

The future of macro-economic and monetary integration in Europe

**Macroeconomic adjustments in the middle income
countries: implications for the euro adoption**

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Plan

1. Cracow University of Economics
2. Main line of research in the Department of Macroeconomics – publications
3. Middle income countries (MICs)
4. Impact of the crisis on MICs
5. Adjustments to the crisis
6. Conclusions

Cracow University of Economics

<http://www.uek.krakow.pl/en>

HISTORY

- Wyższe Studium Handlowe (Higher Trade School) founded on 25 May 1925
- On 1 October 1925 the first academic year was inaugurated. This moment is considered the birth of today's Cracow University of Economics

MISSION

Rerum cognoscere causas et valorem

STRUCTURE

Cracow University of Economics has four Faculties, all of which have full academic rights:

- Faculty of Economics and International Relations

Department of Macroeconomics (12 academics):

- Jean Monnet Programme: European Module: *Strategies for the Euro Area Enlargement* (06/0142)
- NBP Programme: Mechanisms of Euro Area Functioning

- Faculty of Management
- Faculty of Commodity Science
- Faculty of Finance

Department of Macroeconomics – Main Publications

(Polskie Wydawnictwo Ekonomiczne, Warszawa:

<http://www.pwe.com.pl/kategorie?PHPSESSID=&q=wojtyna>)



Financial Crisis and its Impact on Middle Income Countries (2011)



Relations between Productivity, Incomes and Employment in Countries on Different Level of Development (2010)



Macro- and Microeconomic Adjustments in Middle Income Countries after Financial Crises (2009)



Institutions and Economic Policy in Middle Income Countries (2008)

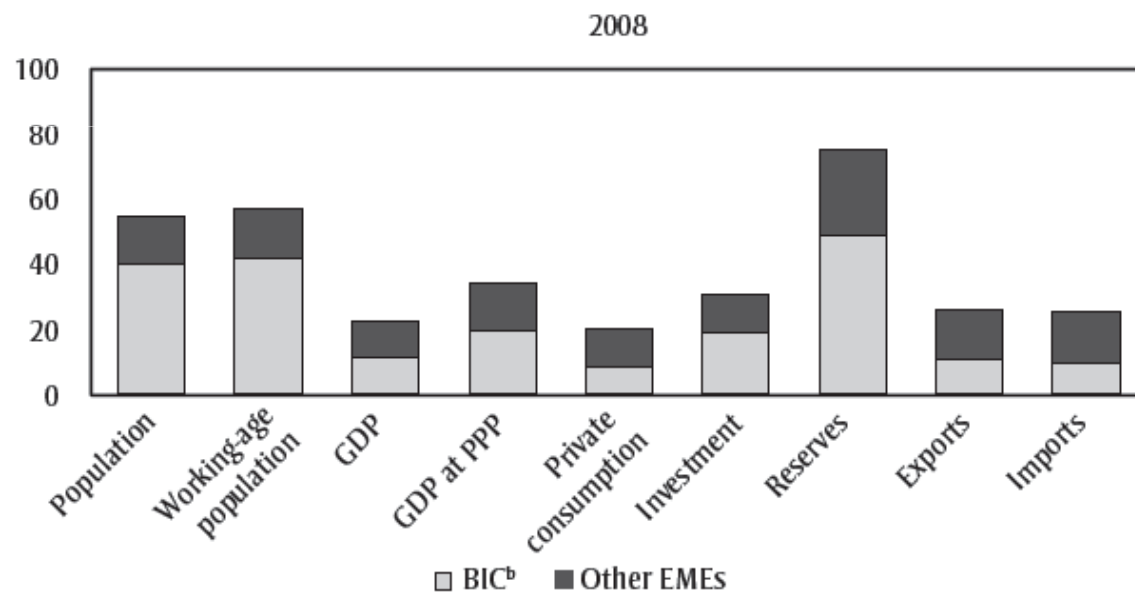
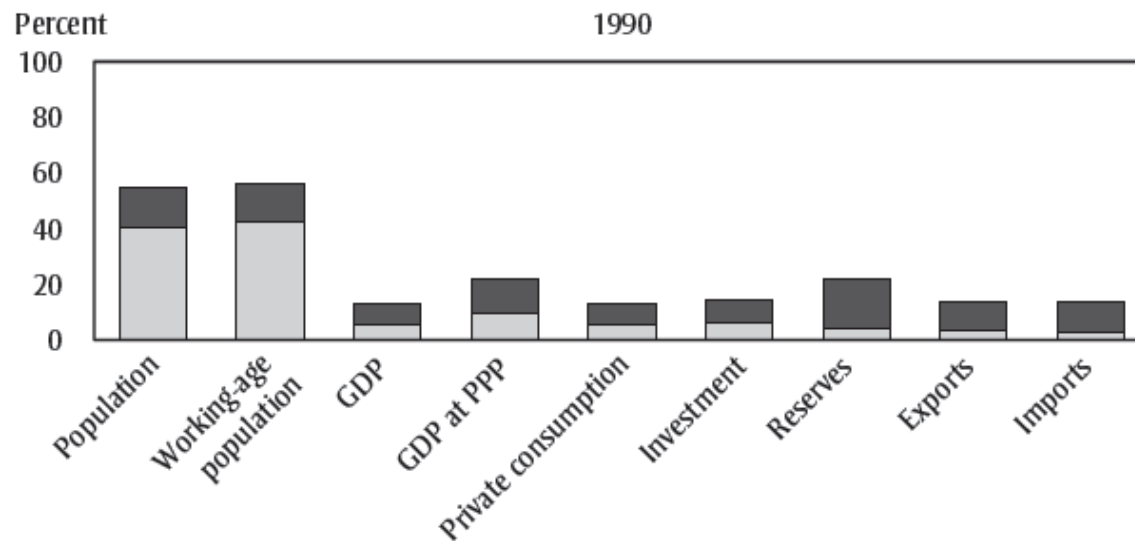
Middle Income Countries (MICs)

