The institutional systems, the policy shocks and the economic growth*

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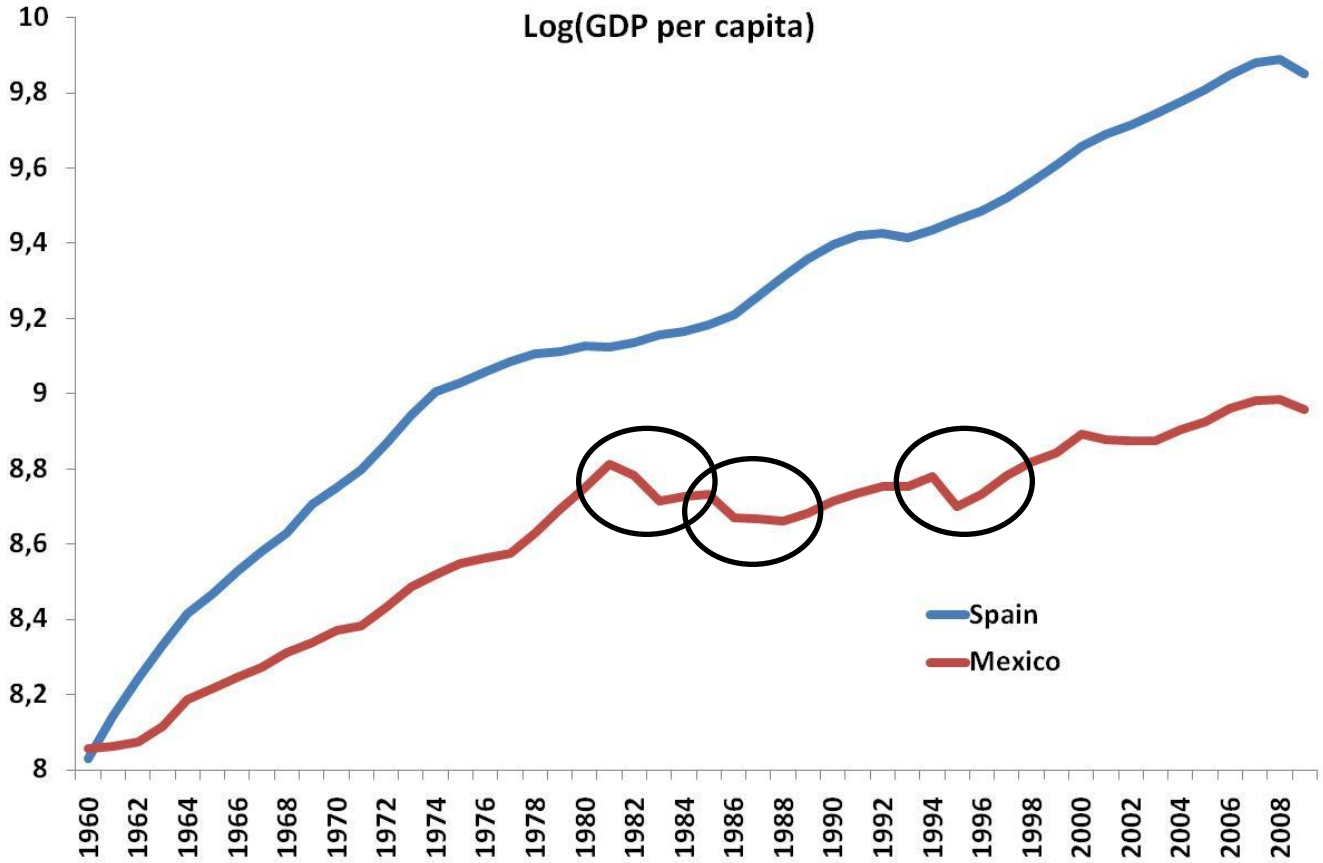
*I am grateful to Aleksander Łaszek for his assistance in preparing this presentation.

1. Growth trajectories:

differences in the relative role of the periods of growth and of growth breakdowns (crises, slowdowns, stagnations) – L. Balcerowicz, A. Rzońca, *„The Puzzles of Economic Growth. The Propelling Forces and the Crises: the Comparative Analysis”**

**see also: Easterly and Levine (2000), Hratkovska and Loayza (2003), Fosil (2007)*

Diagram 1: Spain versus Mexico



1960-1971 Spain was growing faster than Mexico due to trade liberalization and FDI inflow

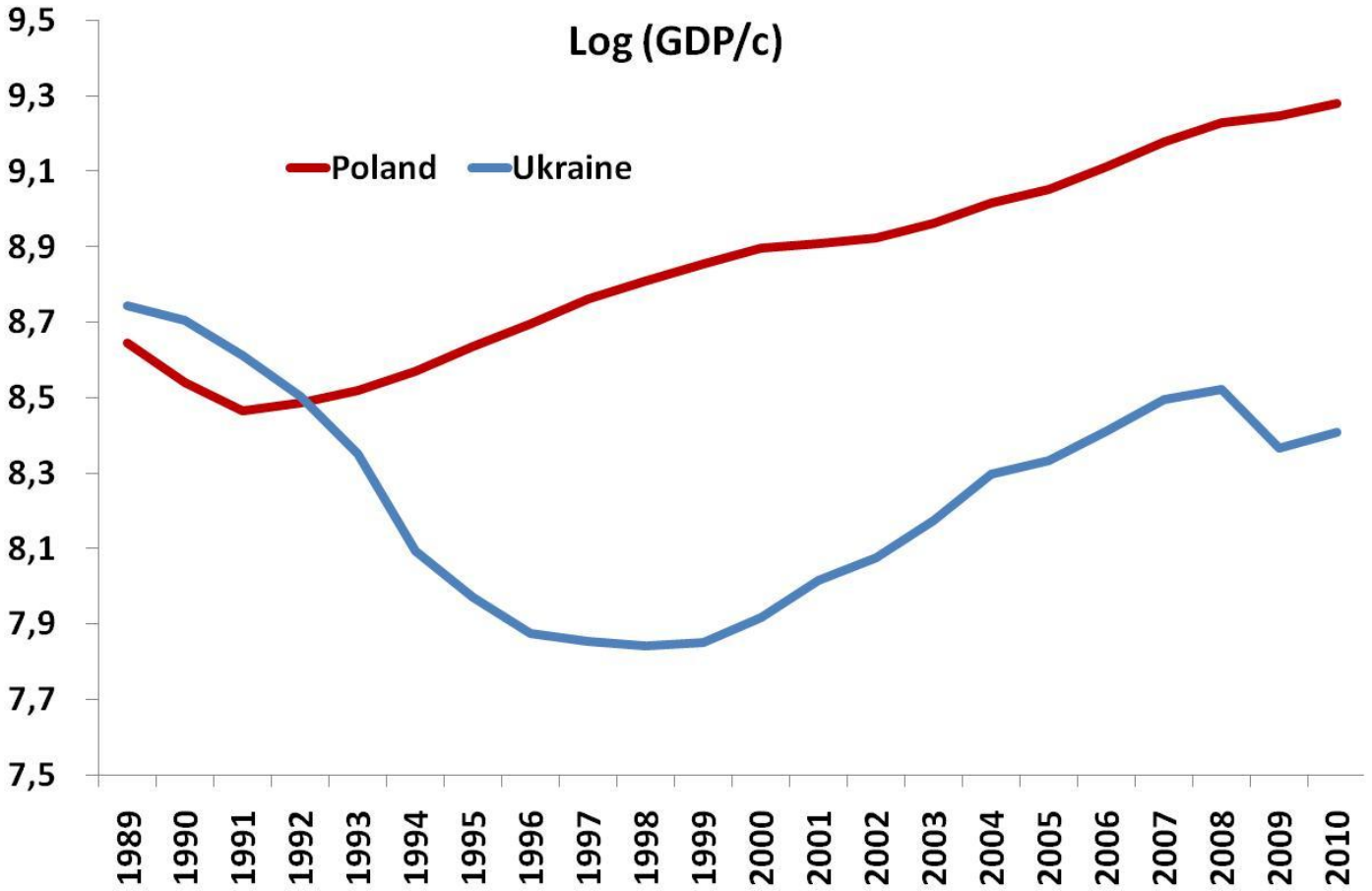
1972-2008 the main source of divergence were economic crises in Mexico in 1982, 1986 and to lesser extend in 1995 caused by expansionary monetary policy, growing external indebtedness, peso overvaluation and poor banking supervision

GDP per capita in 1990 US$ (converted at Geary Khamis PPPs)

Source: The Conference Board and Groningen Growth and Development Centre, Total Economy Database, January 2009,

L. Balcerowicz, A. Rzońca, „The Puzzles of Economic Growth. The Propelling Forces and the Crises: the Comparative Analysis", 2010

Diagram 2: Ukraine versus Poland



After small GDP per capita declines at the beginning of the transformation Polish economy has entered the path of uninterrupted economic growth.

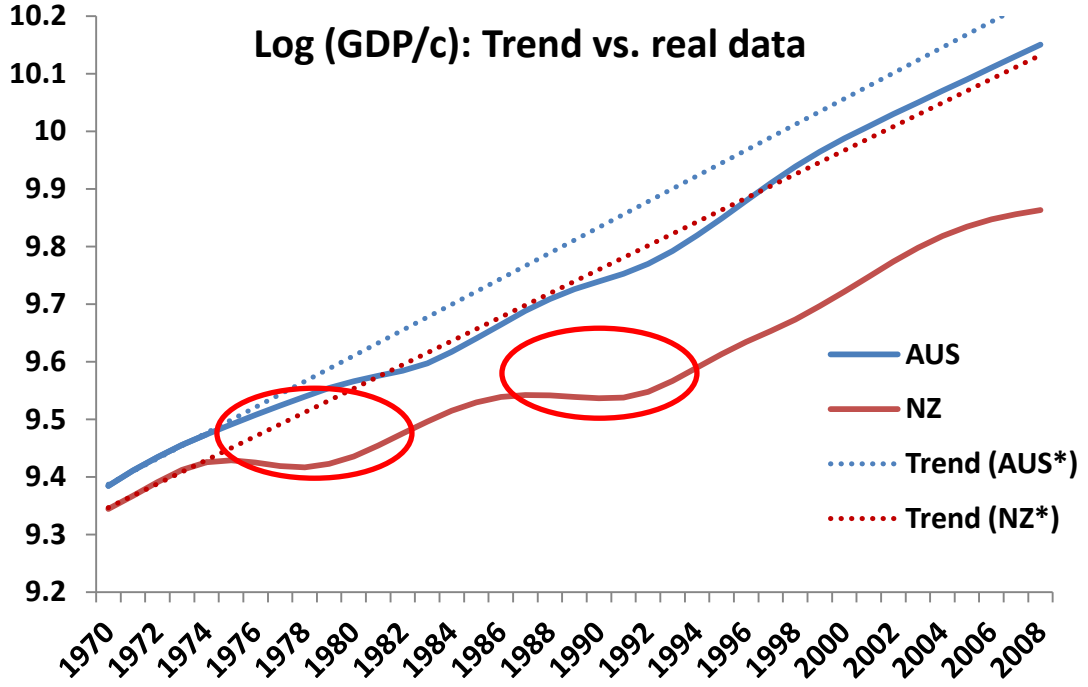
Ukraine's GDP per capita did not start to grow until 1998. subsequent growth was faster than in Poland, but ended with sharp contraction in 2009.

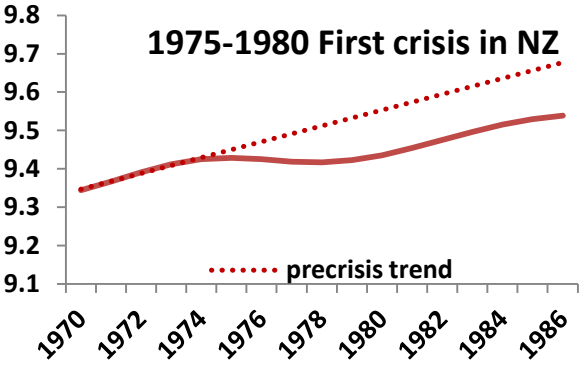
GDP per capita in 1990 US$ (converted at Geary Khamis PPPs)

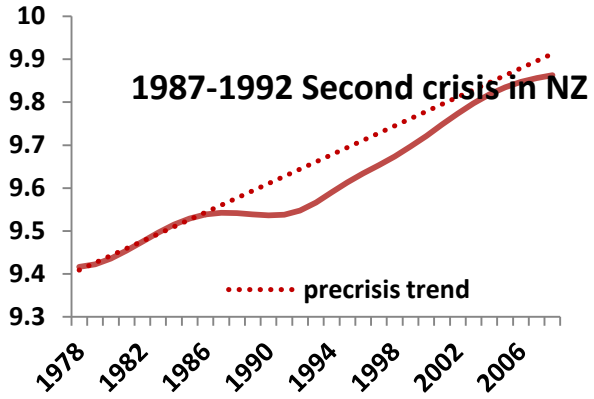
Source: The Conference Board and Groningen Growth and Development Centre, Total Economy Database, January 2009,

L. Balcerowicz, A. Rzońca, „The Puzzles of Economic Growth. The Propelling Forces and the Crises: the Comparative Analysis", 2010

Diagram 3: Australia versus New Zealand







In 1970 GDP/c in New Zealand was only 7% lower than in Australia. In 2008 GDP/c in New Zealand was 26% lower than in Australia. Nearly all of this difference can be attributed to two crises in New Zealand:

- 1975-1980 – terms of trade shock (Oil shocks and loss of preferential access to UK market)
- 1987-1992 – result of expansionary fiscal and monetary policies in previous years.

