Emerging Market Economies in the Global Economy: Financial Stability and Competiveness

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Society for the Study of Emerging Markets

January 3, 2015, Boston

Terms of Trade Shocks, Competitiveness and Stability: The Role of Foreign Asset Management

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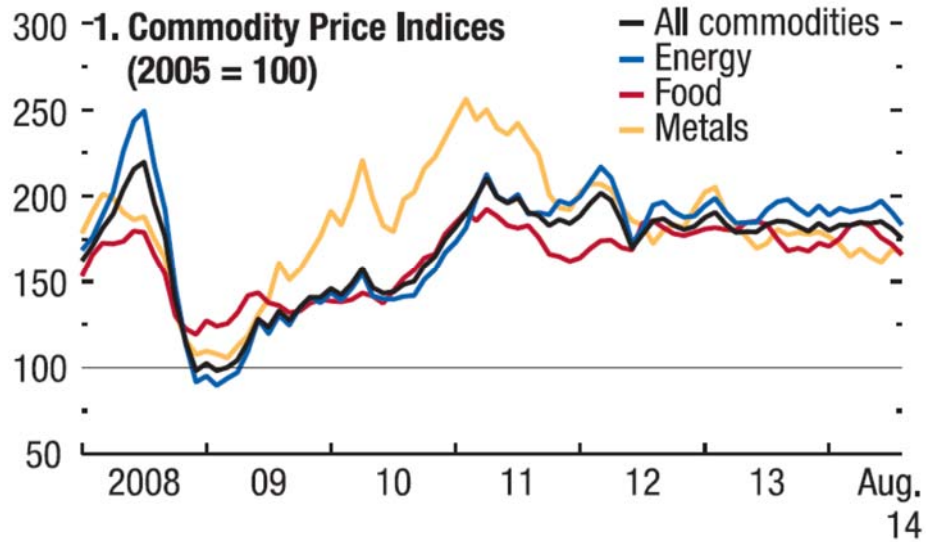
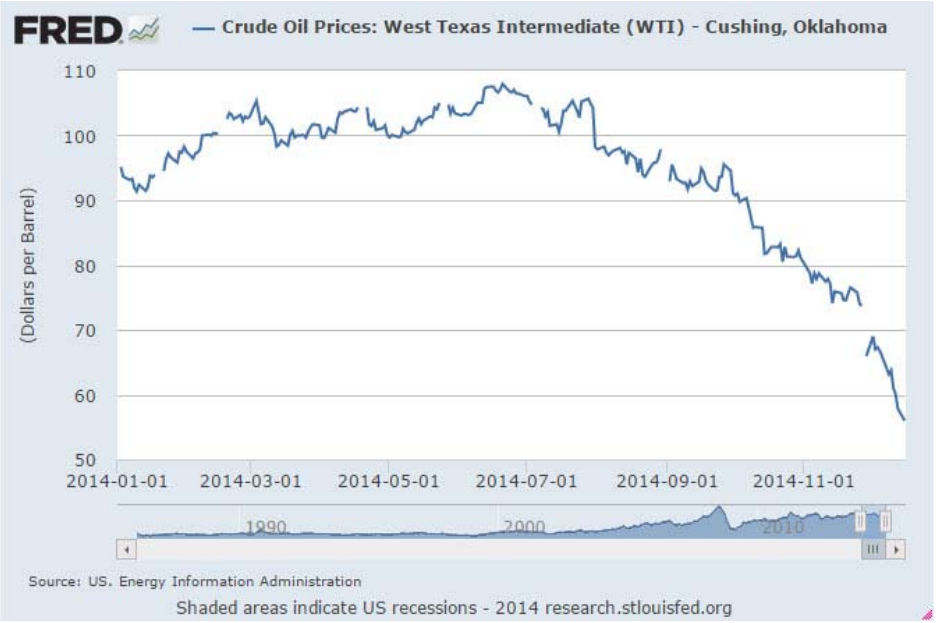
USC & the NBER

