and output growth volatility?
- What is the influence of the exchange rate regime on fiscal outcomes? Have fixed exchange rate regimes exerted discipline?
- Analysis based on
 - IMF's *Annual Report on Exchange Rate Arrangements and Exchange Restrictions (AREAER)*
 - Distinguish between “de facto” and “de jure” regimes
 - 3-way aggregated classification (pegs-intermediates-floats)

Trends and evolution in SSA

SSA de jure and de facto exchange rate regime fine and aggregate classifications



- Pegs dominate
 - 2/3 of commodity exporters de facto peg (most to the euro)
 - Frontier market economies less likely to peg
- Transitions
 - Mid-1990s to mid-2000s “bipolar” regime and “hollowing out”
 - Reversal of trend lately, transition away from floats especially since GFC
- Words vs. deeds
 - Divergence between de jure and de facto

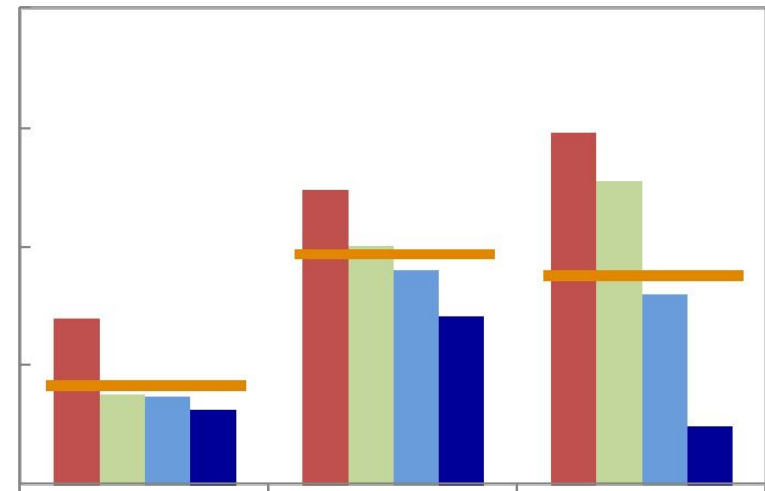
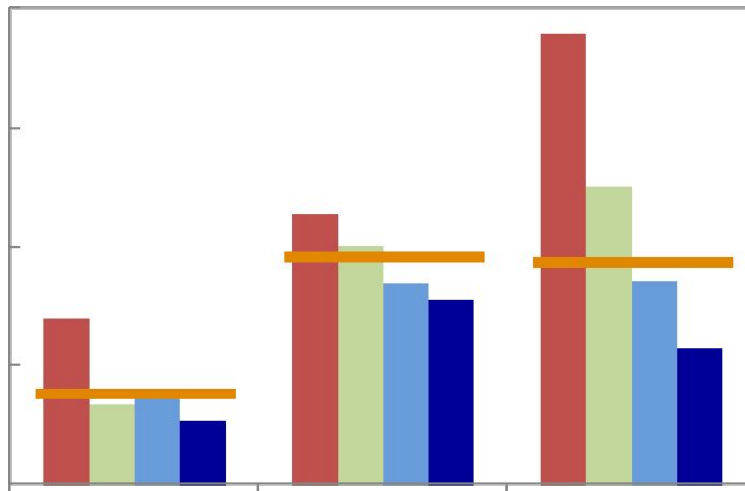
Stylized facts: inflation