World Bank criterion (based on GNI *per capita* and Atlas method):

- Low income countries: \$1,005 or less
- Lower middle income countries: \$1,006 – \$3,975
- Upper middle income countries: \$3,976 – \$12,275
- High income countries: \$12,276 or more

Pragmatic approach: not mature economies – emerging market economies

- Institutions are not as strong and stable as in advanced economies
- Convergence process still underway
- More vulnerable to financial crisis

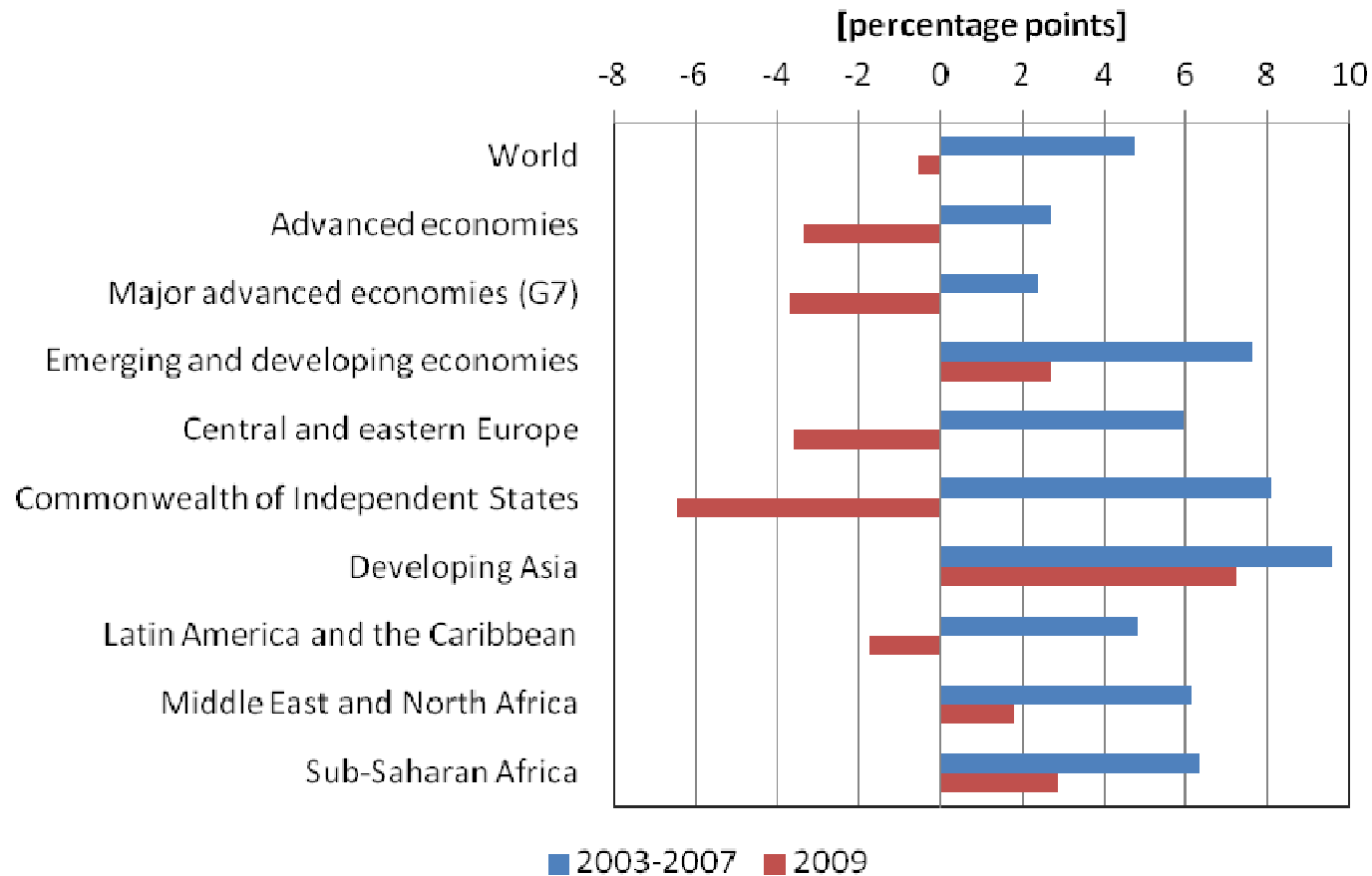


a. In percent of world totals.
b. Brazil, India, China

Emerging Market Economies, Shares in the Global Economy, 1990 and 2008^a

Source:
Kose and Prasad
(2010, p. 3)

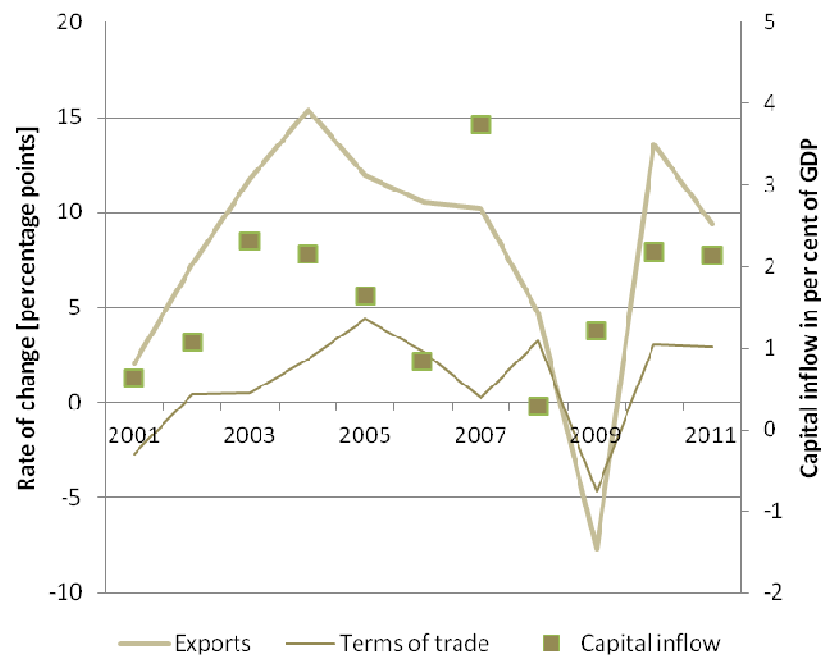
GDP growth before and during the financial crisis, 2007-2009



