WHY TRANSITION ECONOMIES DID WORSE THAN OTHERS IN 2008-09 RECESSION?

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While developing countries as a group did better than developed countries in 2008-09 recession, transition economies – former communist countries – experienced the largest reduction of output. Out of 42 countries that experienced negative growth in 2007-09, 13 were transition economies (table 1). In fact, 4 out of 5 most affected economies were former communist countries (Latvia, Estonia, Ukraine, Lithuania).

The hypothesis is that these transition countries (1) suffered more than the others from the sudden outflow of capital and (2) did not manage this outflow particularly well.

Table 1. Countries that experienced reduction of GDP in 2007-09

COUNTRY	Increase in GDP in 2007-09, %	Increase in GDP in 2009, %
Latvia	**-21.772**	**-18**
Estonia	**-17.1924**	**-14.1**
Ukraine	**-13.215**	**-15**
Lithuania	**-12.45**	**-15**
Ireland	-9.79	-7
Zimbabwe	-9.3662	3.7
Armenia	**-8.5792**	**-14.4**
Finland	-6.6936	-7.8
Iceland	-6.5001	-7.7
Japan	-6.3376	-5.2
Denmark	-5.9541	-5.1
Italy	-5.95	-5
Hungary	**-5.7378**	**-6.3**
Mexico	-5.0902	-6.5
Barbados	-4.7318	-4.9
Jamaica	-4.658	-5.3
Slovenia	**-4.573**	**-3.5**
Luxembourg	-4.5	-7.8
United Kingdom	-4.43	-4.5
Turkey	-3.8423	-5
Germany	-3.765	-4.7
Croatia	**-3.5392**	**-5**
Botswana	-3.274	-5.8

Russian Federation	**-2.7424**	**-6**
Spain	-2.7324	-7.9
Portugal	-2.7	-3.6
Canada	-2.2104	-2.7
Netherlands	-2.08	-2.6
Belgium	-2.03	-4
United States	-2.0096	-3
Georgia	**-1.978**	**-2.4**
France	-1.8088	-3.9
Czech Republic	**-1.805**	**-2.2**
Austria	-1.672	-4.2
New Zealand	-1.3951	-3.6
Chad	-1.1042	-.7
Austria	-1.2133	-1.4
Moldova	**-1.0544**	**-7.7**
Singapore	-.922	-2
El Salvador	-.575	-3
Malta	-.4525	-2.5
Hong Kong, China	-.3648	-2.7
Romania	**-.3183**	**-7.1**
Greece	-.04	-2

Source: World Economic Situation and Prospects, 2010. UN/DESA, 2010.