Inflation is the lowest in SSA countries with pegs

SSA inflation median performance, various periods

De jure

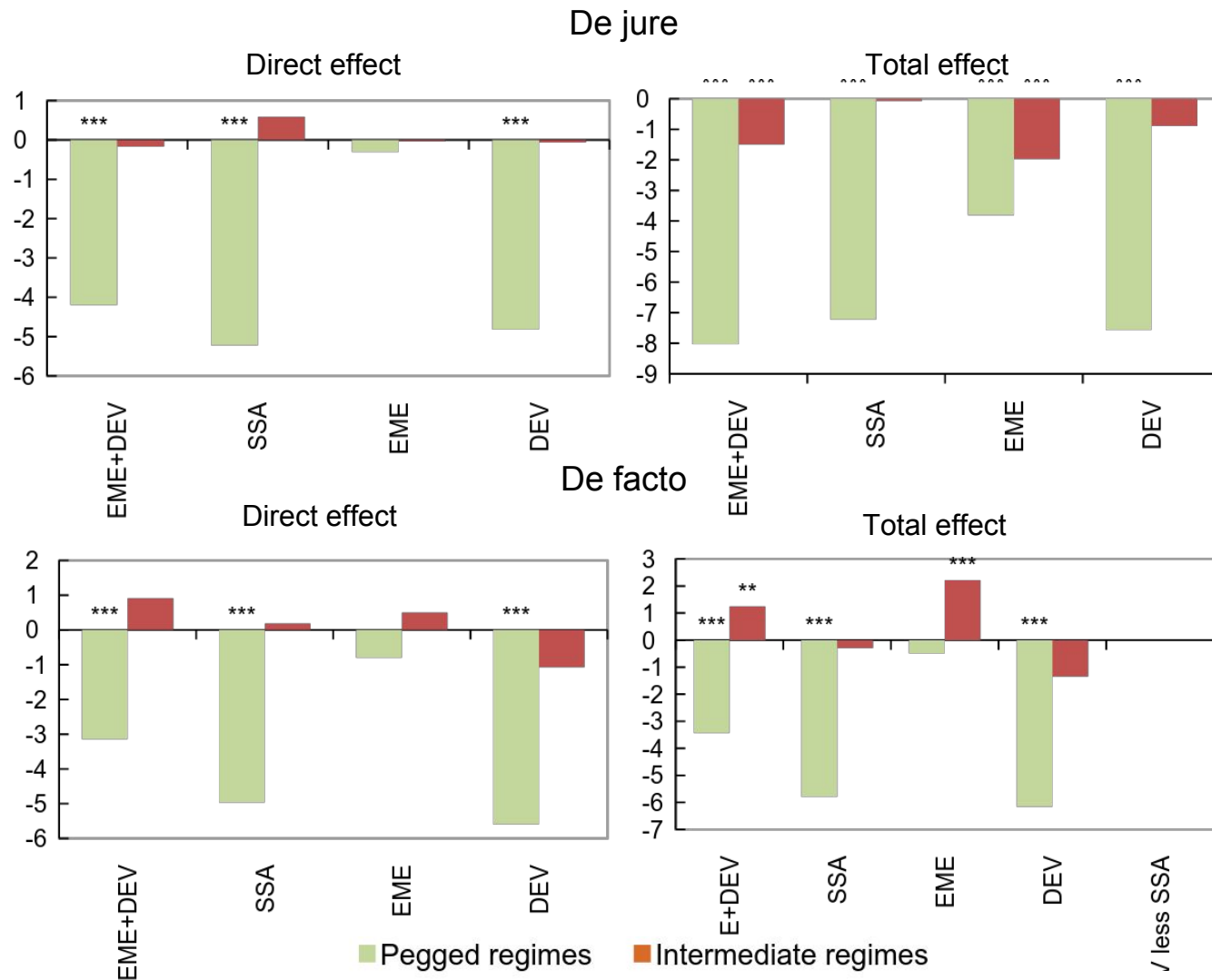
De facto



Empirical results: inflation

Controlling for determinants, SSA de jure and de facto pegs have lowest inflation