Source: data from IMF, *WEO*.

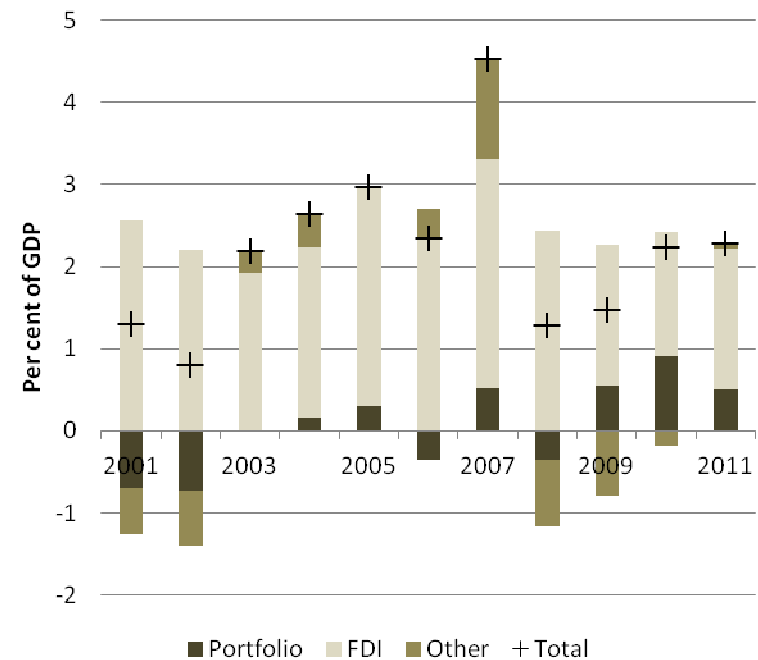
Trade and financial shocks in EMEs

Export volume, terms of trade and capital inflow



Note: data after 2009 are the IMF's estimates.
Source: data from the WEO (2011, September).

Net private financial flows to emerging markets and developing countries



Note: data after 2009 are the IMF's estimates.
Source: data from the WEO (2011, September).

Constraints on macroeconomic policy

Source: Ghosh et al. (2009)

- I. Primacy of a problem of insolvencies and debt overhang in the private sector
 - i. Provision of domestic liquidity
 - ii. Provision of foreign exchange liquidity
 - iii. Implementation of efficient debt workout mechanisms
 - iv. Government support for debt restructuring

- II. External financing constraint („sudden stop” of capital inflows)
 - i. Exchange rate depreciation
 - ii. Raising interest rates
 - iii. Official financing (FCL, SBAs, swap credit lines) and foreign exchange reserves
 - iv. Controls on capital outflows

