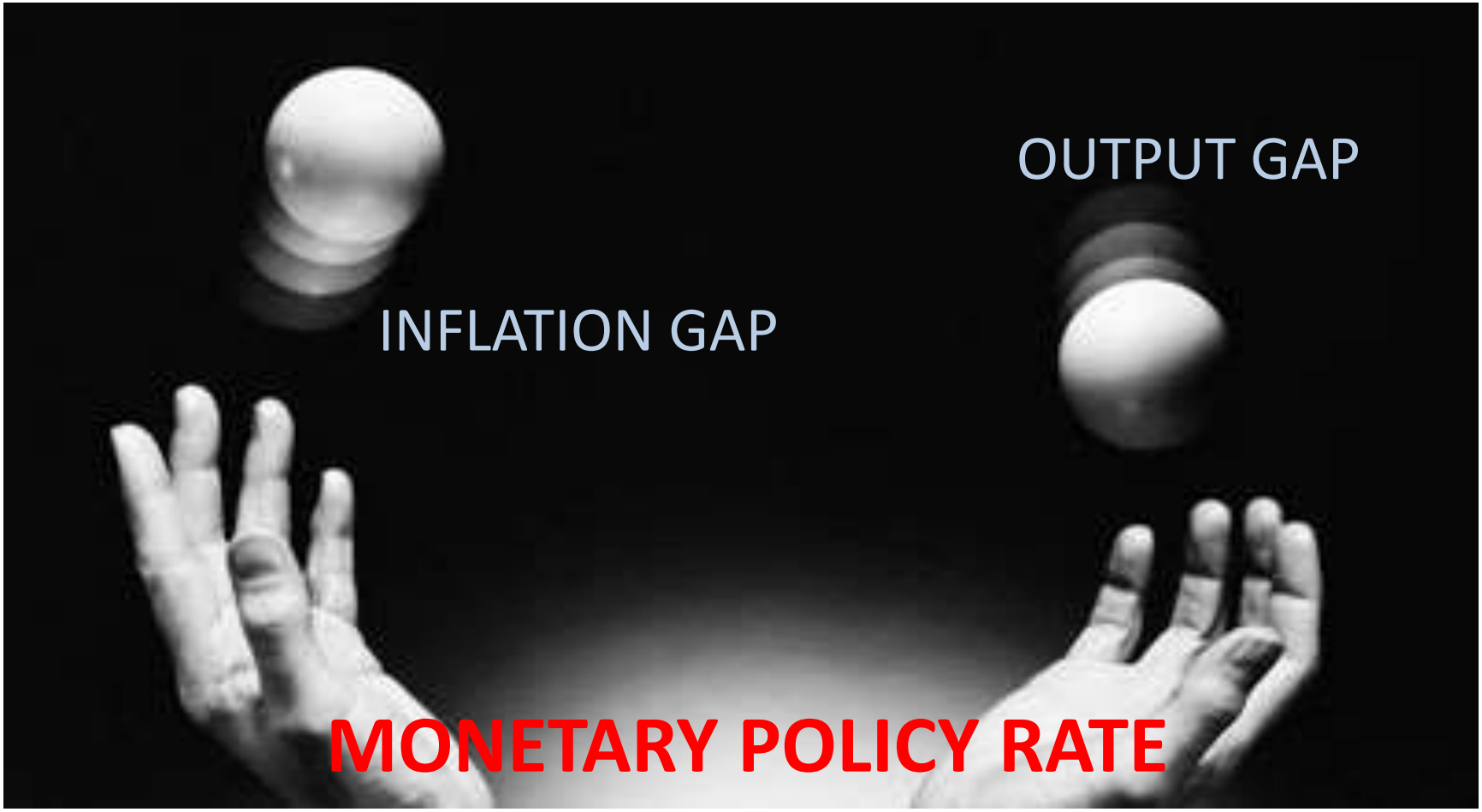
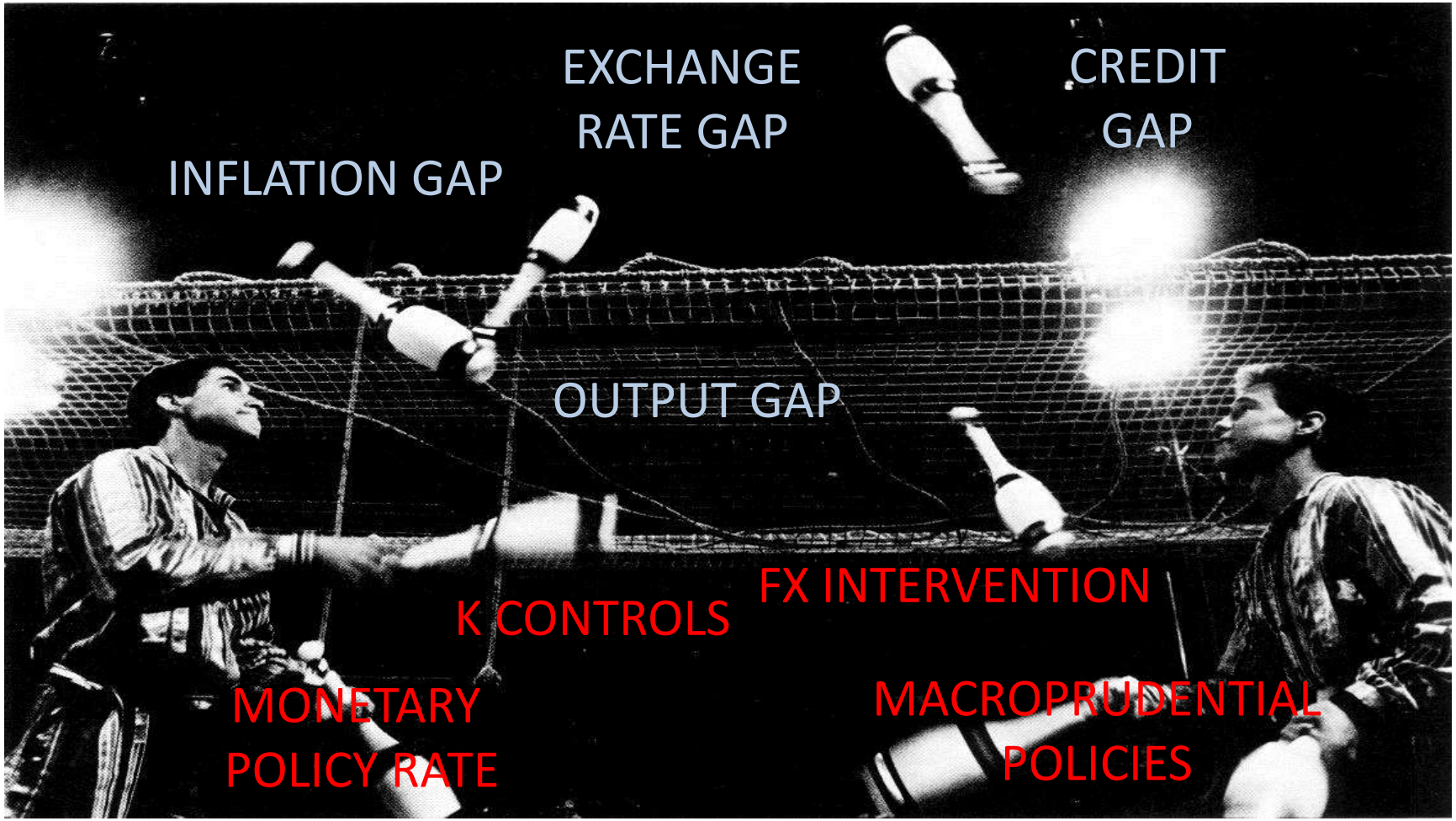
Keeping IT simple