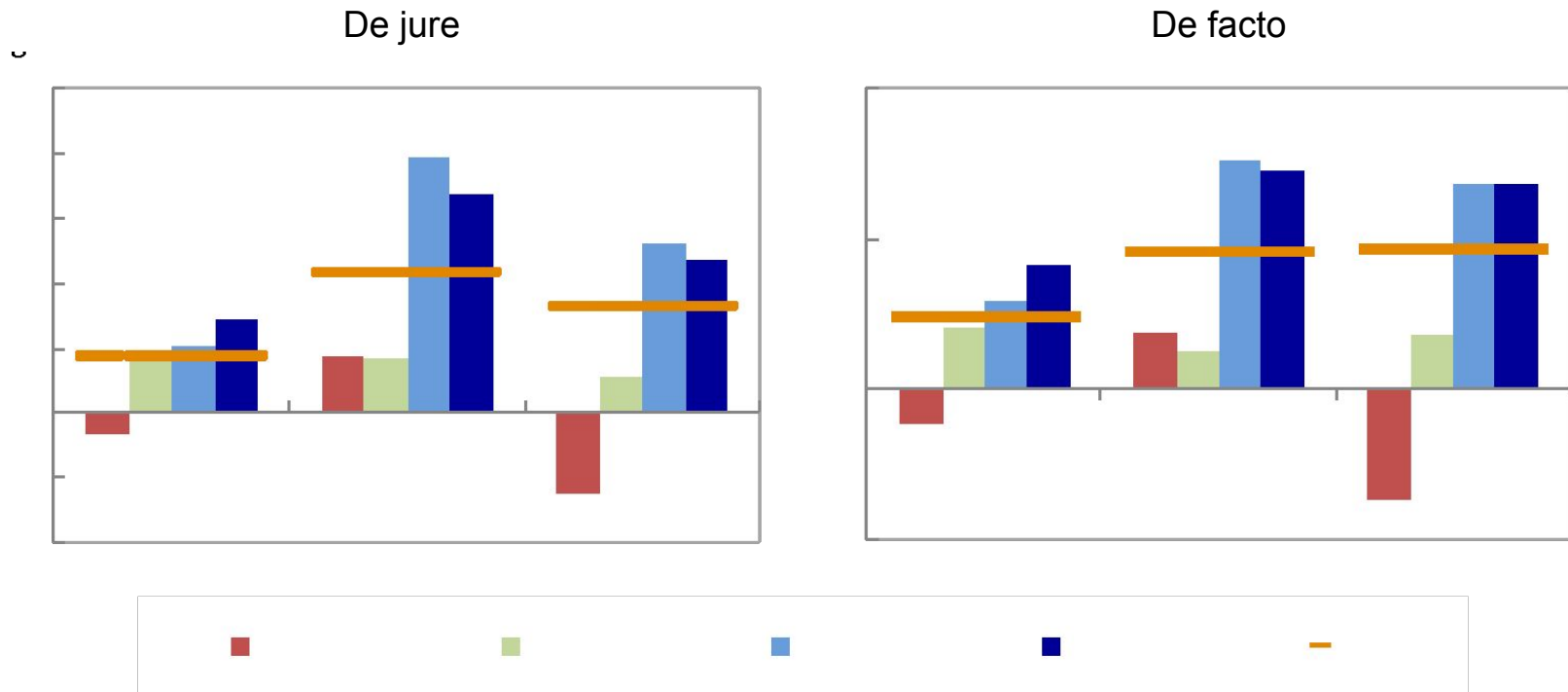
Inflation regression baseline: estimated effects (vs. floats)