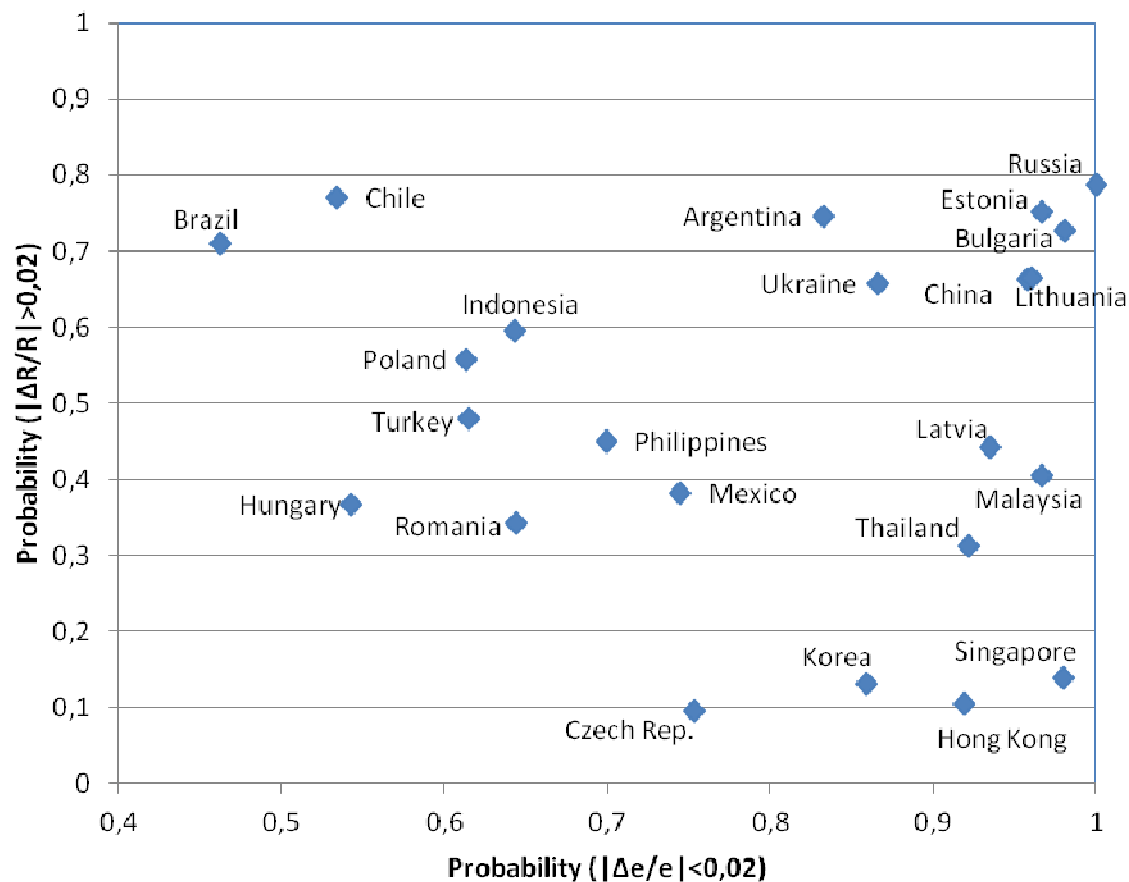
Exchange rates, foreign exchange reserves and pressure on foreign exchange market in emerging markets before and during the crisis.

	Exchange rate ⁽¹⁾		FX Reserves ⁽²⁾		FX Market Pressure ⁽³⁾	
	before	during	before	during	before	during
	crisis ⁽⁴⁾	crisis ⁽⁵⁾	crisis ⁽⁴⁾	crisis ⁽⁵⁾	crisis ⁽⁴⁾	crisis ⁽⁵⁾
Emerging markets	0.3	-2.2	1.8	-0.3	-3.1	3.1
Latin America ⁽⁶⁾	0.3	-2.3	1.7	1.1	-2.2	1.2
Asia ⁽⁷⁾	0.1	-0.3	1.3	0.5	-3.0	-0.1
Europe ⁽⁸⁾	0.4	-3.5	2.1	-1.4	-3.5	6.2
Peggings ⁽⁹⁾	0.2	-0.8	2.0	-0.7	-3.7	3.1
Intermediate ⁽¹⁰⁾	0.2	-2.7	1.5	-0.2	-2.2	2.7
Floaters ⁽¹¹⁾	0.4	-3.7	1.7	0.2	-3.0	3.5