** For both countries trend was fitted to before crisis observations from 1970-1974; all presented data have been smoothed with HP filter (λ=6.25) ; GDP per capita in 1990 US$ (converted at Geary Khamis PPPs)*

Source: The Conference Board and Groningen Growth and Development Centre, Total Economy Database, January 2009,
L. Balcerowicz, A. Rzońca, „The Puzzles of Economic Growth. The Propelling Forces and the Crises: the Comparative Analysis", 2010

2. The systematic growth forces versus factors responsible for growth breakdowns

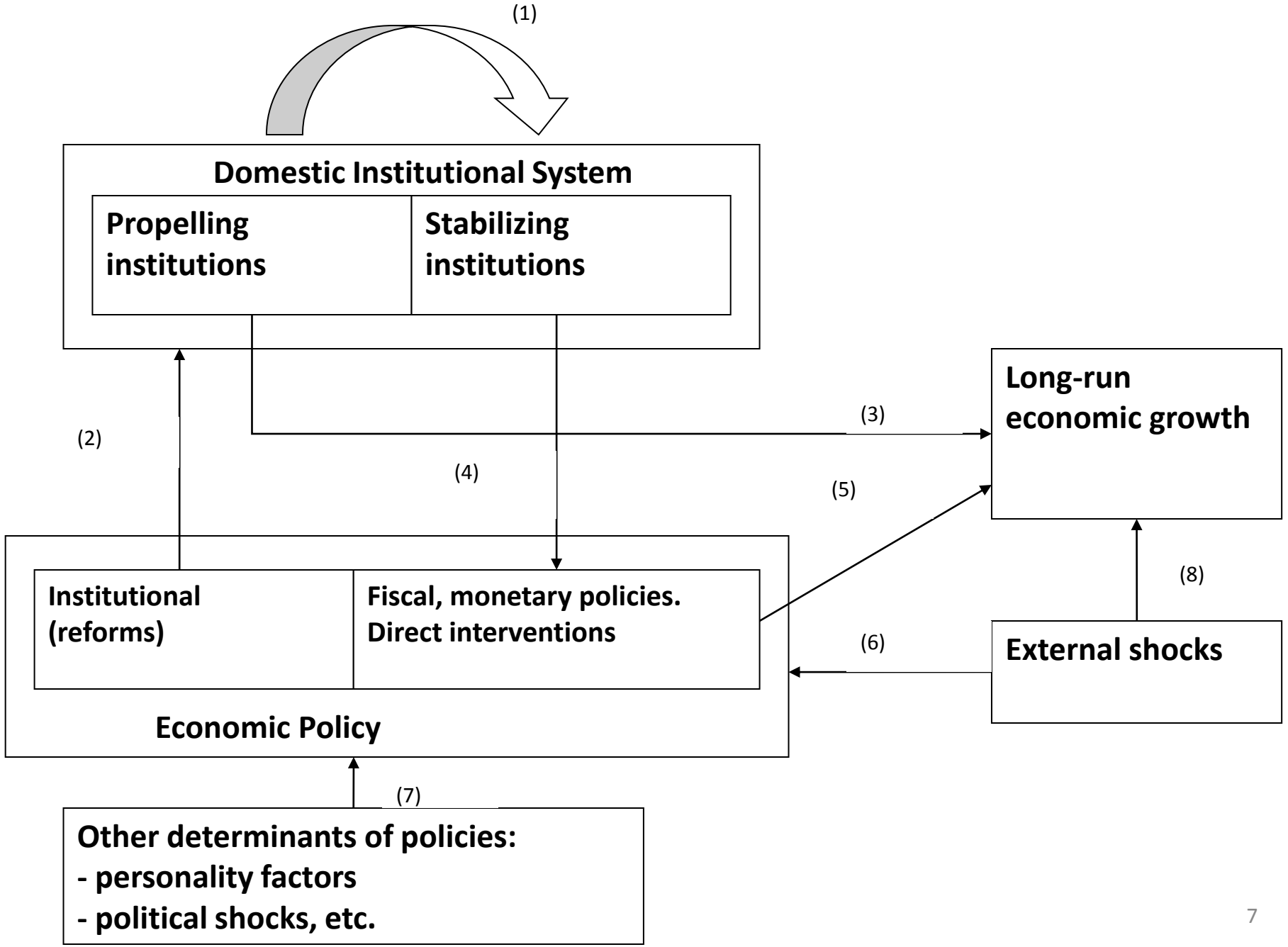
It is analytically useful to distinguish two kinds of forces which shape the growth trajectories:

I. The Systematic Forces - by definition they operate all the time or for a long time, albeit with variable intensity. These forces are responsible for the periods of growth.

II. Factors responsible for the growth breakdowns.

Both types of forces depend on the domestic institutional systems as well as on the other factors.

Diagram 4.


(1)
Domestic Institutional System
Propelling institutions
Stabilizing institutions
(2)
(3)
(4)
(5)
Long-run economic growth
Institutional (reforms)
Fiscal, monetary policies. Direct interventions
Economic Policy
(6)
(8)
External shocks
(7)
Other determinants of policies:
- personality factors
- political shocks, etc.

3. The systemic forces - growth mechanisms: transitional and innovation-based

There are two main kinds of growth mechanisms:

I. **Situation-specific and transitional**, e.g.:
   i. *Raising the employment ratio*
   ii. *Allowing the catching up growth of previously repressed sectors (e.g. services under the socialism)*
   iii. *Shifting part of the bureaucracy to more productive occupation*

II. **Innovation-based growth** (including the technology transfer): the only universal and potentially lasting mechanism.

The strength of this mechanism ultimately depends on the quality of propelling institutions: the property rights, the extent of competition, the scope of free (flexible) markets, the fiscal, regulatory and corruption burdens, etc.

4. What causes the growth breakdowns?

The main factors responsible for the growth breakdowns:

I. Persistent and pronounced decline of the working population (aging)

II. External shocks, including the global financial shocks

III. Wars and internal conflicts

IV. Natural disasters

V. Weakening of the propelling institutions through various destructive reforms, e.g.: a substantial reduction of the intensity of competition (protectionism, creation of domestic monopolies), decline in the protection of private property rights, a substantial increase in the fiscal, regulatory or corruption burdens.

VI. Other domestic shocks, i.e. policy-induced shocks which happen under a given institutional system.

Some of these shocks may jointly hit the same country, e.g. the global financial crisis plus domestic credit booms which went bust (eg. Ireland, Spain, Britain, the Baltics) of plus the fiscal crisis (e.g. Greece)

What causes the growth breakdowns?

The relative role of free markets and political powers (the state) in producing serious (non-institutional) shocks

Consider the frequency and the magnitude of shocks under the following institutional systems:

I. Socialism

II. Quasi-socialism

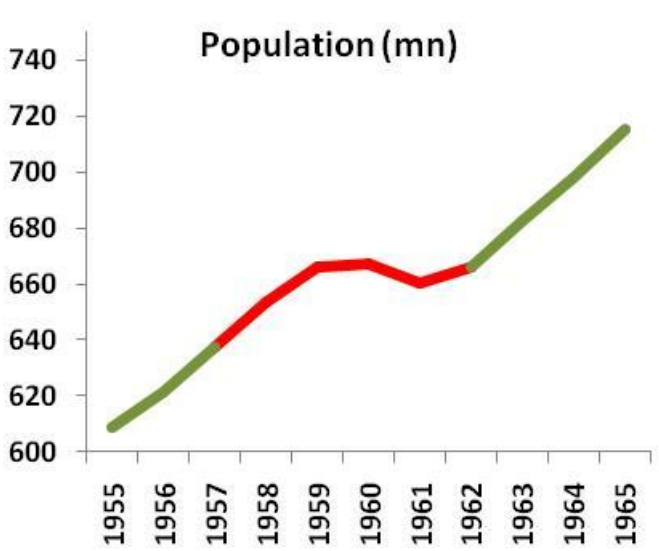
III. Crony-capitalism

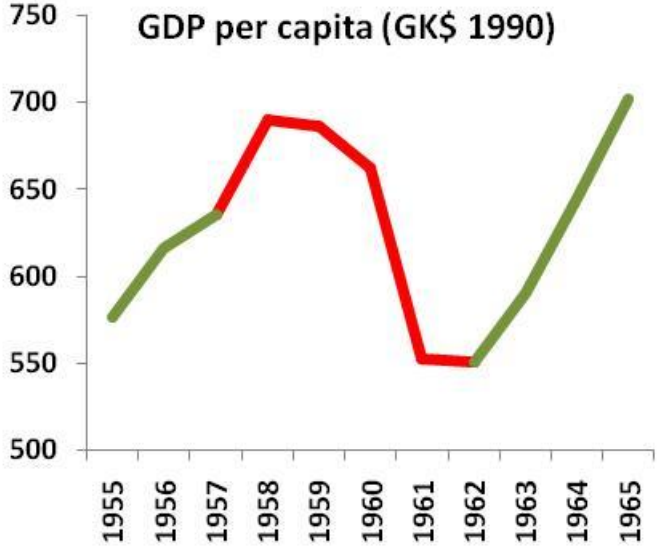
IV. Arms's length capitalism

Socialism - political power, fused with the economic power, is unlimited and almost totally crowds out legal markets, e.g.:

Diagram 5

Great Leap Forward: China 1958-1962



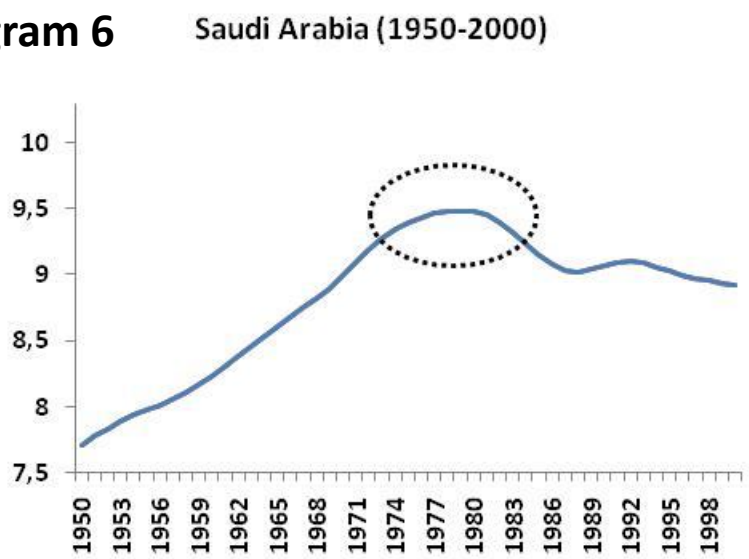


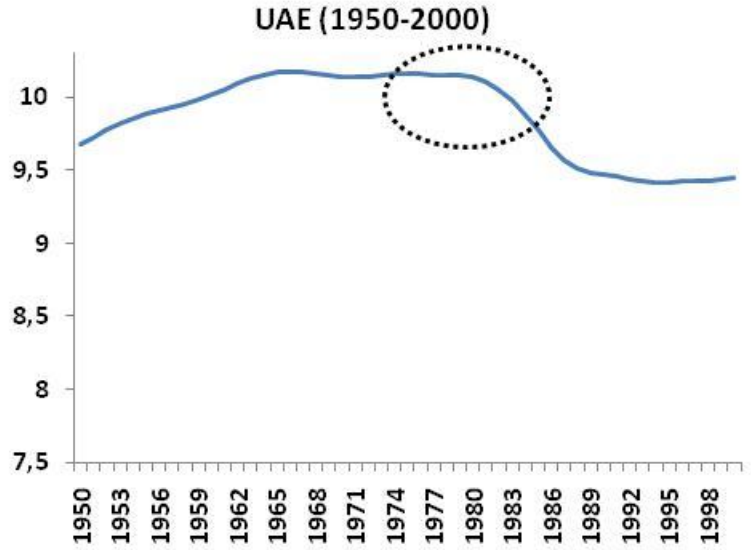
Growth rates								Great Leap Forward							
	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GDP	9,6%	9,5%	2,7%	0,9%	3,5%	6,9%	3,2%	8,6%	-0,6%	-3,5%	-16,5%	-0,4%	7,2%	9,2%	8,8%
Population	2,0%	2,1%	2,2%	2,4%	2,2%	2,1%	2,6%	2,5%	2,0%	0,2%	-1,0%	0,8%	2,5%	2,3%	2,4%