Stylized facts: growth

Growth higher under de jure or de facto intermediate regimes

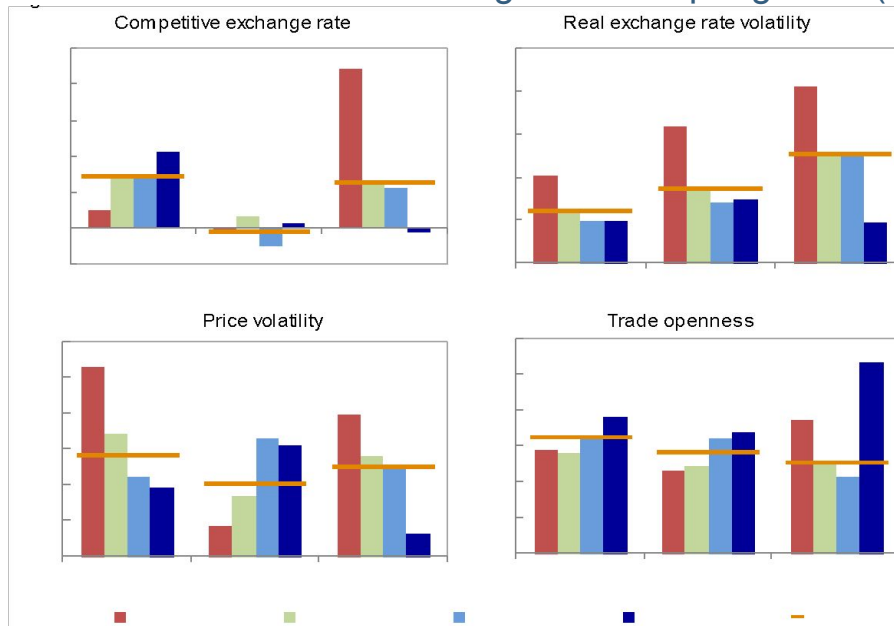
SSA median growth performance, various periods



Empirical results: growth

Potential channels through which e-rate regime affects growth

Unconditional: indirect effects of regime on output growth (de facto)



Compared to floats

- Pegs associated with
 - Less competitive (more overvalued) REER
 - Lower REER volatility, lower inflation, and greater trade openness
- Intermediates
 - More competitive REER
 - Lower price volatility, and greater trade openness

Regression analysis: indirect effects of regime on output growth 1/

	De jure		De Facto	
	Peg	Int	Peg	Int
Less competitive exchange rate 2/	0.117 ***	-0.083 ***	0.064 ***	-0.096 ***
Real exchange rate volatility 3/	-0.855 ***	0.469 **	-1.382 ***	-0.961 ***
Price volatility 3/	0.600 ***	-0.174 **	0.401 ***	-0.111
Inflation	-0.048 ***	-0.027 **	-0.011	0.025 ***
Trade openness	0.311 ***	0.075 ***	0.325 ***	0.110 ***

1/ Relative to floating regimes; includes other controls from growth regression.