Notes: (1) average monthly percentage change (positive value means appreciation); (2) average monthly percentage change (positive value means an increase); (3) average monthly percentage change (positive value means stronger pressure); (4) period from January 2005 to July 2008; (5) period from August 2008 to February 2009; (6) Argentina, Brazil, Chile, Mexico; (7) China, Hong Kong, Indonesia, Korea, Malaysia, Philippines, Singapore, Thailand; (8) Bulgaria, Czech Rep., Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Turkey, Ukraine; (9) Bulgaria, China, Hong Kong, Estonia, Latvia, Lithuania, Malaysia, Russia, Singapore, Thailand; (10) Argentina, Czech Rep., Korea, Mexico, Philippines, Ukraine; (11) Brazil, Chile, Hungary, Indonesia, Poland, Romania, Turkey.

Source: Dąbrowski (forthcoming).

Probabilities of (small) exchange rate change and (large) foreign exchange reserves change

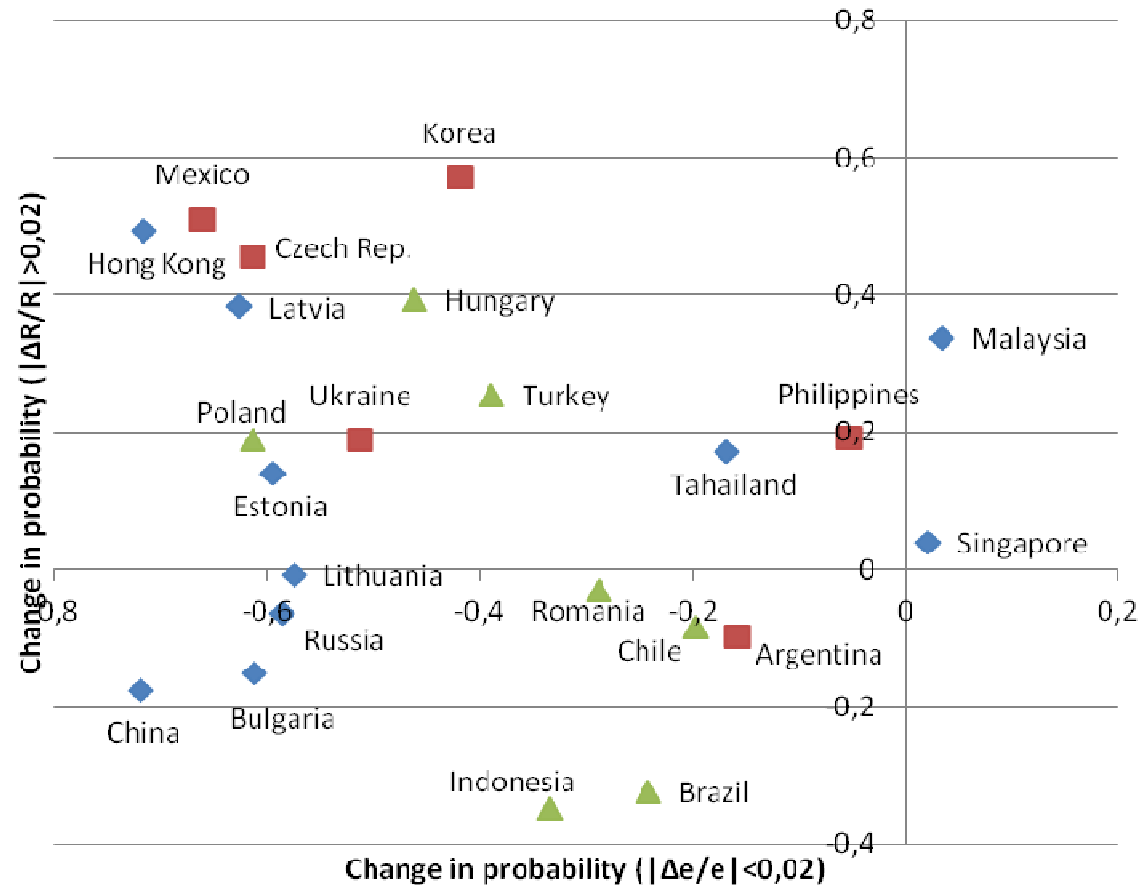


Probability of small ($\pm 2\%$) changes in the exchange rate:

- 0.9 or more – pegged exchange rate
- between 2/3 and 0.9 – intermediate regime
- less than 2/3 – floating exchange rate

Source: Dąbrowski (forthcoming).

Changes in probabilities induced by the crisis



Source: Dąbrowski (forthcoming).

Exchange rate policy vs. foreign exchange reserves policy – conclusions

- 1) Probabilities of small exchange rate changes decreased (except for Malaysia and Singapore)
- 2) Probabilities of large changes in foreign exchange reserves increased in more than a half of analysed economies (Asia and Europe, except for China, Indonesia and Bulgaria)
- 3) *Change in probability of a large depreciation (more than 2%)*
 - Peggers – an increase by 0.28
 - Economies with intermediate regimes – an increase by 0.43
 - Floaters – an increase by 0.47
- 4) *Change in probability of a large depletion of reserves (more than 2%)*
 - Peggers – an increase by 0.23
 - Economies with intermediate regimes – an increase by 0.28
 - Floaters – an increase by 0.18

The resilience of the EMEs during the global crisis

(Kose and Prasad, 2010, p.161-165)

- Less dependence on foreign finance and a shift away from external debt denominated in foreign currencies
- Large buffers of foreign exchange reserves
- Greater trade linkages among EMEs
- More diversification in EME production and exports
- Separation of EMEs' business cycles from advanced economies' business cycles
- Better macroeconomic policies (incl. flexible exchange rates) in EMEs
- Rising per capita incomes and a burgeoning middle class

Did the exchange rate regime in EMEs matter?

Berkmen et al. (2009)

- Dependent variable: revisions of GDP growth projections
- Determinants: financial weaknesses (leverage), credit growth, fiscal position and flexible exchange rate regime

Blanchard et al. (2010):

- Dependent variable: unexpected economic growth (pure crisis effect)
- Peggers fared neither better nor worse than other economies (if STED is included)