Luis O. Herrera B.
Central Bank of Chile

Flexible IT before the GFC-08/09
Svensson (1997)



Monetary Policy in the New Normal
Blanchard et al (2014)

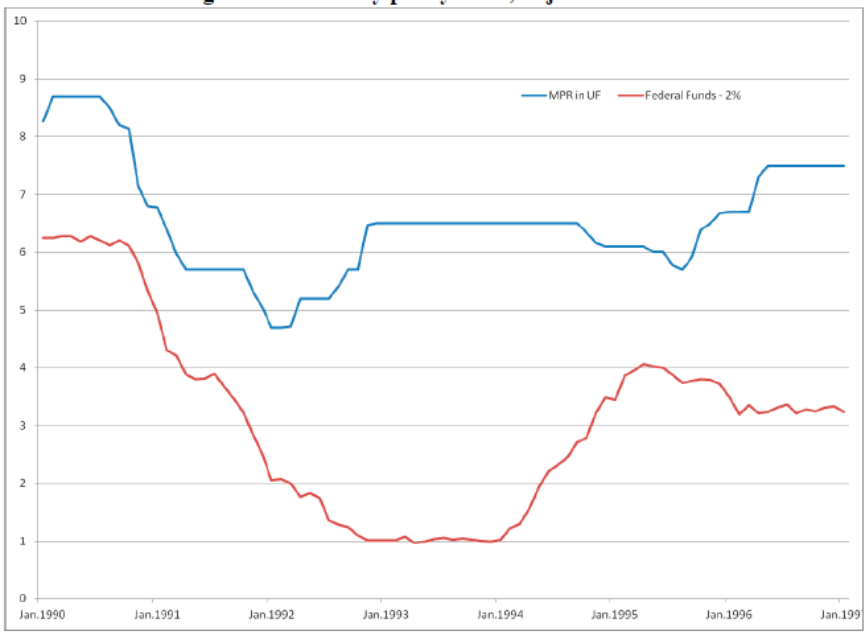


Chile´s IT + ERT in the 1990s.

Figure 4: The exchange rate band and the nominal observed rate

Sources: Bloomberg and Central Bank of Chile.

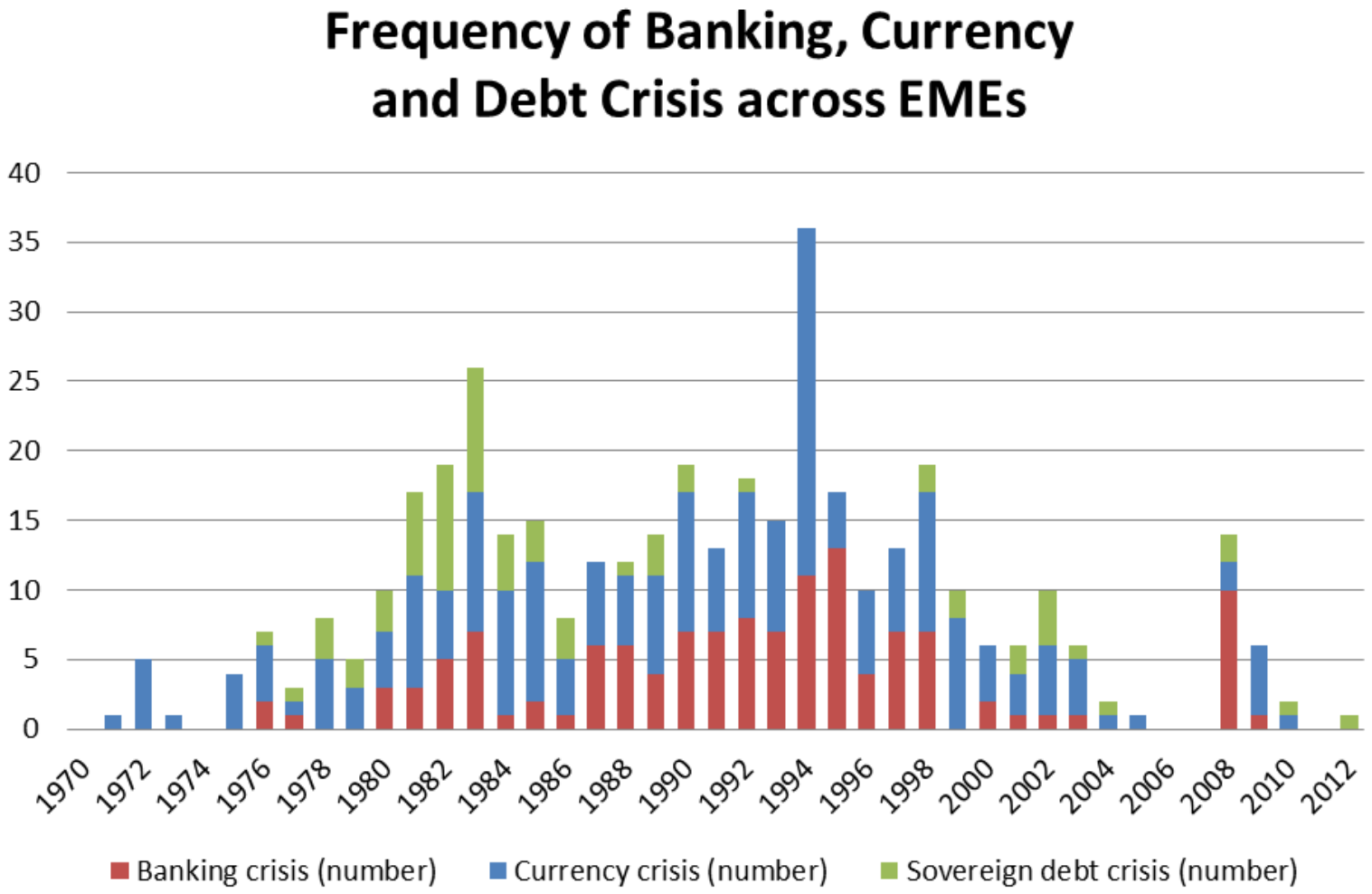
Figure 5: Monetary policy rates, adjusted for inflation