Source: Maddison, Statistics on World Population, GDP and Per Capita GDP, 1-2006AD

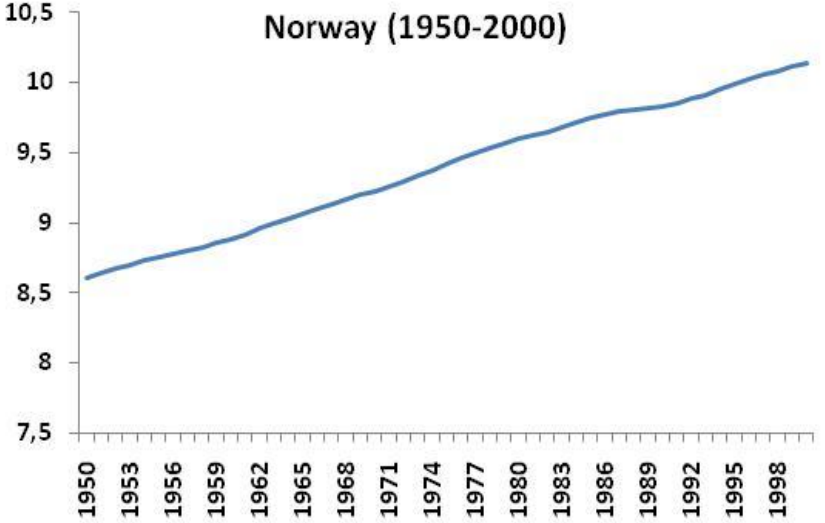
Quasi-socialism - most of the oil countries, e.g.:

Diagram 6





The same fall in oil prices did not lead to GDP growth break down in other countries, e.g. Norway

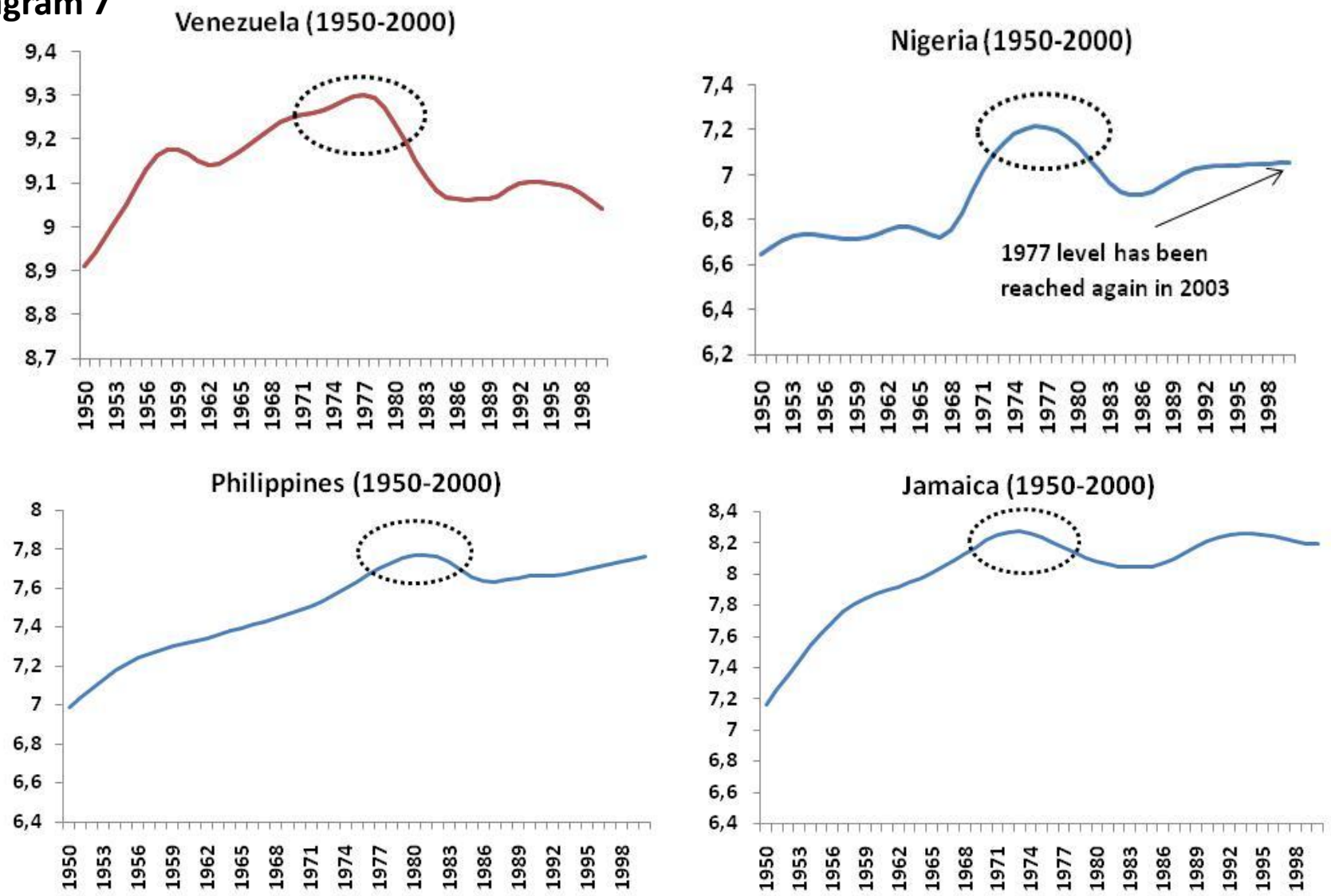


Data smoothed with HP filter (λ=6.25)

Source: Maddison, Statistics on World Population, GDP and Per Capita GDP, 1-2006 AD

Crony-capitalism

Diagram 7



Data smoothed with HP filter (λ=6.25)

Source: Maddison, Statistics on World Population, GDP and Per Capita GDP, 1-2006 AD

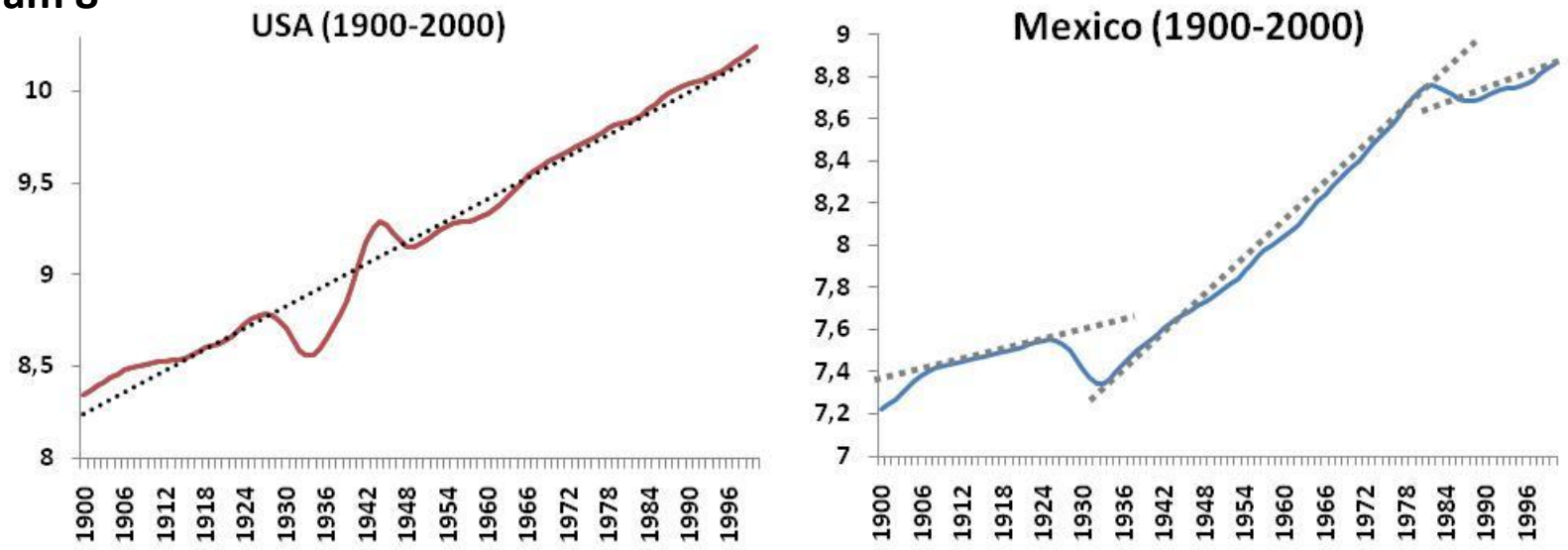
What causes the growth breakdowns?

Observation: it is the concentration of political power (unlimited or weakly constrained government) and not the free markets, which cause the worst shocks.

5. The differences in the post-crisis growth

Methodology:
GDP per capita in 1990 US$ (converted at Geary Khamis PPPs)
Different types of crisis (banking, debt, terms of trade, etc.)
Precrisis trend - linear trend fitted to at least 6 annual observations with the last observation before the crisis truncated

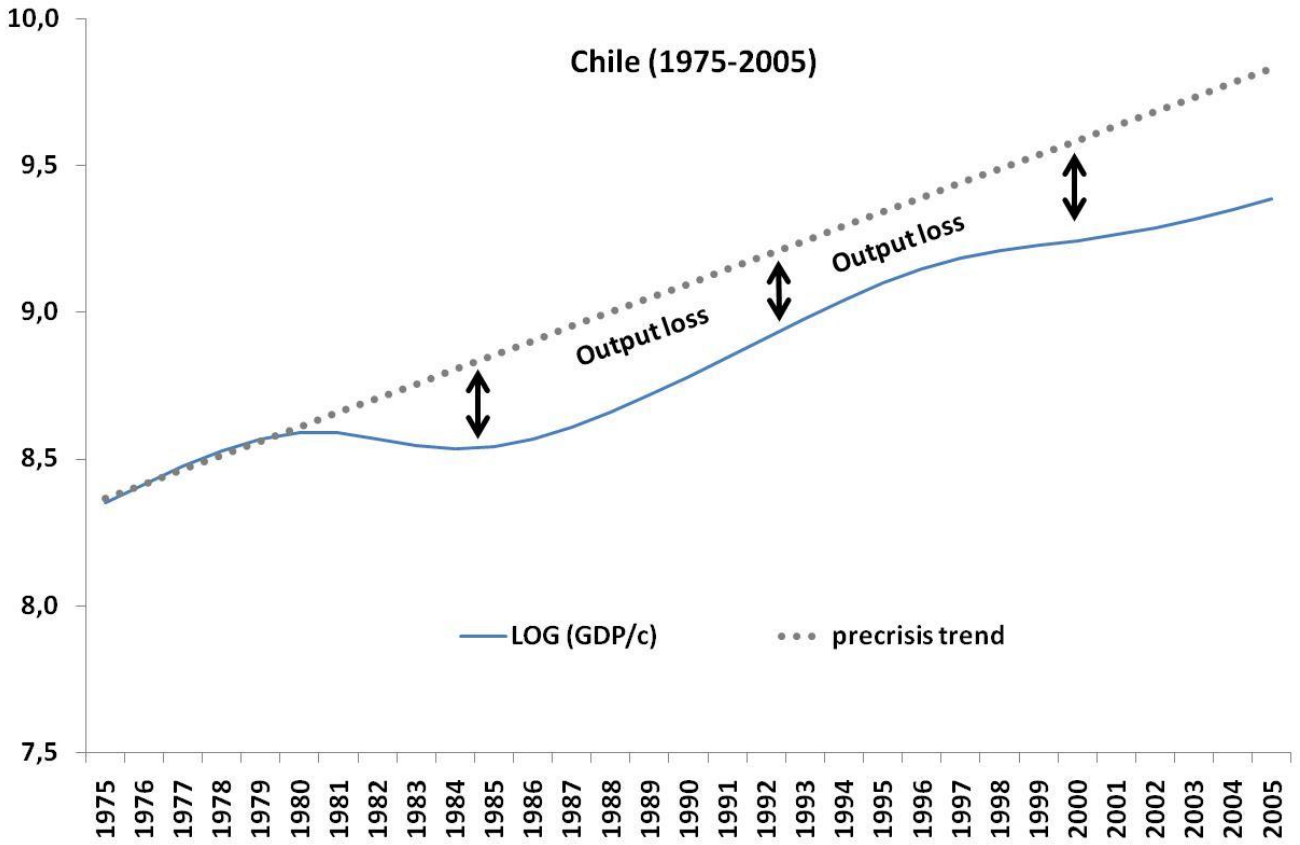
Diagram 8



Data smoothed with HP filter (λ=6.25)

see also: Growth Dynamics: V. Cerra, Ch. Saxena, The Myth of Economic Recovery, IMF 2005; A. Abiad et al. What's the Damage? Medium-term Output Dynamics After Banking Crises, IMF 2009