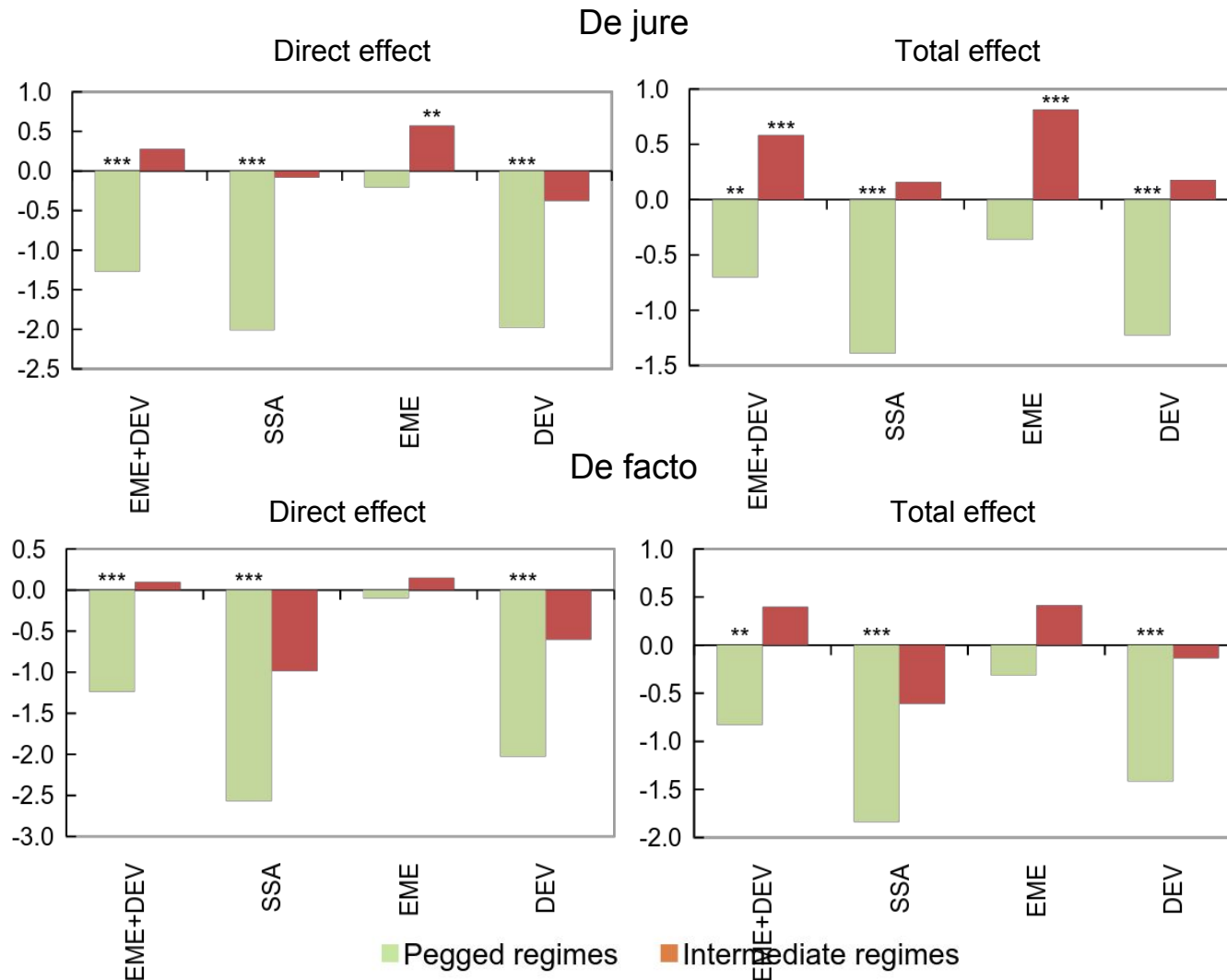
2/ Higher value indicates less competitive (more overvalued) real exchange rate.

3/ Volatility measured as standard deviation of monthly growth rates.

Empirical results: growth

Controlling for determinants, growth is lower under pegs in SSA; de jure intermediate regimes are generally associated with higher growth