Source: Constructed using data from the Central Bank of Chile and Federal Reserve Bank of St. Louis.

Source: Carriere and García, 2013

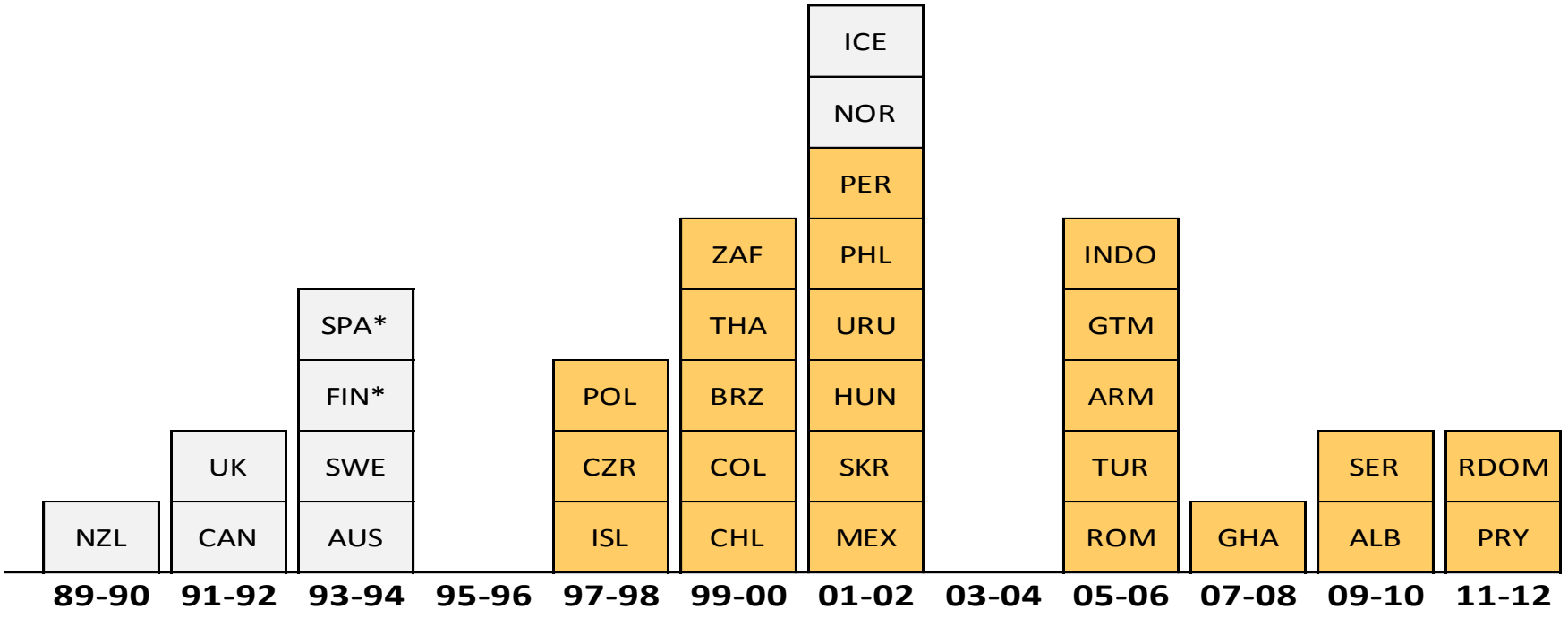
Growing dissatisfaction in EMEs with "intermediate" currency regimes



Source: Laeven and Valencia, 2011

Many EMEs adopted IT around 2000.

Adoption date of fully-fledged IT



(*) dropped in 1998

Source: IMF (2012)

Hopes about IT-cum-float in EMEs.

- Initial hopes about IT-cum-float in EMEs.
  - Stabilize inflation and inflation expectations.
  - Countercyclical monetary policy.
  - Improve incentive to hedge risks related to foreign currency borrowing. Reduce financial stability risks.
  - Increased central bank transparency and accountability.

Doubts about IT-cum-float in EMEs.