Diagram 9



Average annual GDP/c growth rate

1975-1980	1982-1986	1987-2005
4,9%	-0,4%	4,4%
precrisis	crisis	after the crisis

Data smoothed with HP filter (λ=6.25)

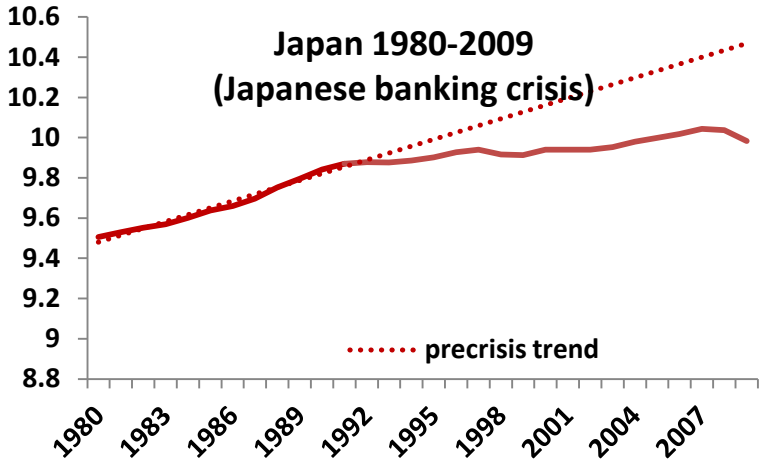
After the crisis GDP growth has returned to precrisis level of around 4,5%, but the output loss has not been recuperated.

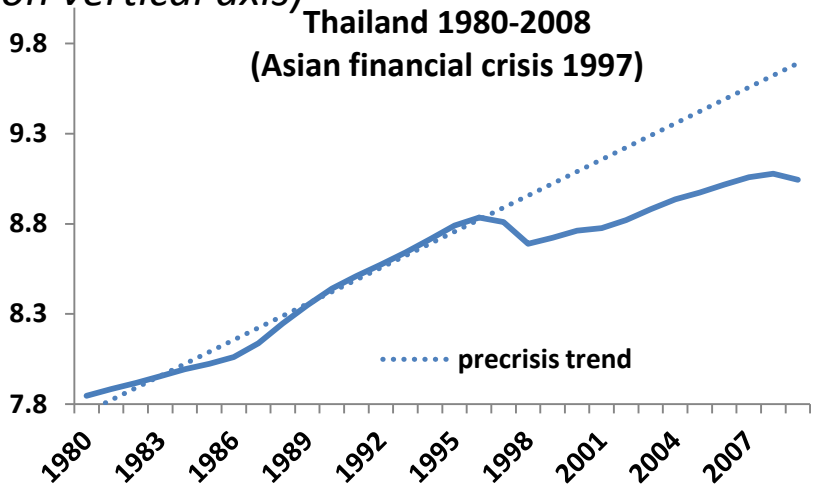
Of course 4,4% is a nearly 20 years average, which includes both faster GDP growth at the end of 1980s and slowdown at the end of 1990s.

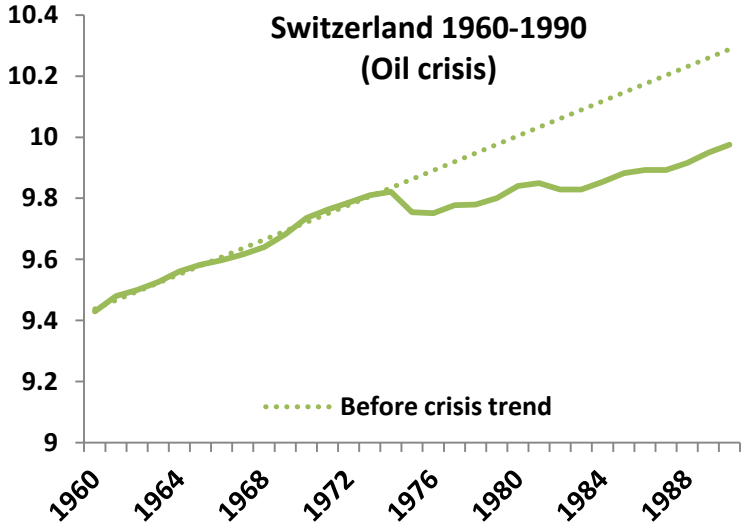
Output loss not recuperated, the rate of growth lower than during precrisis period

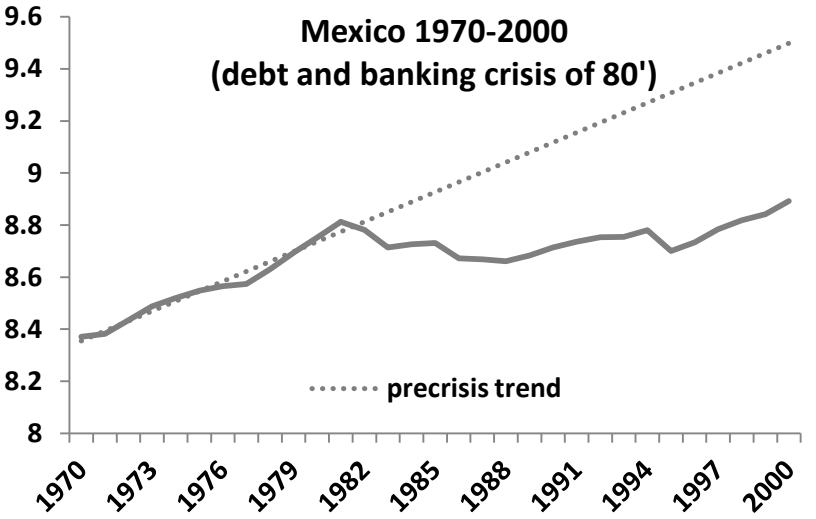
Diagram 10

(log(GDP/c) on vertical axis)







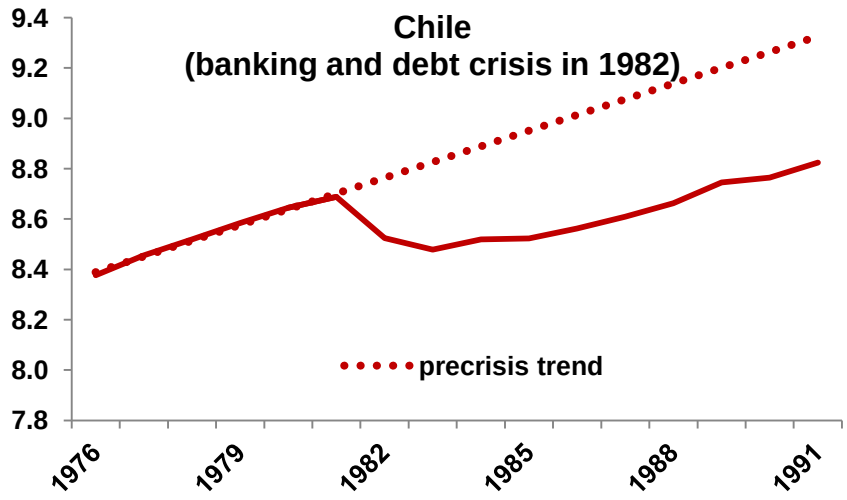


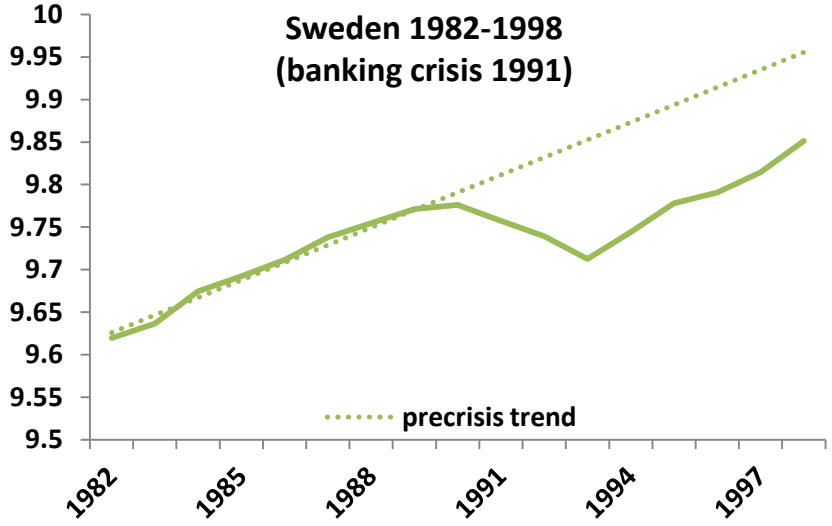
Only Japan did not experienced significant negative rate of growth. In all 4 cases GDP growth rate after the crisis was lower than before.

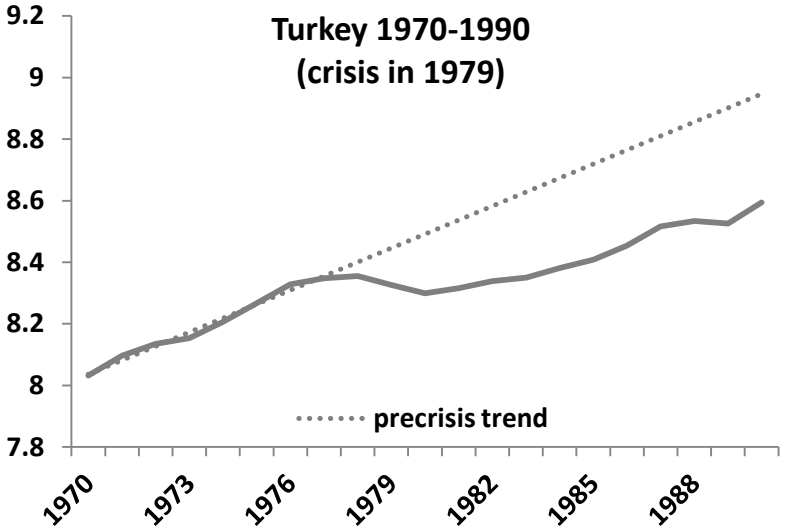
GDP per capita in 1990 US$ (converted at Geary Khamis PPPs) precrisis trend is fitted to at least 7 observations; last observation before the crisis is truncated ; Source: , The Conference Board and Groningen Growth and Development Centre, Total Economy Database, January 2009;

Output loss is not recuperated, but the rate of growth returns to precrisis trend

Diagram 11 *(log(GDP/c) on vertical axis)*





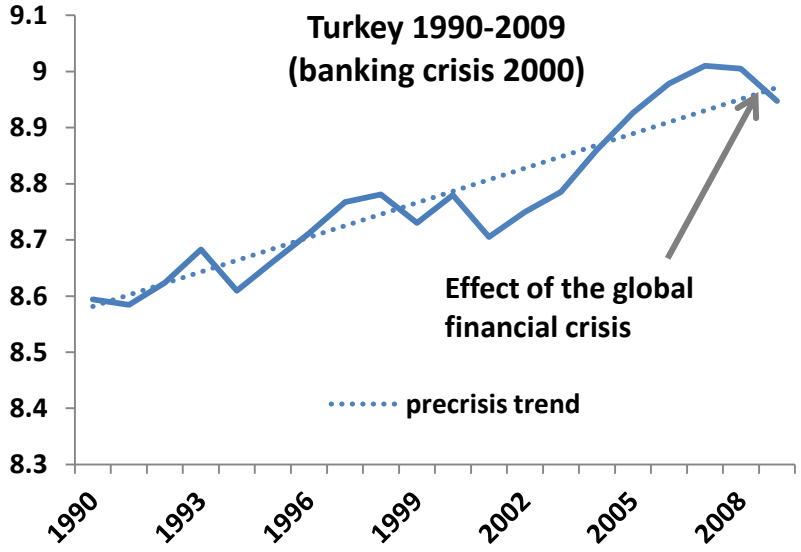


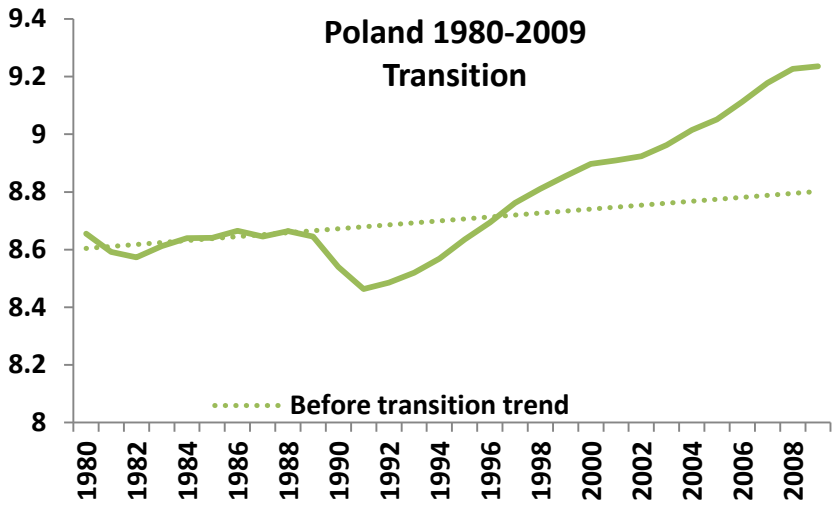
GDP per capita in 1990 US$ (converted at Geary Khamis PPPs) precrisis trend is fitted to at least 7 observations; last observation before the crisis is truncated ; Source: , The Conference Board and Groningen Growth and Development Centre, Total Economy Database, January 2009; see also: Growth Dynamics: V. Cerra, Ch. Saxena, The Myth of Economic Recovery, IMF 2005