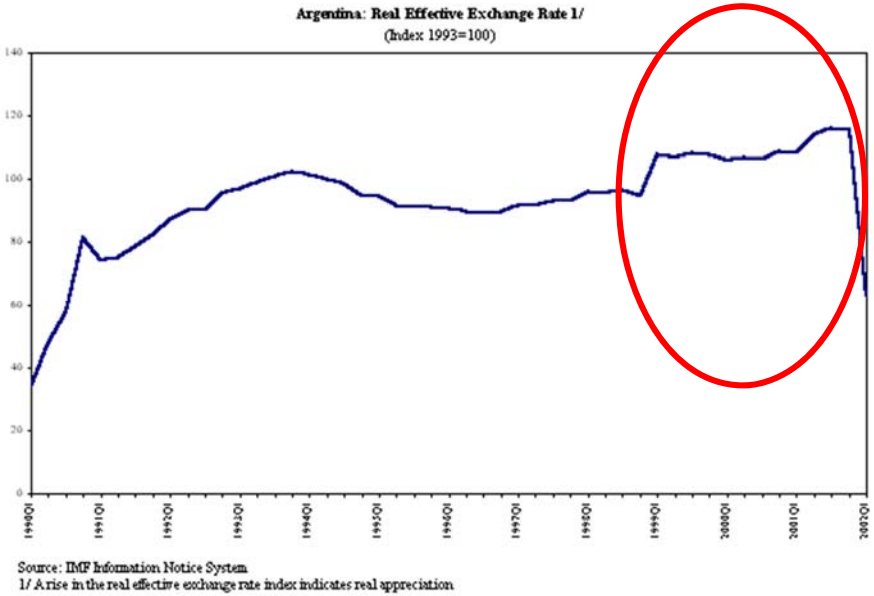
TOT volatility - the new normal after the GFC





The agenda:

- **TOT shocks may induce excessive REER volatility, reducing competitiveness and destabilizing the economy, ultimately leading to financial crisis.**
- **Example: Argentina 1991-2001, pegged to the US dollar, at times of a sharp dollar real appreciation, and deterioration of its terms of trade during the last 1990s→ crisis in 2001-2**



Argentinan REER 1990-2001

U.S. $ trade weighted index 1990-

- **Possible challenges in 2015: appreciating dollar, declining commodity prices induce**

Negative TOT shocks affecting commodity exporters

Positive TOT shocks affecting commodity importers

In due course, the TOT's pendulum would switch back.

Policy Goals and Challenges: Design exchange rate, foreign assets management, and counter-cyclical fiscal policy aiming at greater REER stability at times of ToT and capital flows instability

Aizenman and Riera Crichton (2014 NBER WP 20646, VOXEU)

An emerging configuration:

Managed exchange rate flexibility,
buffered by pro-active IR and SWF management.

For IT countries, SWF may be used as a prime buffer reducing the REER effects of TOT shocks, as part of a fiscal rule [Chile and other countries].
This configuration may apply also to commodity importing countries.

The Global Financial Crisis (GFC) validated the buffer value of IR and the active management of SWF, possibly as part of a fiscal rule inducing counter cyclicality and stabilizing REER.

Ideally, to stabilize *n* targets, one wishes to use at least *n* independent instruments, allocating the instruments to the target that fits their comparative advantage [Tinbergen (1952), Mundell (1962) and Theil (1964)].

To illustrate, the dual mandate of the US FED calls for aiming at two targets – inflation and employment. While useful, IT rule at best may put the US on the frontier of the trade-off between these two targets, but its efficacy may be enhanced by other policy instruments.

Indeed, it’s far from obvious why both in the US and the Eurozone, the burden of stabilization during the past five years has have been allocated mostly to the central bank, with limited and declining use of other instruments.

A superior macro configuration outlined by Chile & other EMs:

IT and IR management by CB

SWF management integrated with the fiscal budgets via fiscal rule

Target *Policy-horizon*	**Agency**	**Instrument**	**Example**
Inflation ***Short/ intermediate run***	CB	IT	Increase real interest rate at times of positive inflation gap [Taylor's principle]
External sector stability ***Short/ intermediate run***	CB	IR & Exchange rate regime management, buffered by prudential regulations	Mitigate the balance sheet exposure of short term external debt by hoarding international reserves, buffered by prudential regulation aiming at shifting the composition of borrowing from hard currency debt to local currency and equity instruments
Output and real exchange rate stabilization **Intermediate / long run**	SWF, Treasury	Accumulation / spending rule Fiscal Rule linked to SWF	In times of plenty – export prices well above a properly projected trend - channel a share of revenue surpluses to the SWF. In lean times – export prices well below properly projected trend – de-cumulate the SWF, buffering the fiscal shortfalls associated with the negative income effects of weak ToT.