- Initial skepticism about IT-cum-float in EMEs.
  - Too soft. Weak monetary and fiscal institutions (Masson et al., 1996).
  - Too rigid. Little room to stabilize output/real exchange rates and accommodate supply shocks (Blanchard, 2003).
  - Won't work. Fear of floating, "original-sin" and financial stability (Calvo, 1999; Hausman & Eichengreen, 2001)

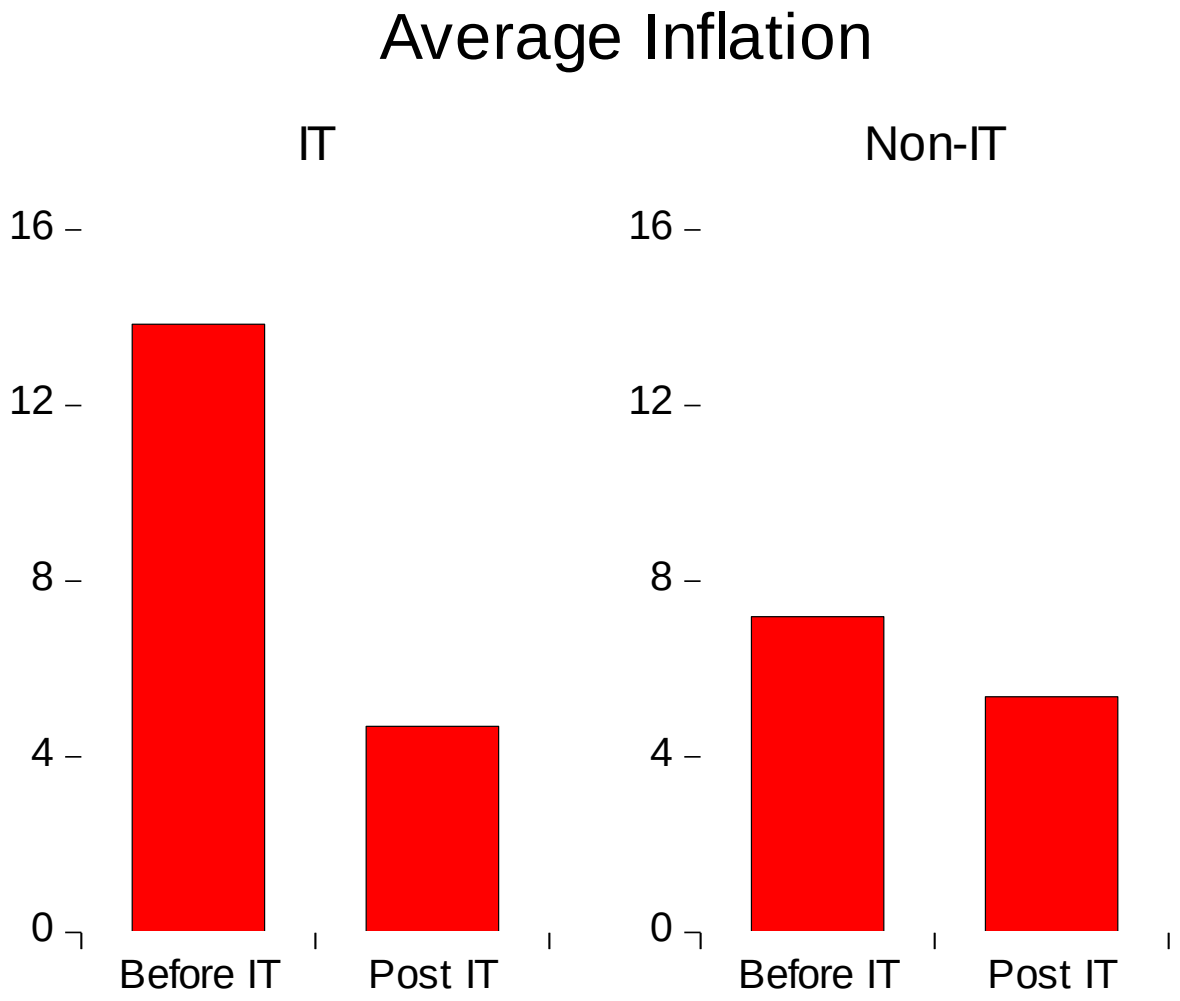
Measuring the performance of IT-cum-float in EMEs

- Ball and Sheridan(2005) methodology:

$$X_{i,t} = \alpha IT_{i,t} + \beta Z_{i,t} + \mu_i + \delta_t + \eta_{i,t},$$

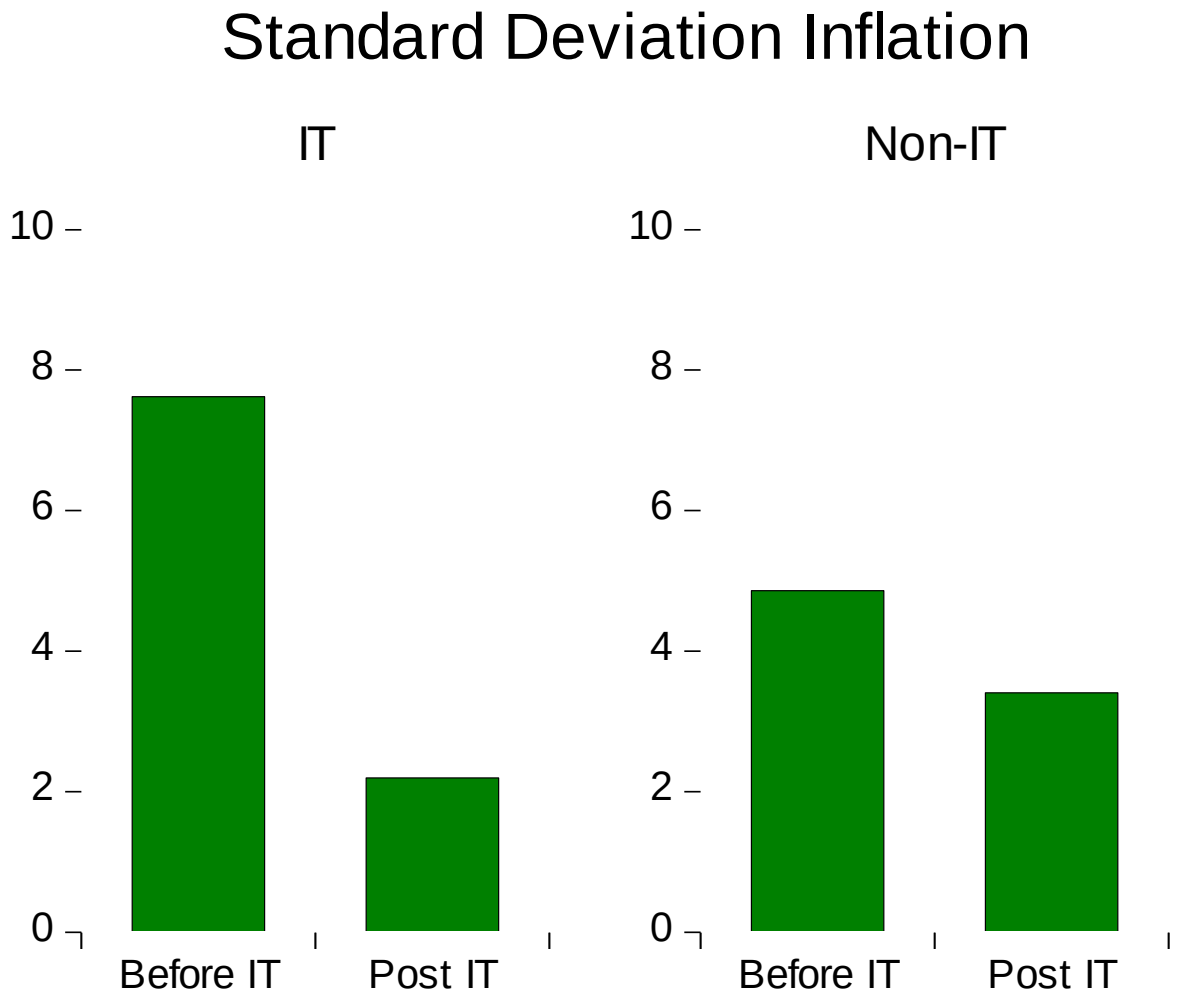
  - $X_{i,t}$ is a macroeconomic or macrofinancial variable of interest:
    - Inflation level, inflation volatility, output volatility, RER volatility, ER or OIL pass-through, inflation inertia, etc.
    - Credit boom, RER overvaluation, current account deficit, bank dollarization, fx leverage, etc.
    - Currency crisis or banking crisis.
  - α measures the impact of IT-cum-float on macroeconomic or macrofinancial performance.

Inflation Level in EMEs



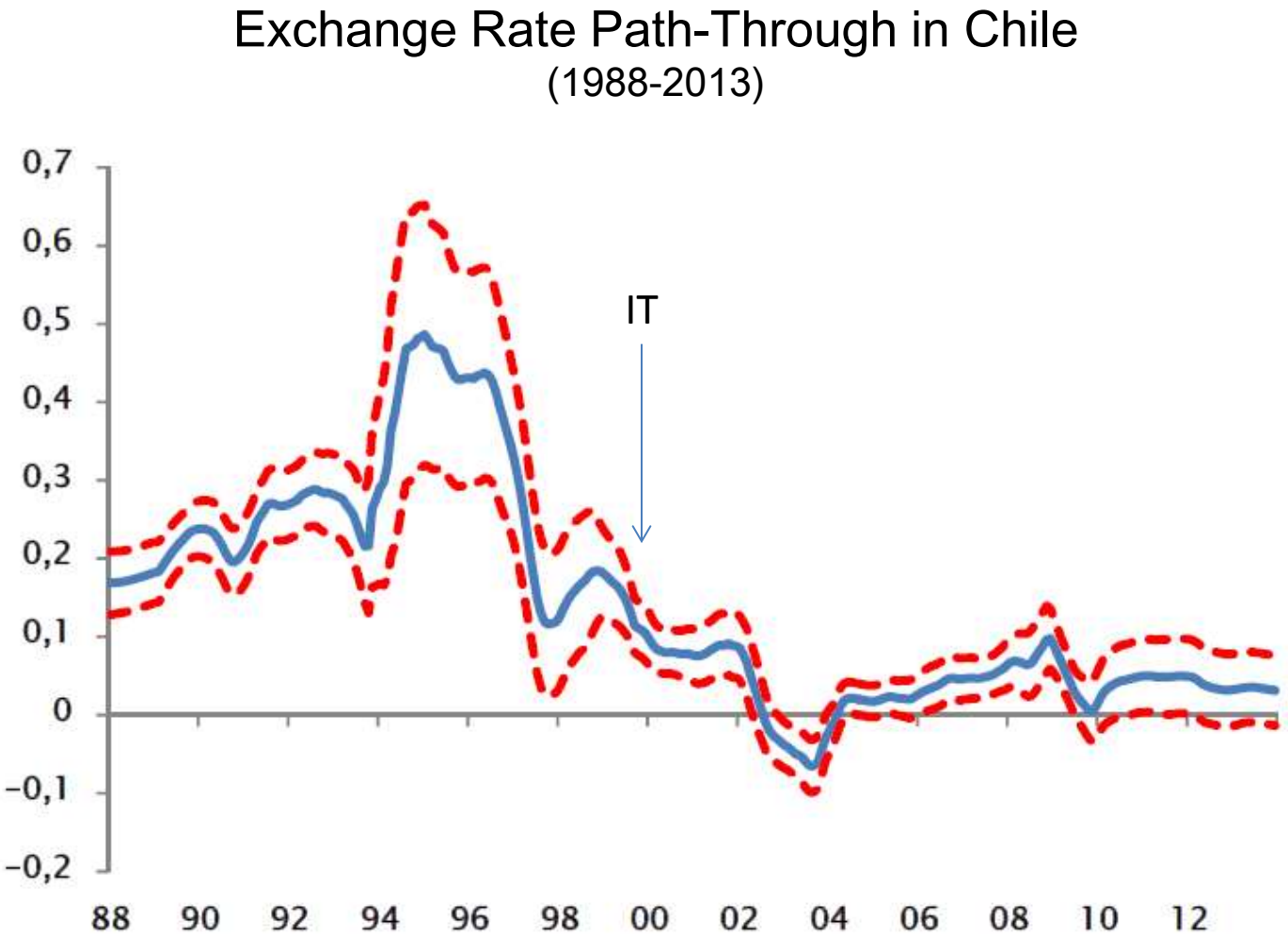
44 emerging countries, defined as those that appear on the MSCI Emerging Markets and Frontier Markets Index or the EMBI+ Index. Before IT for non-IT countries is before 2001. For IT countries is the date of adoption of formal IT.