Output loss is recuperated and the rate of growth is at least as high before the crisis

(log(GDP/c) on vertical axis)

Diagram 12





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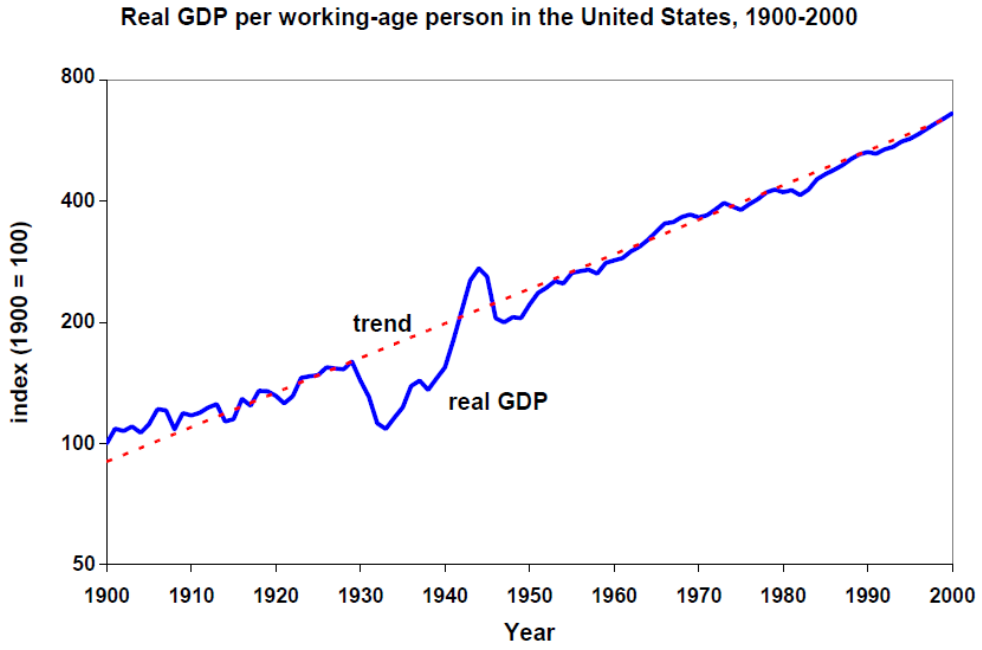
Since 2000, Timothy Kehoe and Edward Prescott have been running a project at the Federal Reserve Bank of Minneapolis to study also the other great depressions that occurred during the twentieth century.

They employ following Cobb-Douglas production function:

$$\log y_t = (\gamma - 1)t + \frac{1}{1-\theta}\log A_t + \frac{\theta}{1-\theta}\log k_t / y_t + \log h_t.$$

where: y_t – output, k_t – capital, h_t – hours worked (all three per working age person), A_t – TFP, θ –capital's share of output γ - trend

Diagram 13



„(…) Trend is defined relative to the average growth rate of the industrial leader. In this volume, we use a trend growth rate of 2 percent per year because this rate is the secular growth rate of the U.S. economy in the twentieth century, γ =1.02. (…)"

Source: T. Kehoe, E. Prescott (2007), Great Depressions of the Twentieth Century; T.Kehoe (2009) The Current Financial Crisis: What Should We Learn from the Great Depressions of the Twentieth Century?

Since 2000, Timothy Kehoe and Edward Prescott have been running a project at the Federal Reserve Bank of Minneapolis to study also the other great depressions that occurred during the twentieth century.

By their definition depression is deemed „great depression" when it is:

1. **deep**
   (output is at least 20 percent below trend),
2. **rapid**
   (detrended output per working-age person falls at least 15 percent),
3. **sustained**
   (output per working-age person do not grow at the trend growth rate during any decade during the depression).

Source: T. Kehoe, E. Prescott (2007), Great Depressions of the Twentieth Century; T. Kehoe (2009) The Current Financial Crisis: What Should We Learn from the Great Depressions of the Twentieth Century?

6. How to explain differences in the post-crisis growth?

Why some growth breakdowns have lasted for so long?

I. **Factors independent from the crisis**, e.g.: has the crisis been preceded by a major technological wave which than subsided (the US in the 1920' and during 1990-2005?)

II. **The initial conditions** (just before the crisis):
- *High initial level of public debt do GDP – the „debt overhang" may depress the post crisis growth – the case for radical fiscal consolidation?*
- *The initial level of the private debt – how strong is the deleveraging process?*
- *How distorted is the structure of output because of the previous boom, e.g. the size of the construction sector?*
- *How rigid (or „dual") is the labor market, e.g. Spain vs. Britain during 2008-2010?*
- *How many situation specific growth mechanisms are „contained" in the initial conditions?*

III. **The policies during the crisis**, including the crisis management:
- *-strengthening the systematic forces of growth („structural reforms") or weakening them?*
- *The crisis management: wrong in kind, proper in kind but insufficient in the dose, proper in kind but excessive in the dose?*

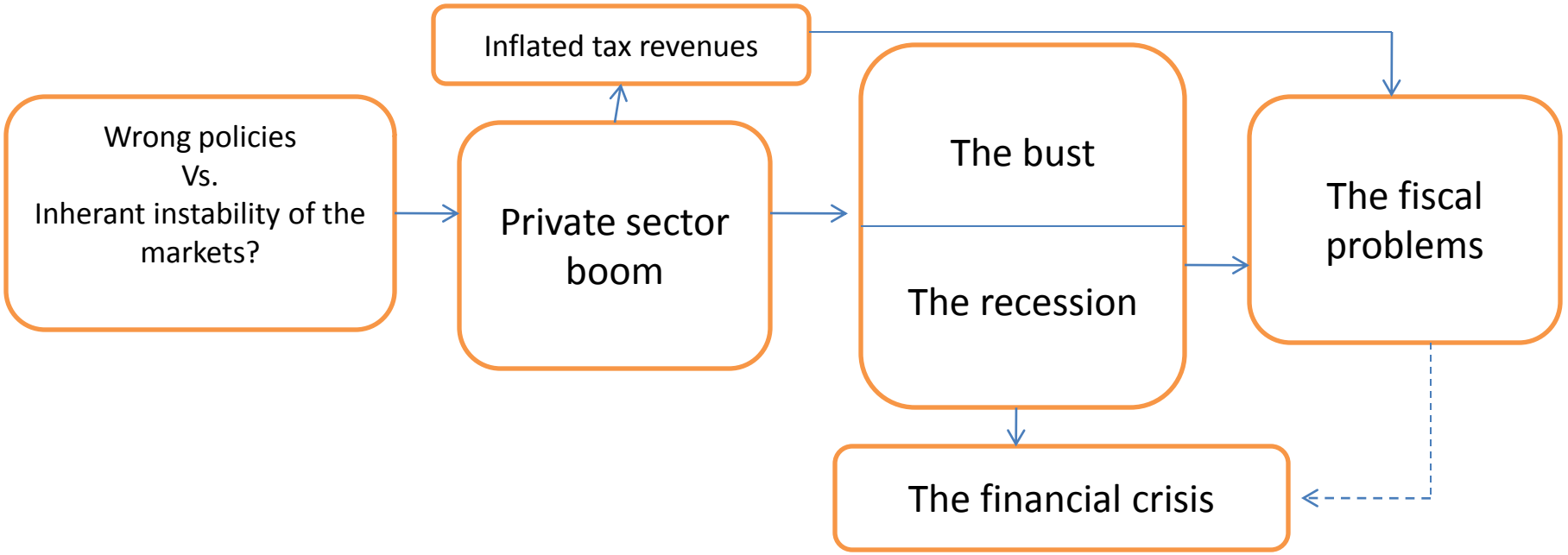
IV. **The underlying channel** – political: what are the professional and popular interpretations of the causes of the crisis? => policies
- *Market failures and/or previous market reforms?*
- *Policy failures, including the lack of reforms?*

7. **Two types of crises which include the fiscal cirses (Sovereign Debt Distress) in the market economies**

A. The financial (banking) crisis → fiscal crisis

B. The fiscal crisis → the financial (banking) crisis

Figure 1. The dynamics of the Financial-Fiscal Crisis



		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Household loans to GDP	Ireland	49,62%	54,79%	62,59%	72,70%	85,99%	94,41%	101,70%	112,55%	123,28%	118,89%
	Spain	48,14%	52,08%	57,61%	64,41%	71,87%	79,22%	83,24%	83,92%	86,43%	85,69%
	United Kingdom	74,89%	76,15%	82,73%	87,53%	92,55%	98,34%	92,81%	84,45%	103,68%	99,16%
Property price index	Ireland	60,6	64,9	74,1	82,4	88,5	100,5	100,0	90,9	78,5	66,3
	Spain	47,0	54,4	64,0	75,2	85,6	94,6	100,0	100,7	93,2	89,6
	United Kingdom	50,3	63,0	72,8	82,9	85,6	93,5	100,0	85,3	88,1	88,6

Source: Eurostat, ECB, Nationwide

Policies which contribute to financial crises

My reading of the empirical literature on the causes of the financial crises leads me to the following list of policies which contribute to the financial crises:

1. Politicized (or state-directed) credit allocation: it is usually driven by political considerations which dominate the economic risk assessment and, thus, leads to large banking losses and/or to Sovereign debt distress. The activity of Fannie May and Freddie Mac in the US is the recent example.

2. Persistently expansionary fiscal policy: it contributes to spending booms and may also result in the banking losses and in the public debt problems.

3. Monetary policy which occasionally leans "with the wind", i.e. fuels asset bubbles (Fed's policy in the 2000s being the main recent example). It has been linked to a doctrine of monetary policy which narrows its goal to the short-term CPJ inflation, and excludes from its purview asset price developments and the related factors (e.g. the growth of monetary and credit aggregates).