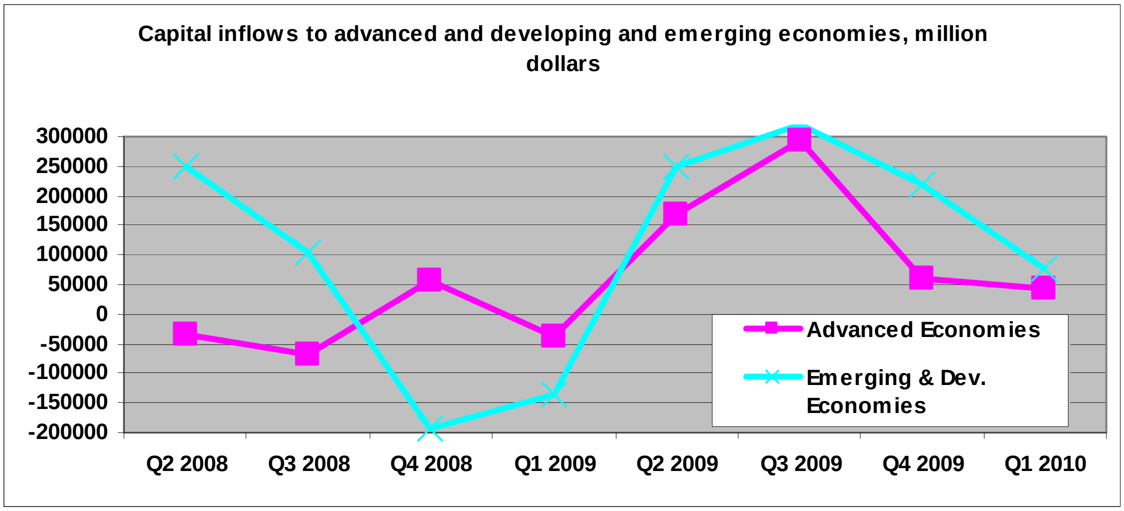
Outflow of capital in 2008-09

Capital flows[1] to developed and developing countries changed dramatically during recent economic recession. In particular, emerging and developing economies experienced a decline in international financing – from an inflow of $250 billion in the second quarter of 2008, before the crisis, to an outflow of 200 billion in the fourth quarter of 2009. In the second and third quarters of 2009 capital inflows to developing countries returned to pre-crisis level, although later they declined to about $50 billion in the first quarter 2010 (see fig. 1). Advanced economies did not experience a decline in capital inflows in the beginning of the crisis, and there was an increase in

[1] Capital inflows are defined as the sum of financial account, capital account and errors and omissions in the balance of payments data in International Financial Statistics (IMF). They are equal to the difference between the increase in foreign exchange reserves, including gold, and current account balance. Because balance of payments statistics is published with a delay capital inflows are computed as the difference between increase in reserves and the current account balance. For most countries, as past data show, this is a very reasonable approximation.

inflows in the second and third quarters of 2009 with subsequent decline of inflows in late 2009 – early 2010 (fig. 1).

Fig. 1

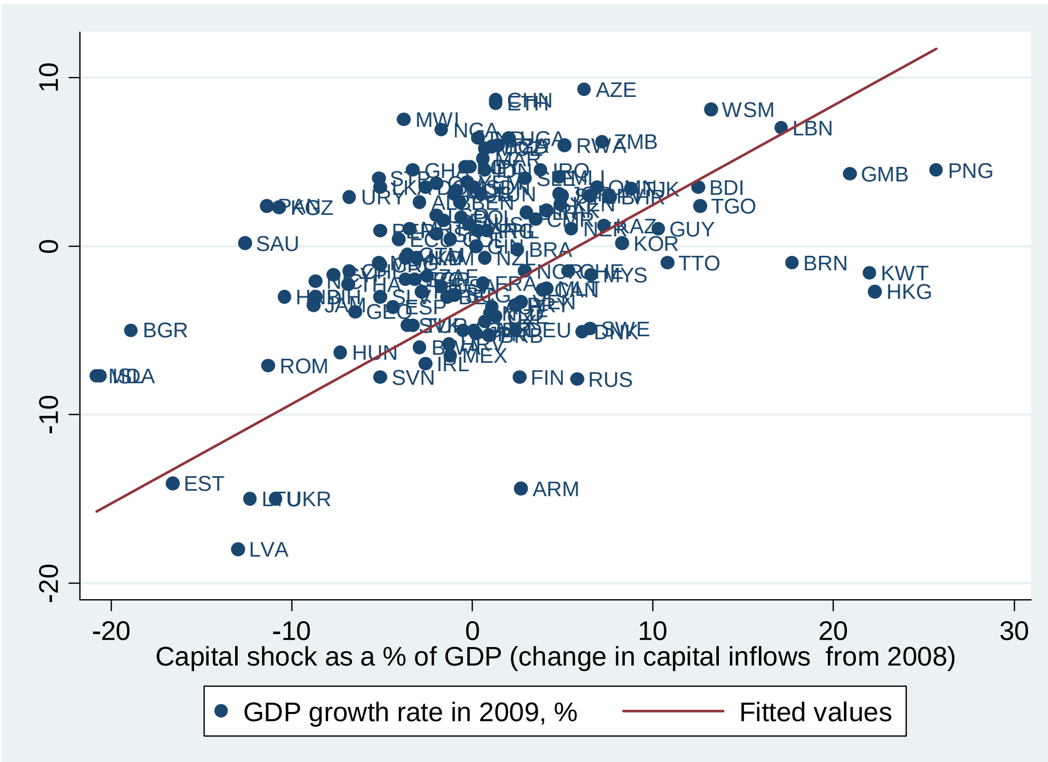


Source: International Financial Statistics.