Inflation Volatility in EMEs



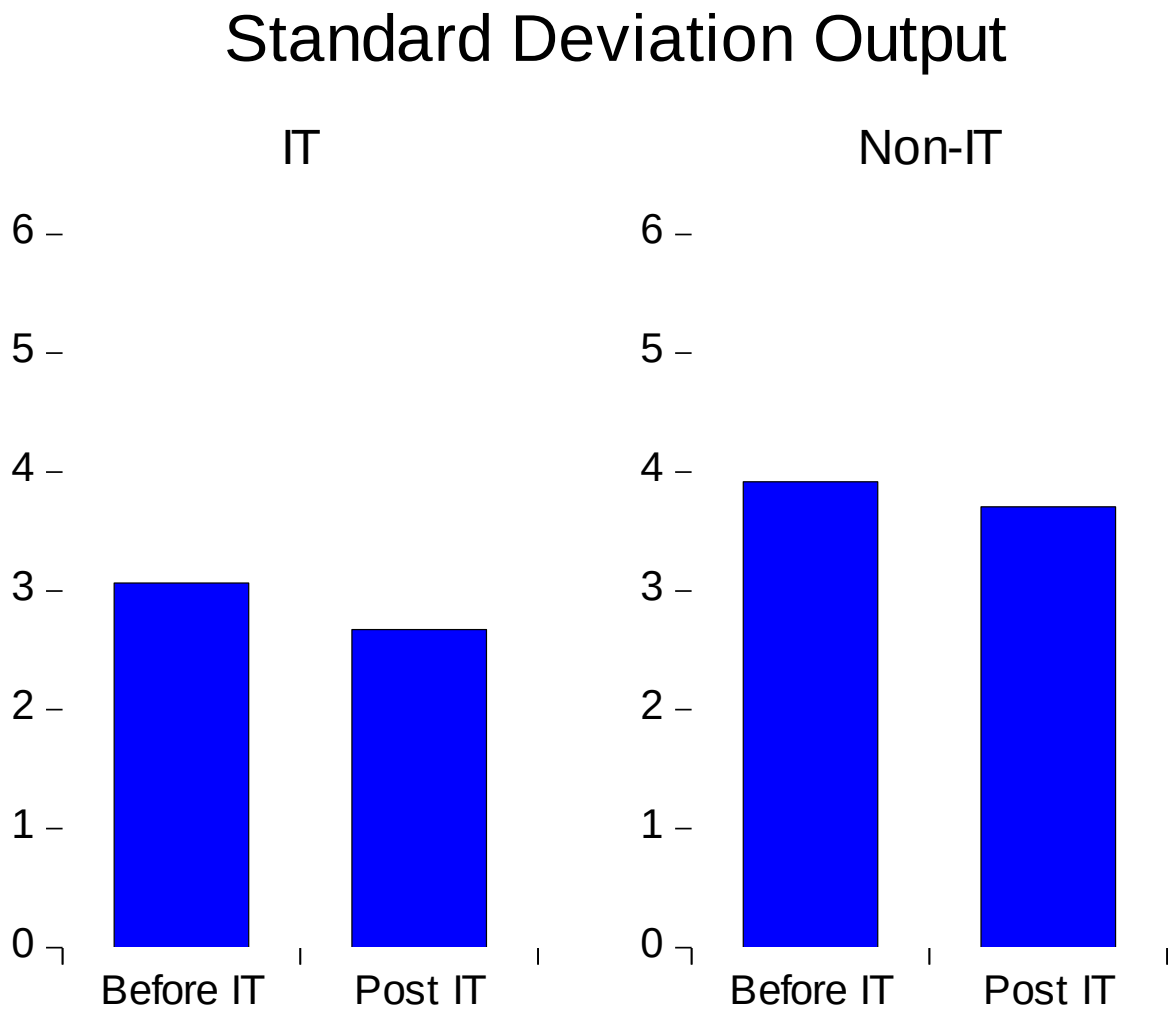
44 emerging countries, defined as those that appear on the MSCI Emerging Markets and Frontier Markets Index or the EMBI+ Index. Before IT for non-IT countries is before 2001. For IT countries is the date of adoption of formal IT.