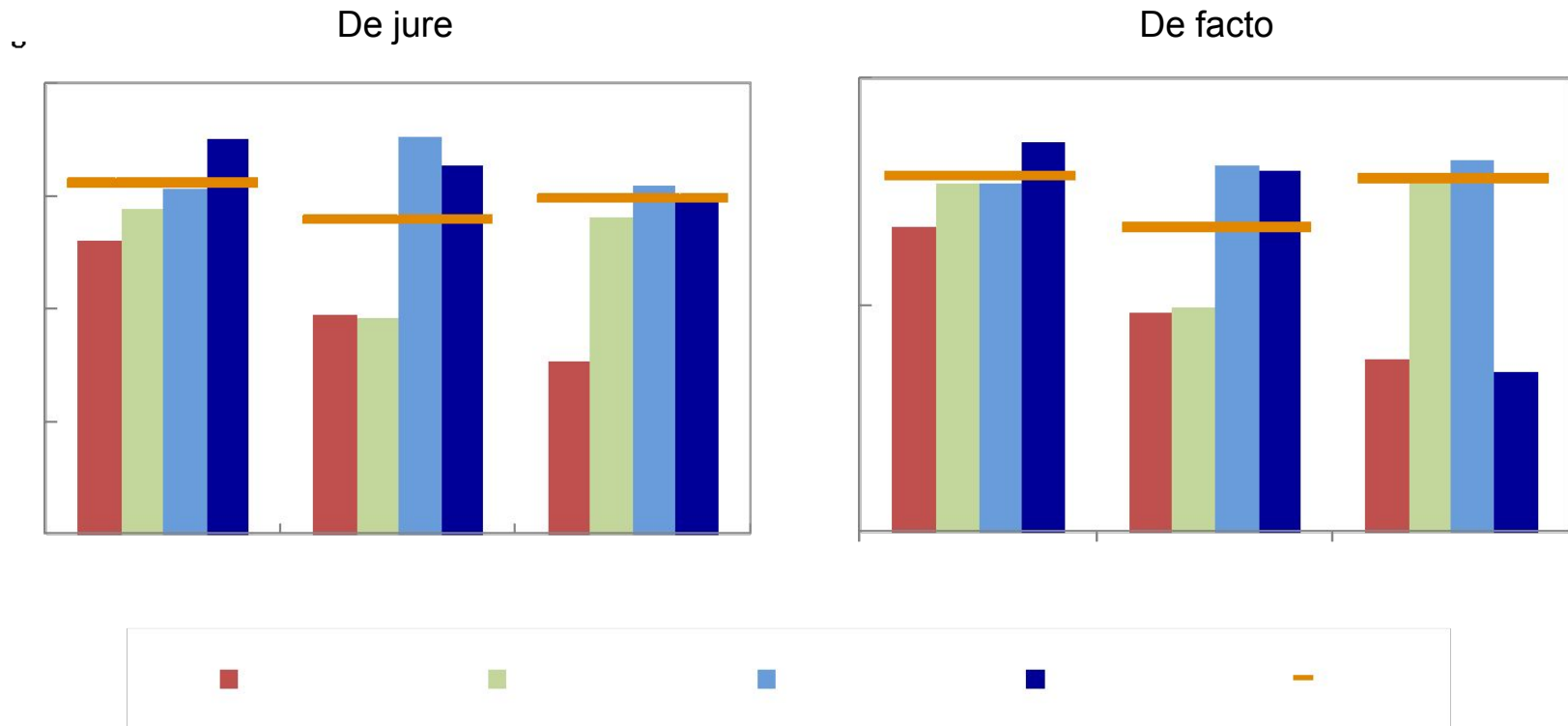
Growth regression baseline: estimated effects (vs. floats)