It is usually believed that the reduction of the capital inflows contributes to the decline in output (recession), but in general this was not actually the case in 2008-09. The performance of developing countries that were most affected by the reduction of the capital inflows was actually better than the performance of developed countries. Transition economies – the newcomers to the capitalist world – were hit especially hard by the boom and bust cycle – the increase in capital inflow in the 2002-07 and the outflow of capital in 2008-09 . In most cases they abolished controls over cross border capital flows in the 1990s and did not restore it after the Asia 1997 financial crisis.

There was some correlation between shocks to the capital account (change in the inflow of capital) and economic performance as measured by the change in GDP in 2007-09 or in 2009 alone (fig. 2). But of course there were outliers. China and India experienced the decline in capital inflows from Q2 2008 to Q3-4 2008 and Q1 2009 of the same magnitude (several percentage points of GDP) as Baltic states and Ukraine, but in the former countries 2009 GDP was 14 to 18% higher than in 2007, whereas in the latter – 10 to 22% lower (fig. 2).

Fig. 2. Increase in net capital inflows in 2009 as compared to 2008, % of GDP, and change in GDP in 2009, %



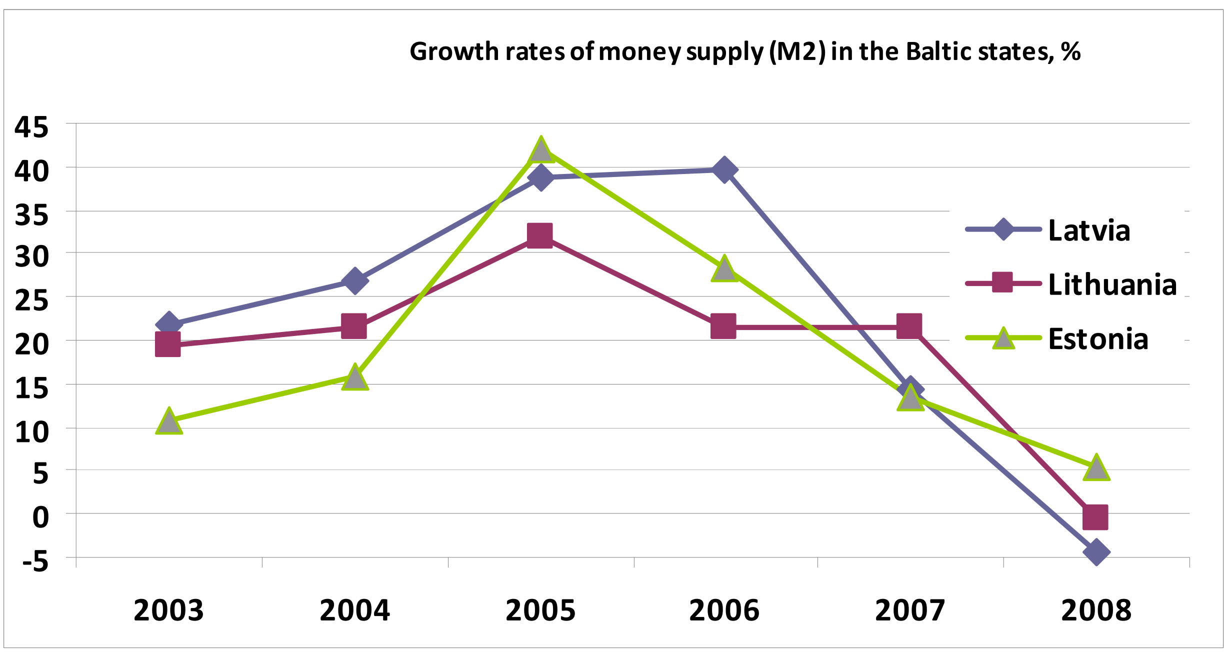
Source: World Development Indicators; International Financial Statistics.

Policy: how countries reacted to the outflow of capital

To be sure, GDP growth rates depend not only external shocks, such as changes in capital inflows, but also on domestic economic developments. However, if domestic conditions are unchanged, there may be several factors that explain the lack of correlation between changes in capital flows (and trade shocks) and the depth of the recent recession. The crucial one is how countries handled the deterioration of the balance of payments – by running down foreign exchange reserves (with possible impact on the domestic money supply in the absence of sterilization) or by devaluation of national currencies. *Ceteris paribus*, devaluation of the national currency in response to the negative trade or capital account shocks, provides stimuli to the national economy by making the production of tradables more profitable. So capital outflow (as well as negative trade shock) should not necessarily cause a recession.