4. Tax regulations which favour debt financing relative to equity finance.

5. Subsidies to mortgage borrowing.

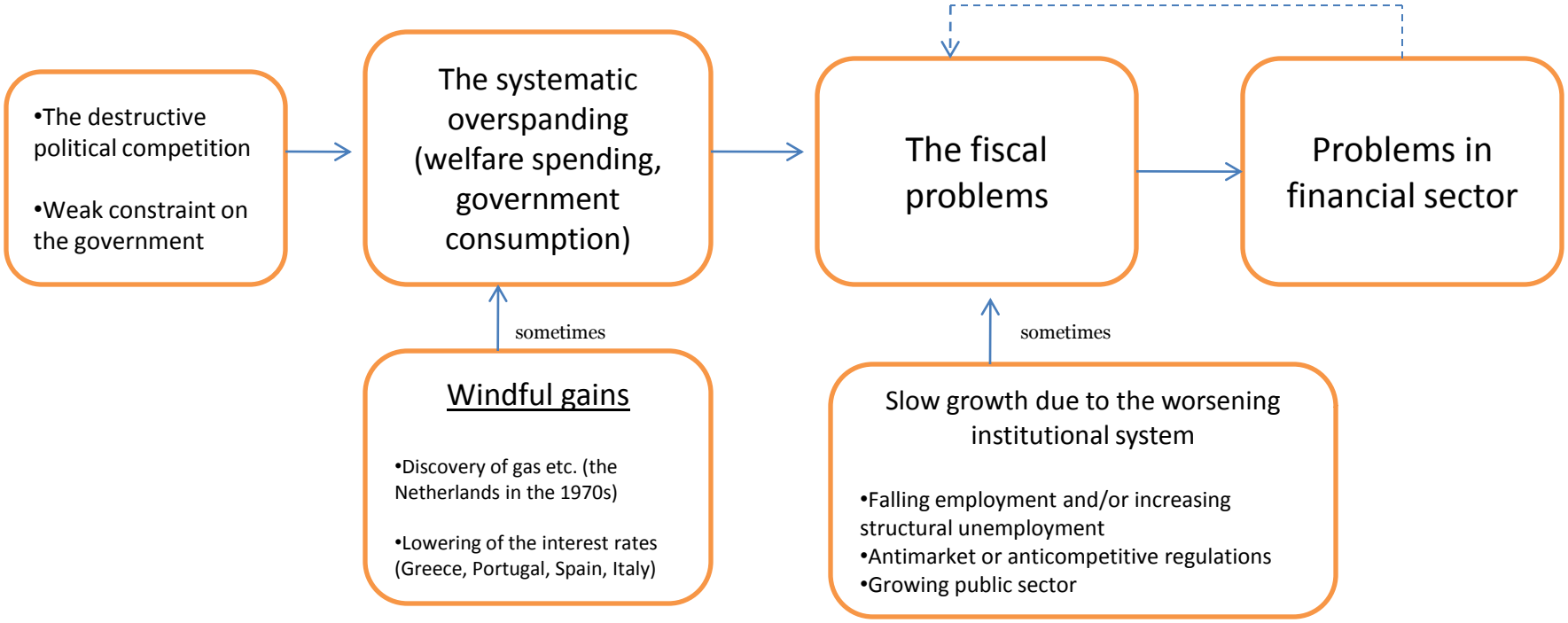
6. Financial regulations which encouraged excessive securitization, e.g. the risk-weights contained in Basel 1 and the mandatory use of credit rating by the financial investors.

7. Generous deposit insurance which eliminates an important source of market discipline.

8. Regulations which limit the shareholders concentration in large banks and thus increase the agency problems and weaken market discipline (Calomiris, 2009a). This may be an important source of the managers compensation schemes which favour short-term gains and disregard longer –term risks.

9. Policies which have resulted in the "too big to fail" syndrome, i.e. financial markets' subsidization – vía reduced risk premiums – of the large financial conglomerates. This is another important instance of public interventions which weaken the market discipline. The resulting concentration, in the face of the financial crisis, exerts an enormous pressure upon the decision-makers to bail-out large financial companies again, thus creating a sort of a vicious circle. The policies in question included an easy acceptance of the mergers of already huge financial companies and an easy-money policy which fuelled the growth of already large financial conglomerates.

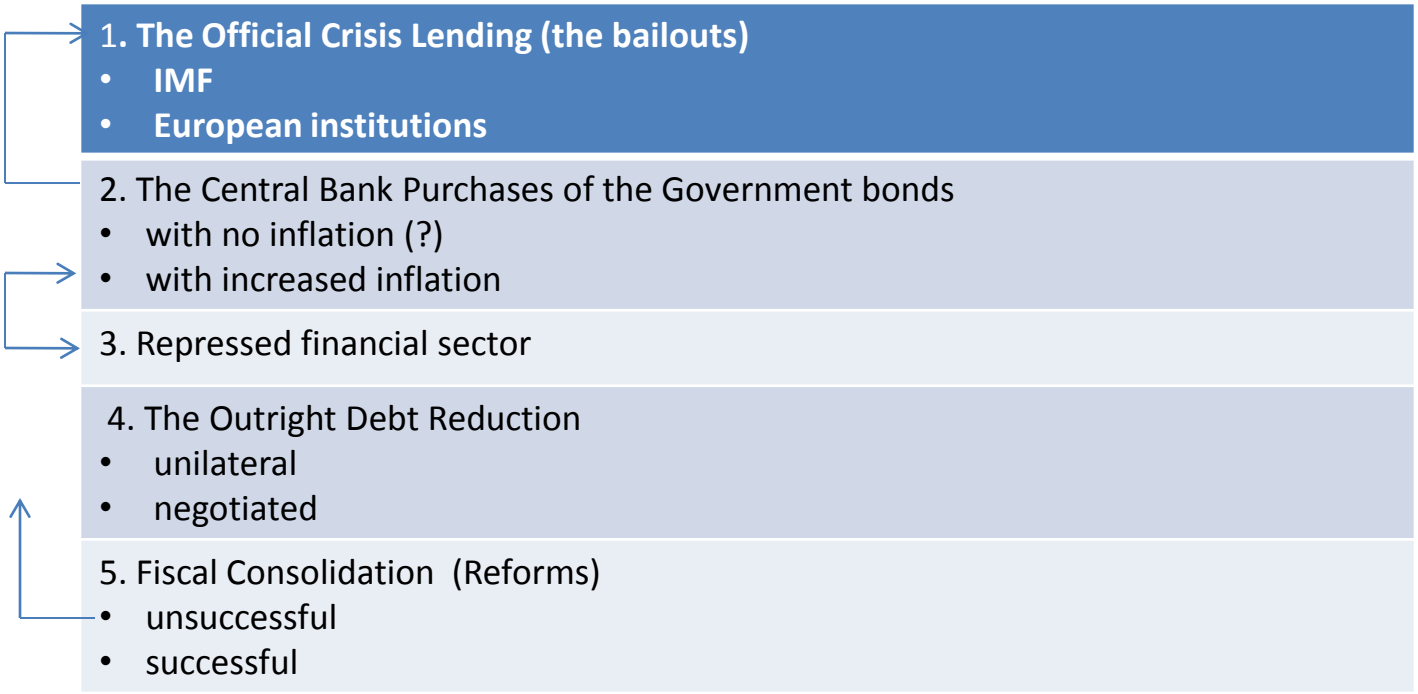
Figure 2. The dynamics of Fiscal- Financial Crisis



		1990	1995	2000	2005	2006	2007	2008	2009	2010
Greece	General government total expenditure	43,43	43,17	46,64	43,95	45,16	46,64	49,65	52,84	49,48
	General government net lending/borrowing	-14,51	-6,99	-3,69	-5,30	-6,12	-6,69	-9,80	-15,51	-10,42
	General government net debt	64,22	66,40	77,41	100,29	106,11	105,41	110,72	127,10	142,76
Portugal	General government total expenditure	39,26	39,66	39,29	42,42	40,82	44,30	44,64	49,83	50,64
	General government net lending/borrowing	-5,06	-3,41	-1,09	-2,54	-0,36	-3,15	-3,54	-10,11	-9,14
	General government net debt	n/a	n/a		41,97	57,95	58,77	63,66	67,36	78,79	88,70

Source: IMF

8. The follow-up to financial-fiscal Crises: the experience



Comments:

• All bailouts create moral hazard; they do not solve the core problem; at the best they serve to buy time to prepare the consolidation/reform package (see the huge literature on IMF). Bailouts do not substitute for consolidation/reforms.

• The return to a repressed financial sector is –hopefully- not very likely

•Appropriate fiscal consolidation/reforms can restore confidence of the financial markets, i.e. they have both short-term and loner-term effects (see later)

•The popular expressions: „contagion", „domino effects", etc. are misleading methaphors

• The uncritical use of those methaphors contributes to the pressure aiming at forcing the bailouts and central bank „actions"

• Delayed, insufficient and/or badly structured consolidation/reform effort exacerbate this pressure

9. Central Banks, public debt, inflation

Those who excert a pressure on the ECB to engage in the massive purchases of the euro area governments' bonds use three main rhetorical devices:

- They stretch the concept of the „lender of the last resort" (see the criticism of O. Issing)
- They frame the choice: either the ECB „will be „the lender of the last resort" or a catastrophe will happen"
- They refer to the examples of FED and Bank of England, as the mere referrence to any example could suffice to settle the problem

This rhetorical devices are no substitute for a careful comparative analysis of the consequences.

Even a preliminary analysis shows, that the massive purchases of government bonds by the ECB would be a worse kind of a „bail-out”:

- It would create a worse moral hazard problem (weakening the incentives to reform)
- It would risk generating inflation and other negative consequences
- It could undermine the trust in the ECB
- It would give it a powerful political position inviting the pressures from the politicians
- It would further undermine the rule of law in the EU in a situation when confidence is crucial

There is- to my knowledge- no careful comparative analysis of the QE and the monetization of the public debt in Japan, the US and Britain. But these operations are cerainly not a „free lunch”:

• in Japan, these operations contributed via very low interest rates to the delays in the reforms and the restructuring of the economy, thus weakening the economic growth and excerbatinh the sovereign debt distress
•In the US the growth slowdown has not been prevented but inflation has not declined; the QE which includes public debt monetization has contributed to the asset bubbles in the world (including oil prices)
•In Britain growth is even slower while inflation is higher

Japan

	Monetary base/GDP	Inflation	GDP per capita (USD, current prices)
1990	9%	3,05%	5,6%
1991	8%	3,28%	3,3%
1992	8%	1,74%	0,8%
1993	8%	1,31%	0,2%
1994	9%	0,60%	0,9%
1995	9%	-0,10%	1,9%
1996	9%	0,10%	2,6%
1997	10%	1,88%	1,6%
1998	11%	0,58%	-2,0%
1999	12%	-0,29%	-0,1%
2000	13%	-0,68%	2,9%
2001	14%	-0,78%	0,2%
2002	18%	-0,88%	0,3%
2003	21%	-0,30%	1,4%
2004	22%	0,00%	2,7%
2005	22%	-0,30%	1,9%
2006	19%	0,30%	2,0%
2007	17%	0,00%	2,4%
2008	18%	1,39%	-1,2%
2009	20%	-1,37%	-6,3%
2010	21%	-0,72%	4,0%
2011		-0,37%	-0,5%

Source: Bank of Japan, IMF

USA

	Monetary base/GDP	Inflation	GDP growth
2007	6,28%	2,87%	1,91%
2008	12,61%	3,82%	-0,34%
2009	15,92%	-0,33%	-3,49%
2010	15,39%	1,65%	3,03%
2011		2,99%	1,53%

Source: Federal Reserve, IMF

UK

	Monetary base/GDP	Inflation	GDP growth
2007	5,33%	2,35%	2,69%
2008	6,74%	3,63%	-0,07%
2009	14,58%	2,12%	-4,88%
2010	13,71%	3,34%	1,35%
2011		4,51%	1,14%

Source: Eurostat, IMF

10. When deficit's reduction is long lasting?

First and foremost when it is expenditure based

Authors	Countries analyzed	Period covered	Main findings
Alesina, Perotti (1996)	20 OECD countries and 3 case studies (Denmark, Ireland and Italy)	1960-1994	"We find that fiscal adjustments which rely primarily on spending cuts on transfers and the government wage bill have a better chance of being successful (...) On the contrary fiscal adjustments which rely primarily on tax increases and cuts in public investment tend not to last"
McDermott, Westcott (1996)	20 OECD countries	1970-1995	"Fiscal consolidation that concentrates on the expenditure side, especially transfers and government wages, is more likely to succeed in reducing the public debt ratio than tax-based consolidation. Also, the greater the magnitude of the fiscal consolidation, the more likely it is to succeed in reducing the debt ratio"
Alesina, Ardagna (1998)	20 OECD countries and 10 case studies	1960-1994	"Three ingredients seem to be important for a succesful, long-lasting and expansionary fiscal adjustment. It must combine spending cuts in transfers, welfare programmes and the governemnt wage bill, some form of wage agreement with the unions that ensures wage moderation, and a devaluation immediately before the fiscal tightening"
Alesina, Ardagna (2009)	21 OECD countries	1970-2007	"As for fiscal adjustments those based upon spending cuts and no tax increases are more likely to reduce deficits and debt over GDP ratios than those based upon tax increases."