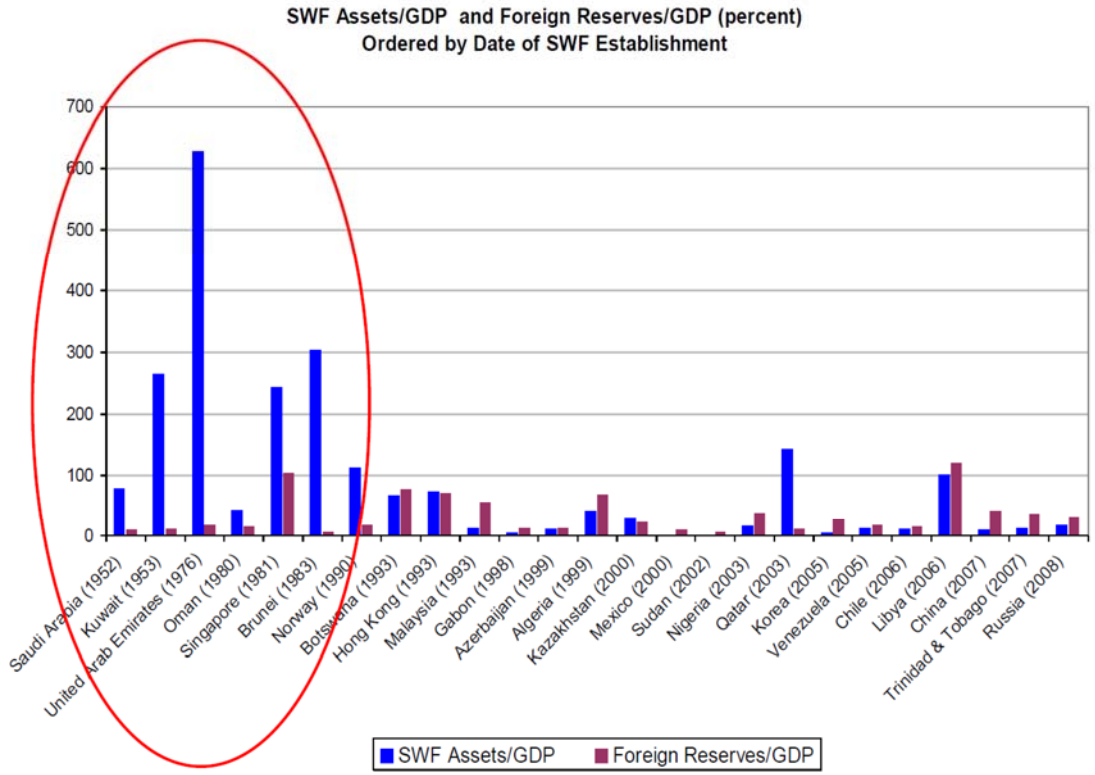
Aizenman and Riera Crichton (2014, NBER WP 20646) analyzes the degree to which the growing importance of sovereign wealth funds [SWFs], and the diffusion of inflation targeting and augmented Taylor rules have impacted the post crisis adjustment to the challenges associated with terms of trade and financial shocks.

Main results:

- Active management of IR and SWF reduces the effects of transitory CTOT shocks on the real exchange rate.
- The buffer effect showed its strongest influence during the 80's, 90's and the end of the Great Moderation (2003-2007).
- Yet, during the great recession (2008-2009) we observed disconnect between the CTOT – REER association, and the role of reserves.

- The REER-CTOT relationship resumes during the post-great recession period (2010-2013) and reserve buffering returns but not at the levels observed previous to the crisis.
- We identify a “substitution” between the roles IR and SWF - SWFs take over the buffering of the REER and the real GDP during the Great Recession and the post-Great Recession period.
  - Inflation targeting (IT) matters, potentially diverting resources to the preservation of domestic price stability: IT countries seem to give up the use of reserves to buffer against CTOT shocks, possibly relegating this role to the SWFs.
  - In countries that follow an augmented Taylor rule, their monetary authorities place larger weight on output gaps; while inflation gains importance for IT countries.

- The nature of the regime matters - non IT countries switch from ‘REER stabilization’ to inflation targeting when committing to a formal IT rule.
- Countries with older SWFs have more sovereign assets relative to IR Source: Aizenman and Glick (2010)



To conclude, our research supports the gains from the following possible policy assignments:

Managed exchange rate flexibility helps emerging markets facing ToT and financial instability – nominal ER appreciation and hoarding at times of plenty, and depreciation in bad times provide a valuable automatic stabilizer [Frankel (2010), Aizenman, Chinn, Ito (2011)].

- In times of plenty – when export prices are well above a properly projected trend -
  hoard IR and channel a share of revenue surpluses to the SWF.
- In lean times – when export prices are well below properly projected trend -
  de-cumulate IR and SWFs, buffering the fiscal shortfalls associated with the negative income effects of weak ToT.

- Coordination between the various policies [IR and SWF management, IT, Fiscal Rule] may be essential for the stabilization efficacy at times of higher volatility.
- The logic of linking a country's buffer funds (international reserves, SWFs, public debt) with the fiscal budget can be applied to any country once we recognize that the public debt is akin to Sovereign Liability Fund – a negative SWF.
- BY stabilising the economy in the presence of volatile CTOT and other shocks, counter-cyclical policy is a worthy goal for all countries.
- **While properly managed IT deals with inflation and price stability, generically IT and Taylor rules do not suffice to stabilise both output and inflation. The logic of Tinbergen rules of policy design imply that at times of large and persistent shocks, IT rules should be complemented with fiscal rules, as has been clearly illustrated by Chile and several other countries.**

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