It is widely believed, for instance, that Baltic countries (Estonia, Latvia and Lithuania) experienced the greatest reduction of output in 2007-09 (from 12 to 22%) not because of trade and capital account shocks (that were not that large – 2 % of GDP), but mostly due to the policy to maintain the exchange rates of their currencies (Estonia and Lithuania run formal currency boards and Latvia has a *de facto* currency board). Outflow of capital of about 4% of GDP (partially counterweighted by the improvement of the trade balance of about 2% of GDP) led to the reduction of foreign exchange reserves, which under the regime of a currency board automatically translated into the decline of the money supply (fig. 3), very much like the outflow of capital from Argentina in 2000-2002 (that also had a currency board at a time) caused a recession.

Fig. 3



Source: World Development Indicators.

On the other hand, the expansionary effect of devaluation is limited, of course. If the negative trade and capital account shocks are too large, devaluation cannot mitigate these shocks completely, but only triggers inflation. Countries like Russia and Bulgaria experienced a combined trade and capital account shock of the magnitude of 7% of GDP (deterioration of the trade and capital account balance from Q2 2008 to average of subsequent 3 quarters – Q3-4 2008 and Q1 2009 – fig. 31). Even though these countries did not finance these shocks completely by running down the reserves (they fell only by about 3% of GDP per quarter – fig. 31), but also devalued their national currencies, they were not able to avoid the reduction of output that became one of the largest in the world.

The regression equation that best explains the decline in output in 2007-09 (or in 2009 alone) is as follows[2] (T-statistics in brackets):

Yincr07_09 = 1.8 – 1.3***CAPinflQ2 -*** 2.1***TRbalINCRQ2*** **+** 1.9***FORincrQ3***

(2.38) (-3.36) (-4.55) (3.93)

Number of obs. = 92, R-squared = 0.1788, robust standard errors,

where:

Yincr07_09 – GDP change in 2007-09,

CAPinflQ2 – increase in capital inflow from Q2 2008 to average for Q3- 4 2008 and Q1 2009, % of 2008 GDP,

TRbalINCRQ2 – increase in trade balance from Q2 2008 to average for Q3-4 2008 and Q1 2009, % of 2008 GDP,

FORincrQ3– average quarterly increase in foreign exchange reserves in Q3-4 2008 and Q1 2009, % of 2008 GDP[3].

[2] This and other equations work, if changes in GDP are measured by 2009 growth rate alone (not 2007-09), and also if changes in capital and trade shocks are measured as the difference between average values for Q2-3 29008 and Q4 2008 – Q1 2009, whereas changes in reserves are computed as average quarterly change for the period Q4 2008 – Q1 2009.

[3] Note that the sum of ***CAPinflQ2*** and ***TRbalINCRQ2*** is **NOT** equal to the increase in the foreign exchange reserves in any particular quarter. Changes in trade balance and capital flows are measured as second differences (increase from Q2 2008 to the average quarterly level of Q3-4 2008 and Q1 2009), whereas increase in reserves over the same period is measured as the first difference (average increase from the beginning of the quarter to an end of the quarter) .

It implies that the negative shocks to the capital account (as well as to the trade account) do not lead to the decline in GDP growth rates, if foreign exchange reserves do not decline proportionately, i.e. if the shock is absorbed by devaluation, not by running down the reserves.

To summarize, fluctuations in capital flows had a serious impact on performance during the recent recession of 2007-09. The rule of thumb was that large outflows of capital, especially coupled with negative trade shocks, suppressed economic activity. But if the shocks were relatively small (up to 3% of GDP change in trade and capital account from Q2 2008 to an average of subsequent 3 quarters), it was possible to mitigate them through devaluation (not allowing foreign exchange reserves to drop by the same amount). If the shocks were large, even devaluation did not allow to avoid output fall.

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For more details on regressions see: Popov, V. To devaluate or not to devalue? How East European countries responded to the outflow of capital in 1997-99 and in 2008-09. CEFIR and NES working paper #154. January 2011.