Decline of the ERPT in Chile



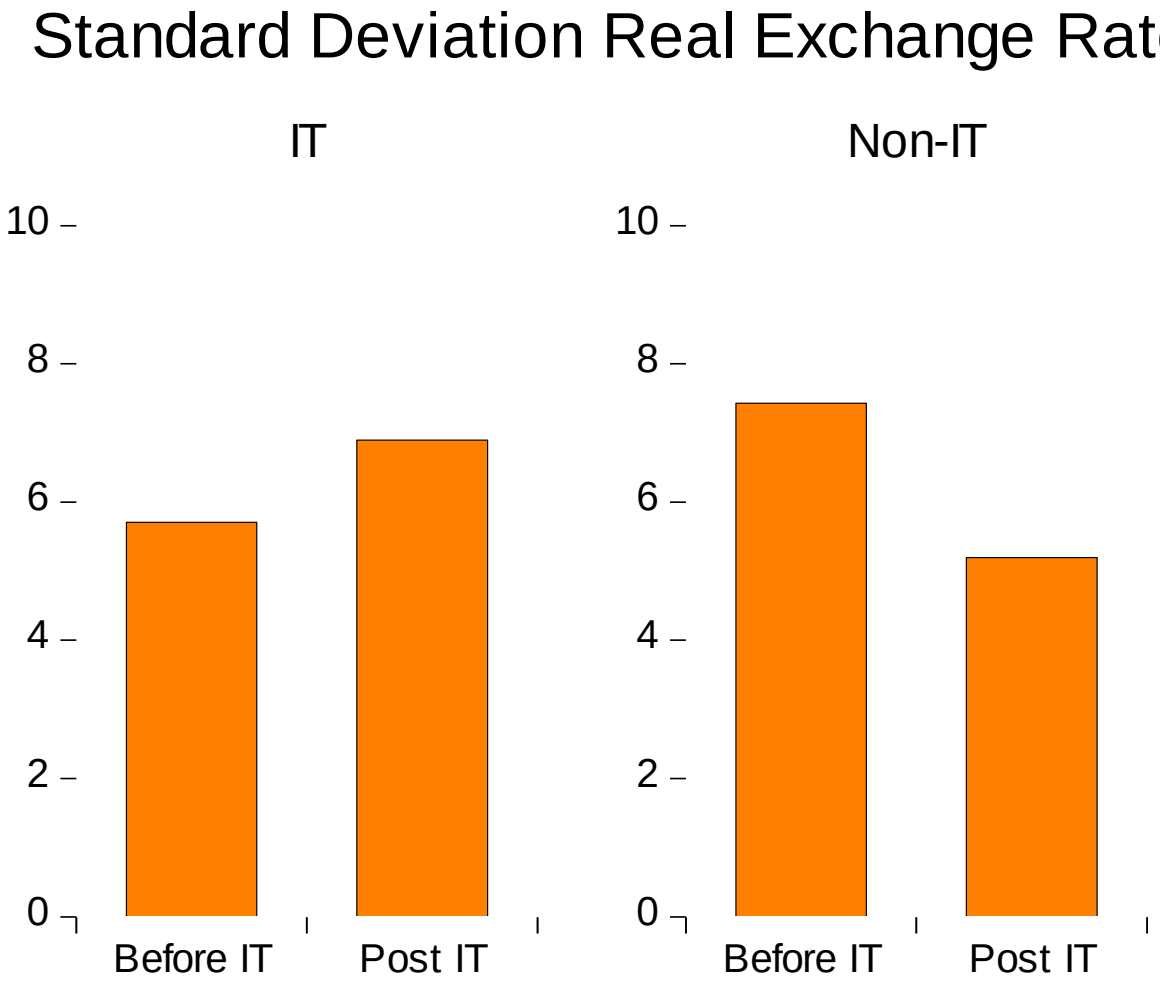
Source: Bertinato et al (2014)

Output Volatility in EMEs



44 emerging countries, defined as those that appear on the MSCI Emerging Markets and Frontier Markets Index or the EMBI+ Index. Before IT for non-IT countries is before 2001. For IT countries is the date of adoption of formal IT.

Real Exchange Rate Volatility in EMEs



44 emerging countries, defined as those that appear on the MSCI Emerging Markets and Frontier Markets Index or the EMBI+ Index. Before IT for non-IT countries is before 2001. For IT countries is the date of adoption of formal IT.

Macroeconomic performance of IT-cum-float in EMEs

- Using non-IT-EMEs as control group, empirical studies find that IT in EMEs contributes to attain:
  - Lower inflation level and volatility.
  - Greater stability of inflation expectations.
  - Less output volatility.
  - Lower RER volatility.
  - Decline of OIL and ER pass-through coefficients.

Performance of IT-cum-float during the GFC- 08/09 and its aftermath.

- Carvalho Filho (2011) finds that ITers implemented more aggressive countercyclical monetary policies and let the exchange rate absorb the adverse external shock, while keeping medium term inflation expectations.
- Rose (2013), however, finds no differences in the macroeconomic and financial performance of alternative monetary regimes, including IT, during the recent global financial crisis and its aftermath, between 2008 and 2012.

Performance of IT-cum-float during the GFC- 08/09 and its aftermath.