Stylized facts: output volatility

Small differences across regimes, overall lower volatility under floats

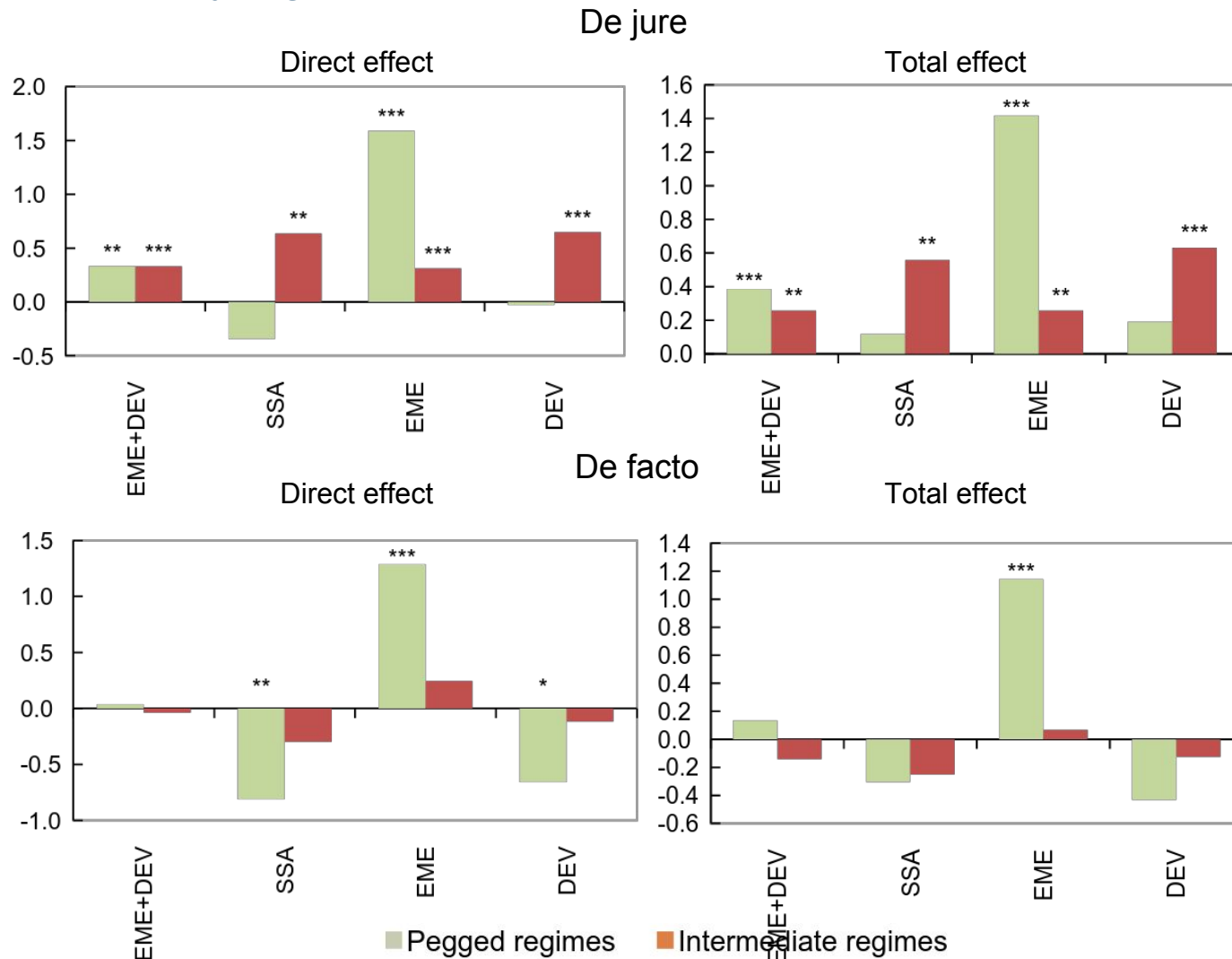
SSA median output volatility, various periods



Empirical results: volatility

Controlling for determinants, volatility is higher under de jure intermediates in SSA

Volatility regression baseline: estimated effects (vs. floats)