Authors	Countries analyzed	Period covered	Main findings
Hagen von, Hallett, Strauch (2002)	20 OECD countries	1960–1998	"(...) the likelihood of sustained consolidation efforts rises when governments tackle politically sensitive items on the budget, such as transfers, subsidies, and government wages. Switching strategies that start with rising taxes and later switching to reduced spending does not produce better results than consistently expenditure-based consolidations. Our analysis also indicates that consolidation fatigue is an important element which policymakers should take into account, since they are strongly time-dependent. Finally, the economic conditions at the start of and during the fiscal consolidation matter. A high debt–GDP ratio and fiscal tightening in other OECD countries raise the likelihood of consolidations to persist. In addition, a weak but recovering domestic economy contributes to the longevity of consolidations."
Guichard, Kennedy, Wurzel, André (2007)	24 OECD countries	1978-2003	"Large initial deficits and high interest rates have been important in prompting fiscal adjustment and also in boosting the overall size and duration of consolidation. Concerning the quality of fiscal policies, an emphasis on cutting current expenditures has been associated with overall larger consolidation. Fiscal rules with embedded expenditure targets tended to be associated with larger and longer adjustments, pointing to institutional features playing a potentially important role in generating successful consolation efforts. Experience across countries also shows that certain design features such as transparency, flexibility to face shocks and effective enforcement mechanisms seem important for the effectiveness of fiscal rules"
Barrios, Langedijk, Pench (2010)	EU27 and 8 non EU OECD countries	1970-2008	"(i) in presence of a systemic financial crisis, the repair of the banking sector is a pre-condition for a fiscal consolidation to succeed in reducing debt levels, especially so when fiscal consolidations are sharp (ii) even after the banking sector is repaired, fiscal consolidations are usually less successful than in absence of financial crises, although more vigorous fiscal consolidations (i.e. cold shower) tend to yield higher results (iii) current debt dynamics in the EU are very unfavourable and in some cases, coupled with rising debt servicing costs and much deteriorated growth outlook warranting differentiated consolidation strategies across EU countries (iv) We do not find conclusive evidence in support of exchange rates (including real exchange rate) depreciation/devaluation as enhancing the success of fiscal consolidation as their effect appear to be low and insignificant."

Under certain conditions fiscal consolidation may turn out to be expansionary. Theory indicates a number of channels through which fiscal adjustment may lead to such non-Keynesian effects

Studies, in general, confirm that the non-Keynesian effects of fiscal consolidation are more likely to occur, when:

- public debt before fiscal consolidation is high or fast growing rather than low and slowly growing;
- fiscal consolidation is of large size and long lasting;
- deficit is reduced through cuts in expenditure rather than via tax increases;
- fiscal consolidation is focused on wages and salaries in public sector and on transfers to households;
- fiscal consolidation is introduced in an open economy.

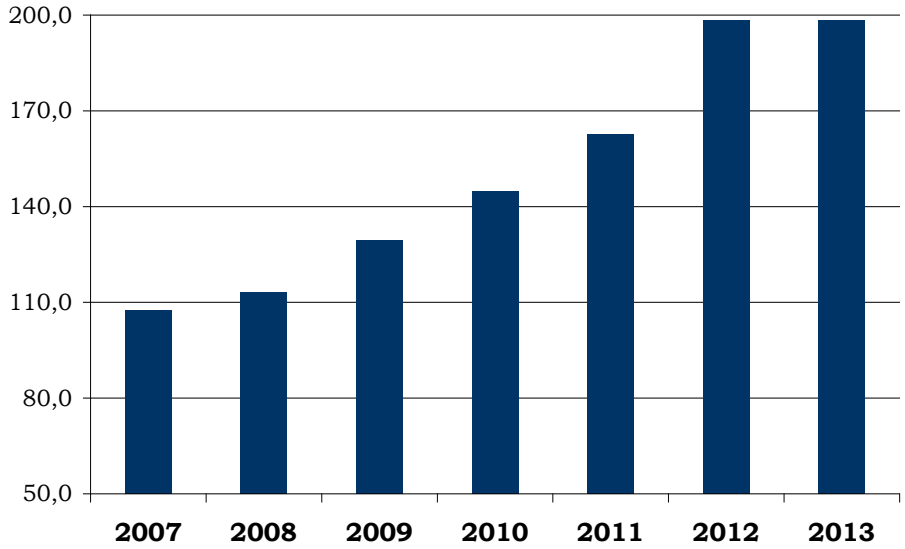
Non- Keynesian effects

Authors	Date of publication	Countries analysed	Period covered	Main findings
Giavazzi F., Pagano M.	1996	19 OECD countries and the case of Sweden	1970-1992	"Our main results are: (i) fiscal policy changes can indeed have non-Keynesian effects if they are sufficiently large and protracted; (ii) these effects are present not only if the fiscal turnaround is obtained through changes in public consumption, but also if it is achieved through changes in taxes and transfers (...); (iii) non-Keynesian effects work, at least partly, by affecting private sector expectations about the future income from labor and capital, and not solely via the implied changes in the real interest rate and asset values"
McDermott, Westcott	1996	20 OECD countries	1970-1995	"(…)fiscal consolidation need not trigger an economic slowdown, especially over the medium term. Fiscal consolidation that concentrates on the expenditure side, especially transfers and government wages, is more likely to succeed in reducing the public debt ratio than tax-based consolidation. Also, the greater the magnitude of the fiscal consolidation, the more likely it is to succeed in reducing the debt ratio"
Perotti R.	1999	19 OECD countries	1965-1994	"I find strong evidence that expenditure shocks have Keynesian effects at low levels of debt or deficit, and non-Keynesian effects in the opposite circumstances. The evidence on similar switch in the effects of tax shocks is less strong."
Lane P. R., Perotti R.	2001	14-17 OECD countries	1964-93	"A fiscal reform that takes the form of a reduction in wage government spending will crowd in an expansion in traded output and employment and improve the level of profitability. A reform that consists of an increase in labor taxation will have the opposite effect on the traded sector. (...) under flexible exchange rates, a reduction in wage government spending doubly improves profitability in the traded sector: not only do labor costs fall but firms in the traded sector also benefit from the induced exchange rate depreciation."
Borys P., Cizkowicz P., Rzońca A.	2011	10 NMS	1995-2010	"The results confirm that composition of the consolidation determines the output response. Moreover, we find evidence that all types of fiscal consolidations stimulate private investments, while export acceleration is observed only when consolidations involve mostly expenditure curtailment. Private consumption reaction to fiscal policy shows signs of nonlinearity - in the case of minor adjustments Keynesian effects dominate, but they are cancelled out when sizable consolidations are considered."

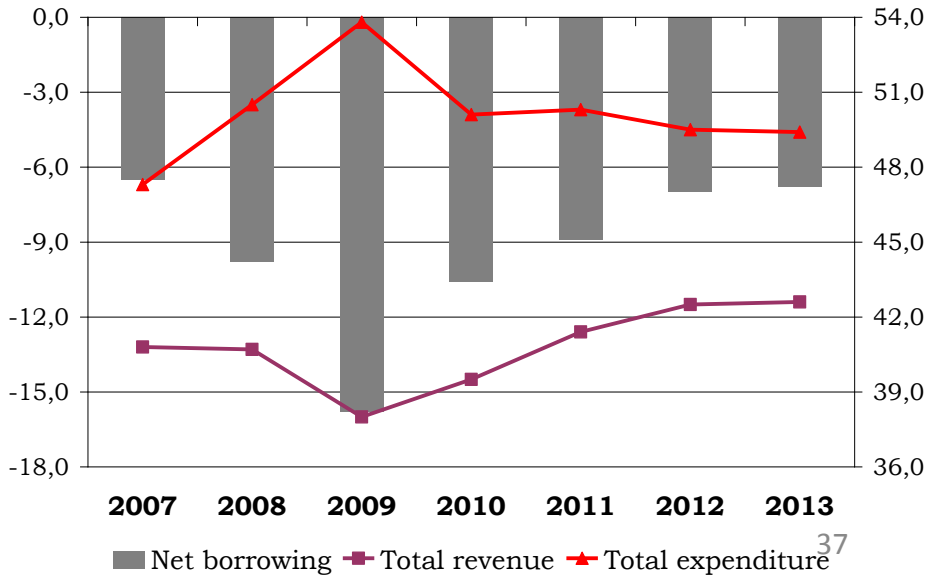
Based on both theoretical and empirical studies on non-Keynesian effects of fiscal contraction, one may claim that deficit's reduction in Greece has not been expansionary, because:

- ✓ even if large, the adjustment has not been large enough to dispel concerns for government's solvency;
- ✓ even if it has included cuts in expenditure, expenditure to GDP ratio is expected to stay above its pre-cisis level; besides, positive supply effects of these cuts have been offset (or possibly outweighed) by negative effects of tax increases (both introduced and planned);
- ✓ it has not been accompanied by significant growth enhancing reforms.

Gross debt, general government (as % of GDP)



Net borrowing, expensiture and revenu, general government (as % of GDP)



Source: European Commission (2011) "European Economic Forecast - Autumn 2011". *European Economy* 6/2011

11. What are the structural problems in the euro area? What are the solutions?

Two kinds of problems:

1. Not related to the essence of the EMU (eg. low capital/asset ratios in the largest European banks)

2. Related to the essence of the EMU

What are the special (inherent) problems of the EMU- the main assertions:

1. One monetary policy can not fit all

2. The monetary union without a „political” union

One monetary policy can not fit all ? The nominal devaluation in necessary tool of adjustment?

- The temporal aspect (assymetric shocks)- not a serious problems in view of the growing synchronization of the business cycles

- The structural asepct: the ECB's interest rate may be too low for some countries most of the time: boom bust; much more serious problem