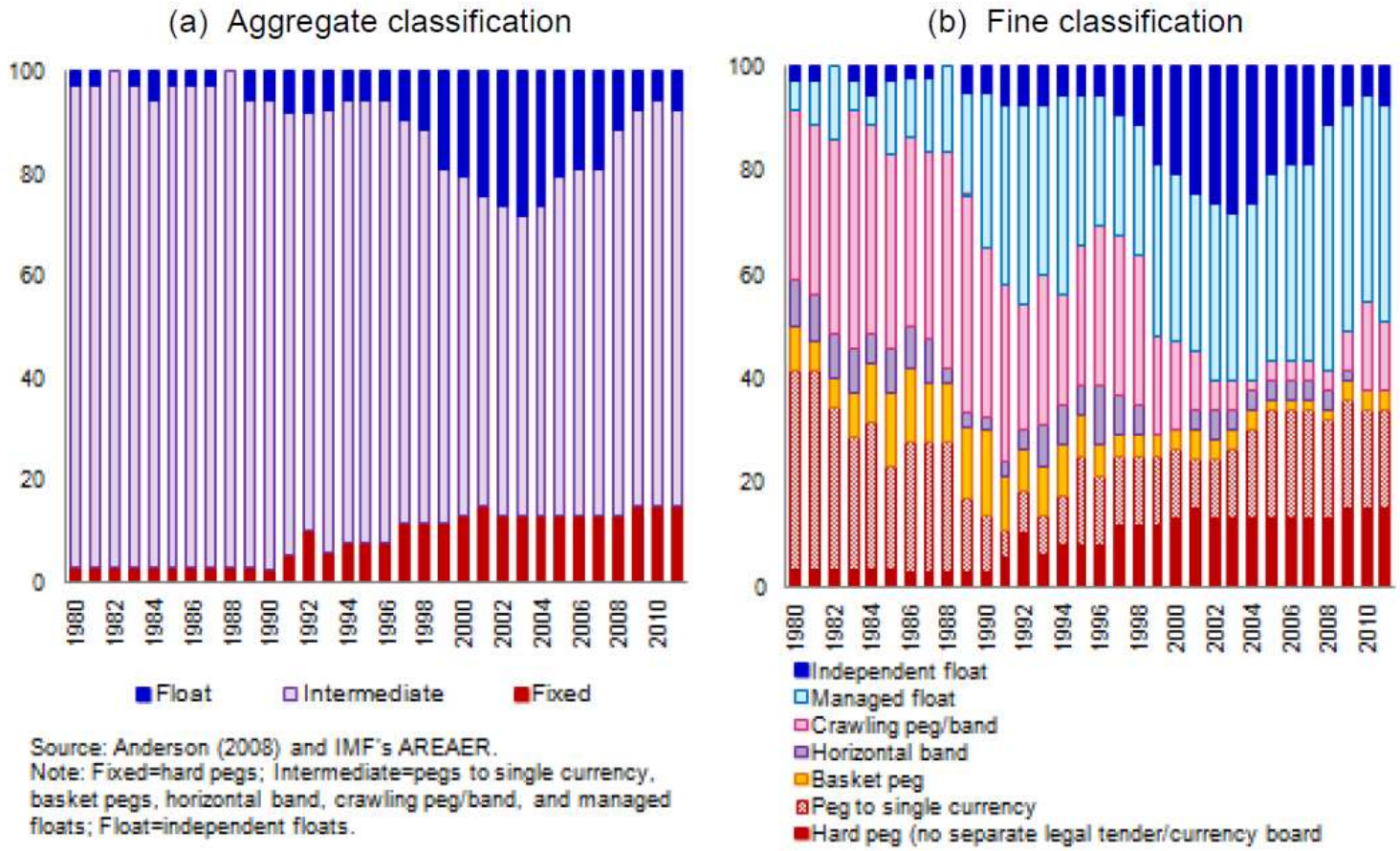
ITers in the GFC-08/09

	Δ GDP	Δ RIR	Δ RER	Δ P	Δ Credit-to-GDP
GFC	**-3,06**	1,00	0,55	-0,25	**-2,87**
	(0,00)	(0,18)	(0,00)	(0,48)	(0,00)
GFC*IT2007	**1,10**	-1,85	**-2,59**	0,156	**2,05**
	(0,10)	(0,13)	(0,05)	(0,80)	(0,03)
country fixed	yes	yes	yes	yes	yes
time fixed	yes	yes	yes	yes	yes
N	43	43	43	43	43
T	10	10	10	10	10

43 emerging countries, defined as those that appear on the MSCI Emerging Markets and Frontier Markets Index or the EMBI+ Index. GFC is a dummy variable equal to 1 from 2008 to 20012, and 0 from 2003 to 2007.

Many EMEs adopted floating ERR around 2000.

Exchange Rate Regimes in EMEs
(IMF's De Facto Classification 1980-2011)



Source: Anderson (2008) and IMF's AREAER.
Note: Fixed=hard pegs; Intermediate=pegs to single currency, basket pegs, horizontal band, crawling peg/band, and managed floats; Float=independent floats.

Source: Ghosh, Ostry and Qureshi(2013)

Macro-financial performance of flexible exchange rates in EMEs (1/2)

- Main results indicate that:
  - Episodes of rapid credit growth are less frequent in flexible ERRs (Magud et al, 2011, Mendoza and Terrones, 2008; Ghosh et al, 2014.)
  - FX-leverage and FX-loans at banks are lower in flexible ERRs (Ghosh et al, 2014; Jeanneau and Micu, 2002.)
  - Reduction of currency mismatches in Latin America after adoption of floating exchange rates (Kamil, 2012; Martínez and Werner, 2002; Cowan, Hansen and Herrera, 2005.)
  - Episodes of REER overvaluation and current account deficit are less frequent in flexible ERRs (Ghosh et al, 2014)

Macro-financial performance of flexible exchange rates in EMEs (2/2)

- Banking crisis and currency is less frequent in flexible ERRs, and more frequent in intermediate regimes than in hard pegs. (Ghosh et al, 2014; Domac and Martinez Peria, 2003; Husain et al, 2005; Angkinand and Willet, 2010; Bubula and Otker-Robe, 2003)
- Growth collapses are more frequent in “hard” pegs (Ghosh et al, 2014)

Performance of IT-cum-Float during Capital Inflows Episodes.

Performance of IT-cum-FLOAT in Capital Inflows Episodes

	Δ Credit-to-GDP	Δ RER	Δ CAS-to-GDP	Δ GDP	Δ Credit-to-GDP
KF	**1,70**	1,01	**-1,56**	**1,01**	**2,09**
	(0,00)	(0,14)	(0,00)	(0,01)	(0,00)
FLOAT*KF	**-1,98**	**2,35**	0,49	-0,51	
	(0,03)	(0,04)	(0,36)	(0,41)	
IT*KF					**-4,13**
					(0,00)
country fixed	yes	yes	yes	yes	yes
time fixed	yes	yes	yes	yes	yes
N	31	31	31	31	31
T	23	23	23	23	23

KF is a dummy variable representing a capital inflow episode (Cardarelli et al, 2010).

Episodic capital controls

- In theory, countries can introduce capital controls and regain monetary independence without giving away exchange-rate stability
- The evidence on the macro effectiveness of capital control remains inconclusive.
- Chile´s experience with encaje.
- Many studies find that “episodic” capital controls are a useful tool to reduce specific macroprudential risks but their impact on macroeconomic variables is not significant or, at least, very hard to pin-down.

Conclusions

- Initial hopes about IT-cum-float in EMEs have been achieved:
  - Stabilize inflation and inflation expectations.
  - Countercyclical monetary policy.
  - Improve incentive to hedge risks related to foreign currency borrowing. Reduce financial stability risks.
  - Increased central bank transparency and accountability.

Conclusions

- But IT-cum-float is not a panacea.
  - Global financial cycle also affects floating currencies. There is a role for MaP and CFMs.
  - In the real world, there are RER misalignments and FX intervention and MP can help to correct them.
  - The relevant question is not theoretical, but operational.
- Need more “tolerance of floating”.

Keeping IT simple

Luis O. Herrera B.
Central Bank of Chile