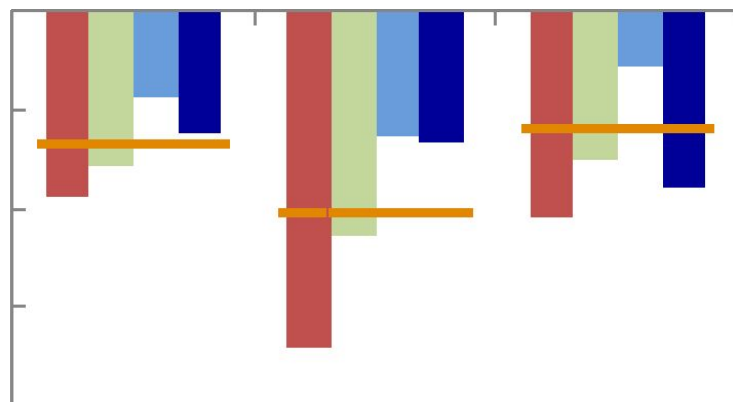


Stylized facts: fiscal balances

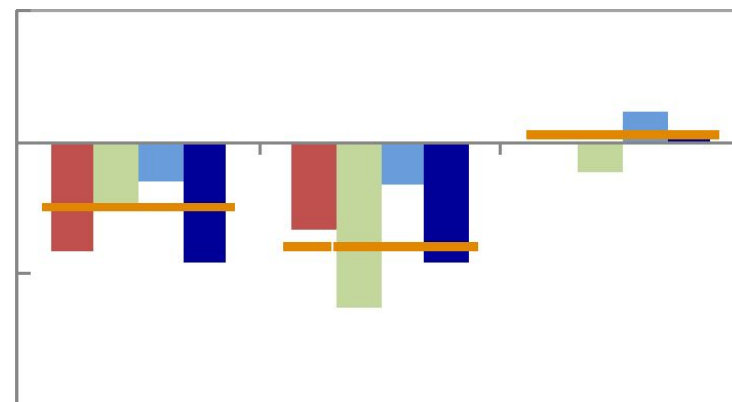
Intermediate regimes associated with the least fiscal discipline in SSA

SSA median fiscal balance to GDP (left) and primary balance to GDP (right)

Fiscal balance to GDP



Primary balance to GDP



Empirical results: fiscal discipline

- Controlling for determinants, intermediate regimes in SSA are associated with weaker (overall and primary) fiscal balances
 - 2 percent of GDP weaker fiscal balances relative to floats and pegs
 - Result driven primarily by the second sub-period 2001-2014
- Debt-to-GDP ratio as the measure of fiscal discipline: no substantial differences among regimes
- For the full EME & DEV sample
 - More flexible regimes appear to be associated with the most fiscal discipline (including slower debt accumulation)

Findings

- No universally “optimal” exchange rate regime: choice depends on country circumstances
- Insights on the role of regime on macroeconomic performance
 - Tradeoffs among the goals of low inflation, sustained high growth, and low output growth volatility across regimes
 - Different degrees of fiscal discipline
- Pegs
 - Best inflation performance but weaker growth
 - Better monetary discipline and greater policy credibility (peg as nominal anchor)
- Intermediates and floats
 - Higher growth relative to pegs but higher inflation
 - For de jure intermediates, higher output volatility
 - Weaker fiscal positions for intermediates

Policy recommendations

In the current environment

- Countries operating under pegs
 - Fiscal and structural policies must bear the burden of adjustment ensuring the sustainability of the regime
 - Reforms that enhance competitiveness and support growth

- Countries with intermediates and floats
 - Strengthen domestic monetary policy framework, ensure price stability to support a flexible regime
 - Exchange rate adjustment in response to prevailing external pressures
 - Fiscal adjustment to contain inflationary pressures from depreciations

World Economic and Financial Surveys

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130 **16**

I N T E R N A T I O N A L M O N E T A R Y F U N D

Thank You

The online edition of the
Regional Economic Outlook
for sub-Saharan Africa
is available at
www.imf.org

Annex

Exchange rate regime classification

- Based on IMF's *Annual Report on Exchange Rate Arrangements and Exchange Restrictions (AREAER)*
- Distinguishes between “de facto” and “de jure” regimes
- Fine and aggregated classifications

7-way classification	3-way classification
1. Hard pegs	1. Peg
2. Conventional pegs	
3. Basket pegs	2. Intermediate
4. Pegs within bands	
5. Crawling pegs	
6. Managed floats	
7. Independent floats	3. Float

Divergence between de jure and de facto

- Central bank commits to (de jure) float but intervenes
- Fear of floating?

SSA distribution of de jure and de facto classifications

		de jure		
		peg	intermediate	float
de facto	peg	686	52	20
	intermediate	6	413	185
	float	13	9	119
	total	705	474	324
	<i>consensus (percent)</i>	<i>97.3</i>	<i>87.1</i>	<i>36.7</i>

Similar developments in EME & DEV sample

EME & DEV de jure and de facto exchange rate regime aggregate classifications