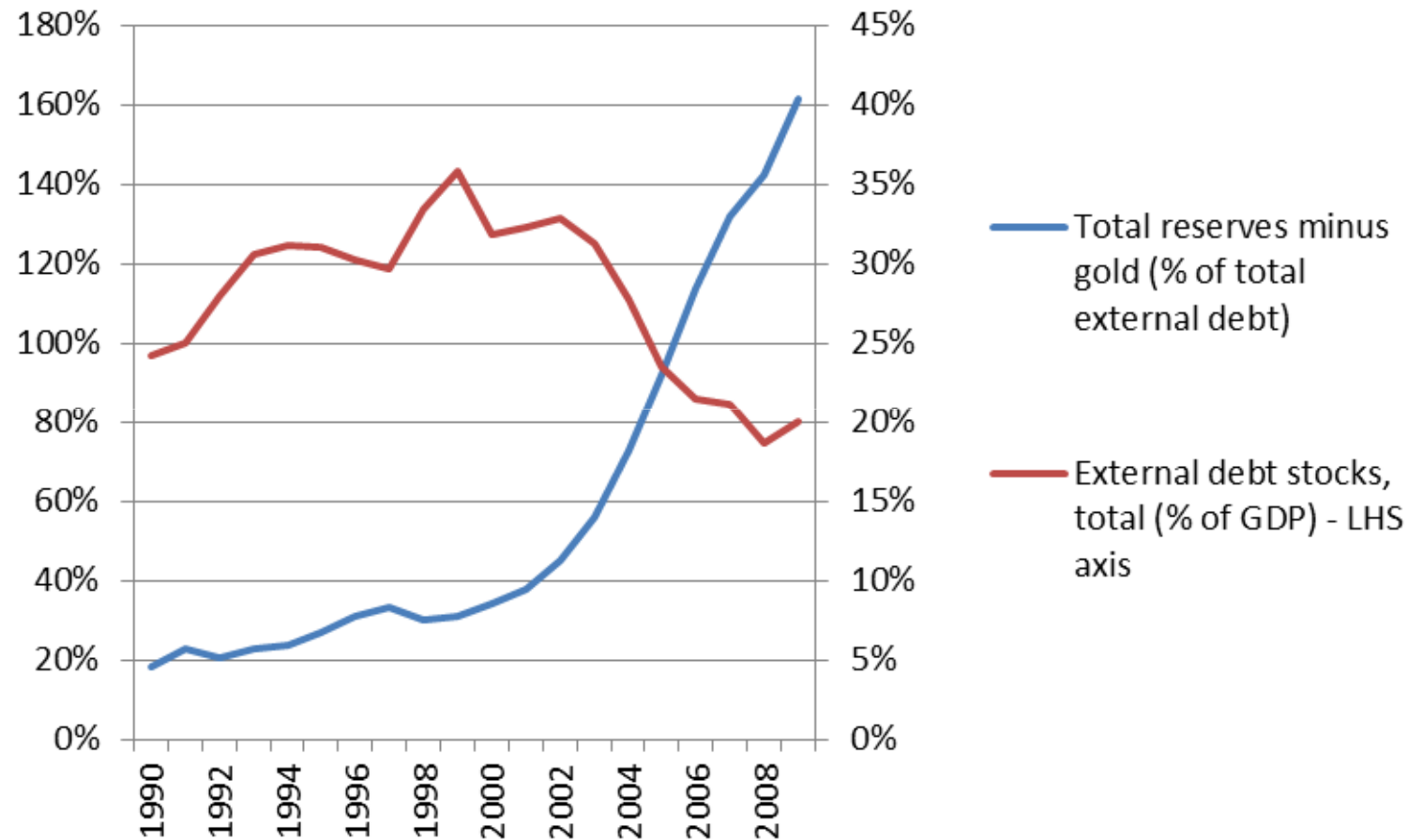
Tsangarides (2010):

- Dependent variable: change in the actual rate of GDP growth
- GDP Growth lower by 1.2 p.p. in countries with fixed exchange rate but statistically insignificant

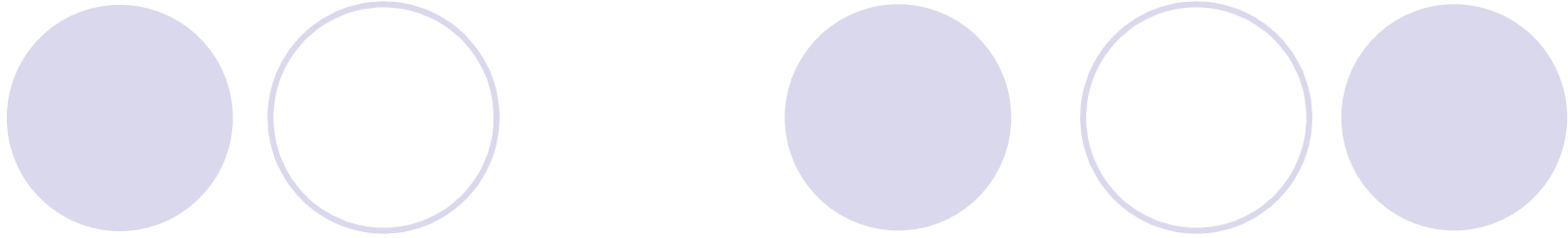
Question remains:

Why did peggers experience stronger shocks?

External debt and foreign exchange reserves in upper middle income countries



Source: data from the WDI.



Thank you for listening.