- The experience of hard pegs:PIIGS versus BELL

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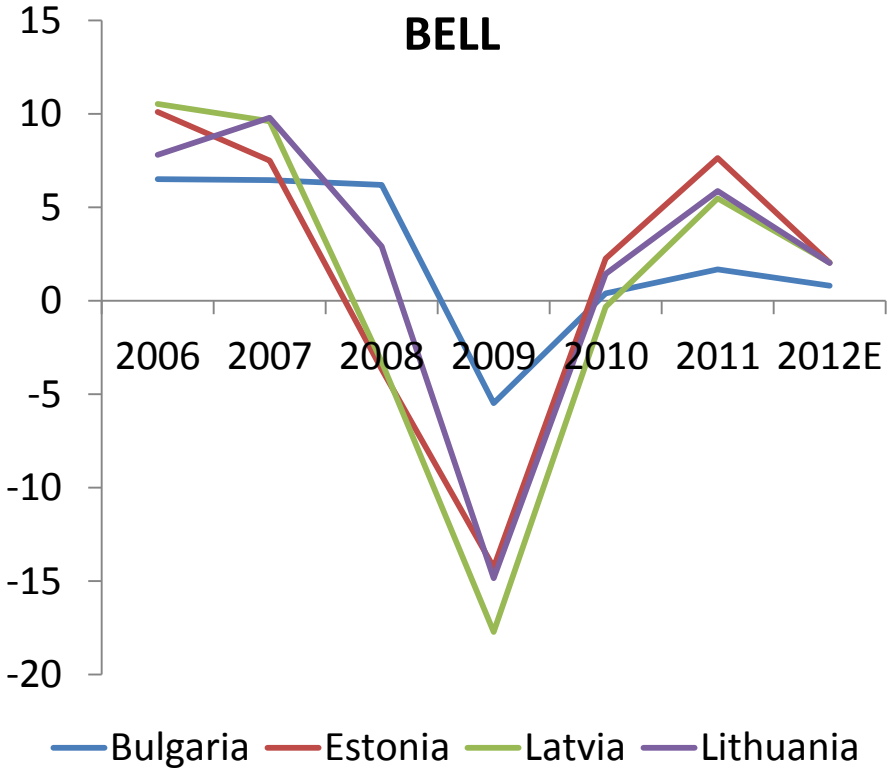
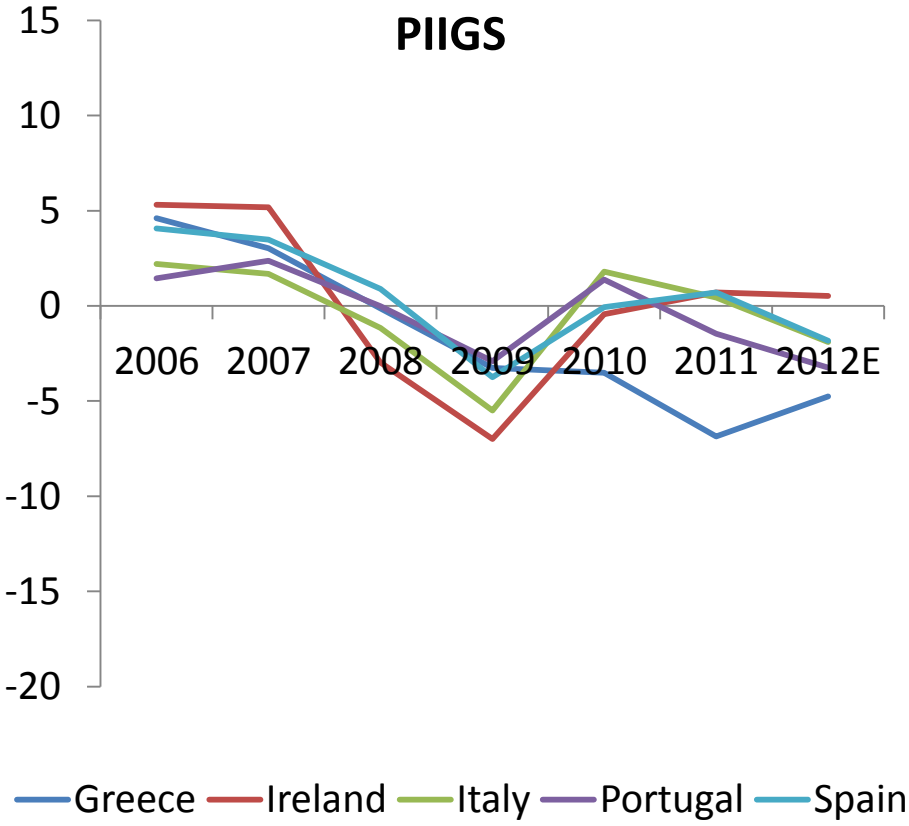
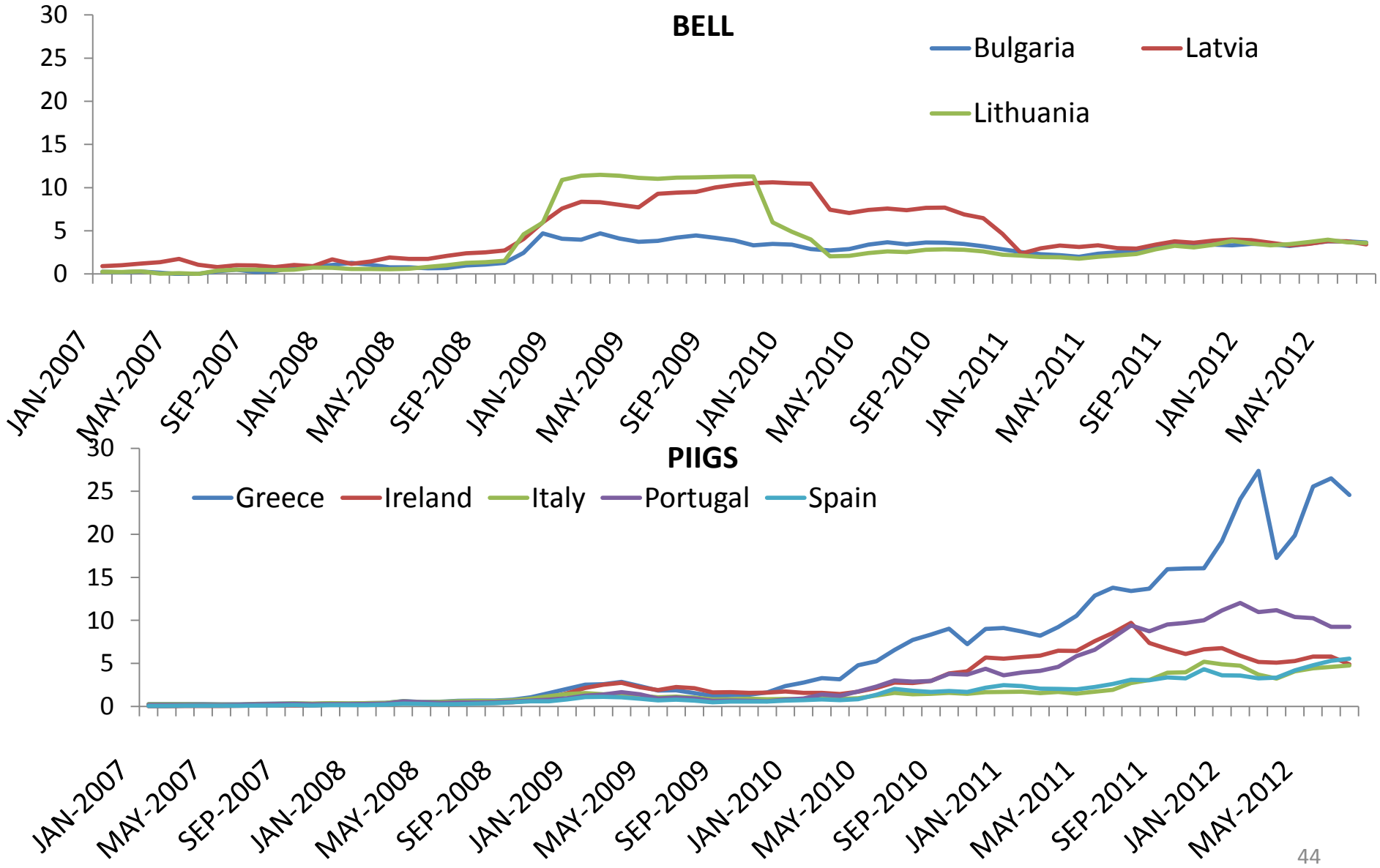
GDP growth 2007-2012 (%)





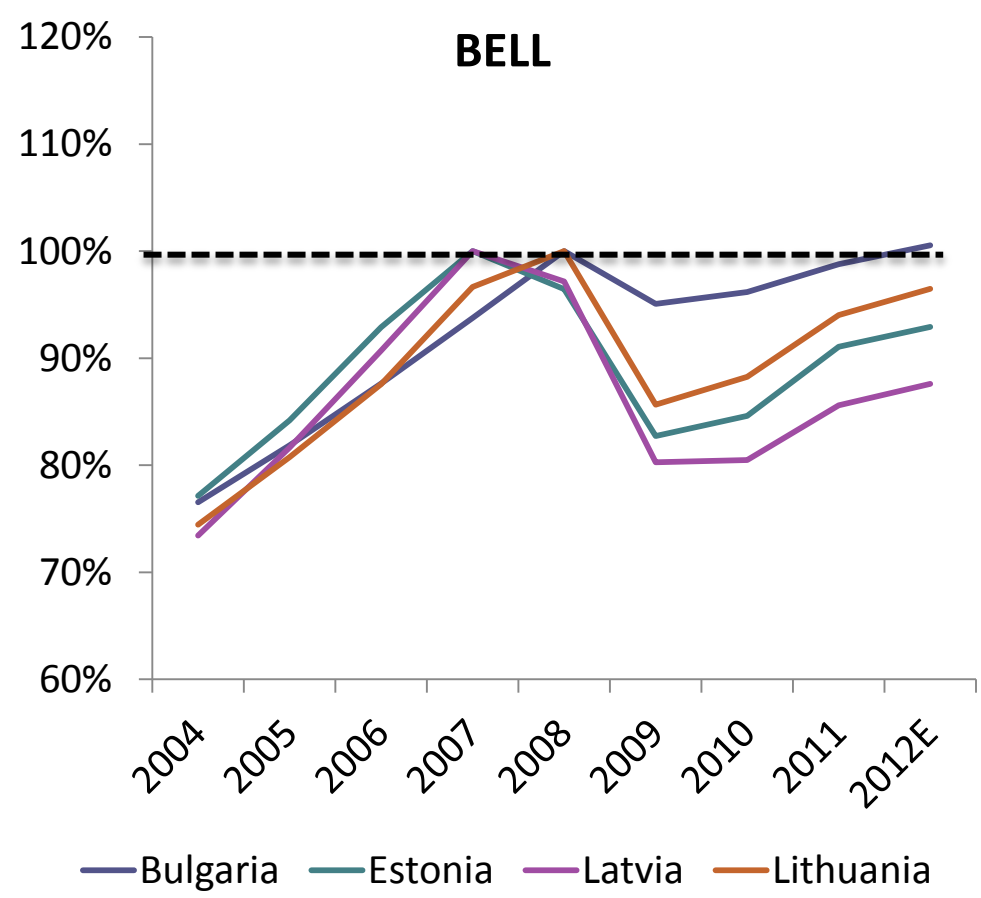
Source: IMF WEO IV 2012

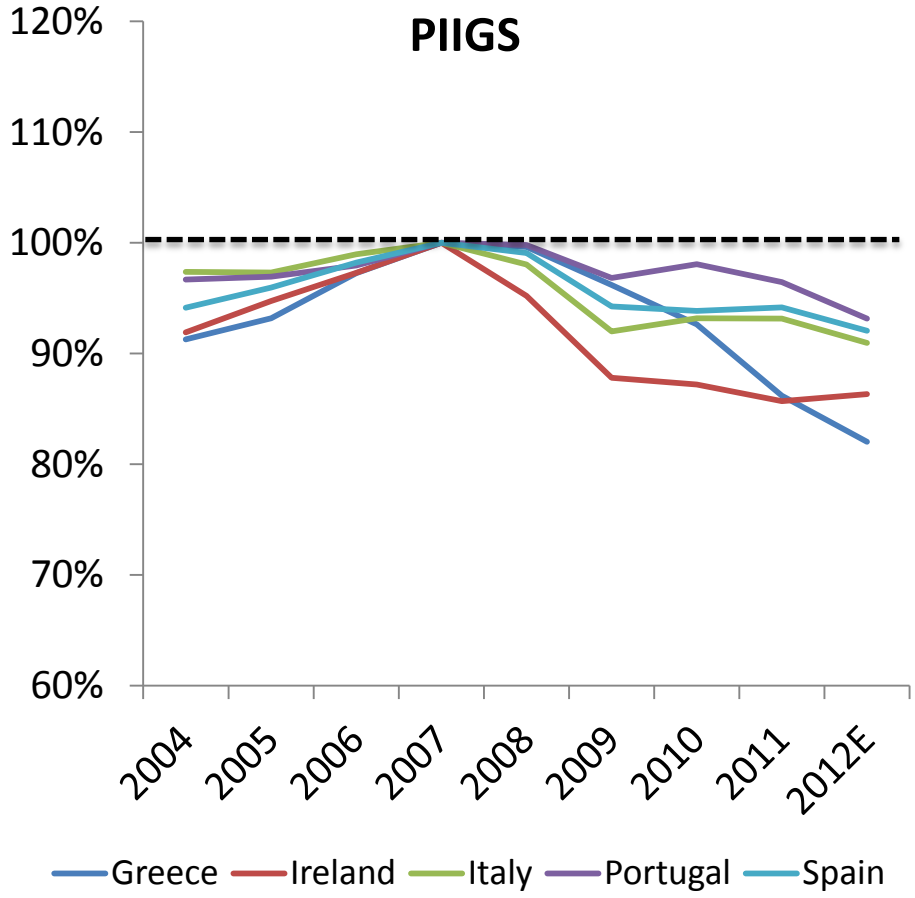
10Y Bond yields spreads relative to Germany



Source: ECB

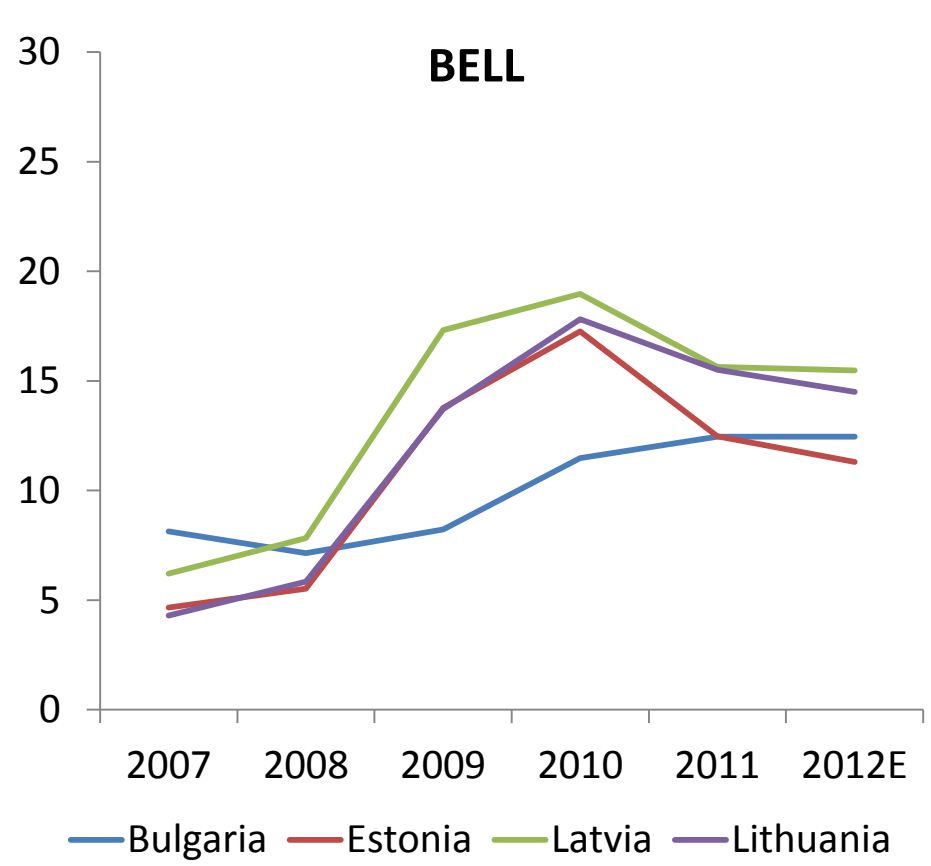
GDP per capita (peak = 100%)

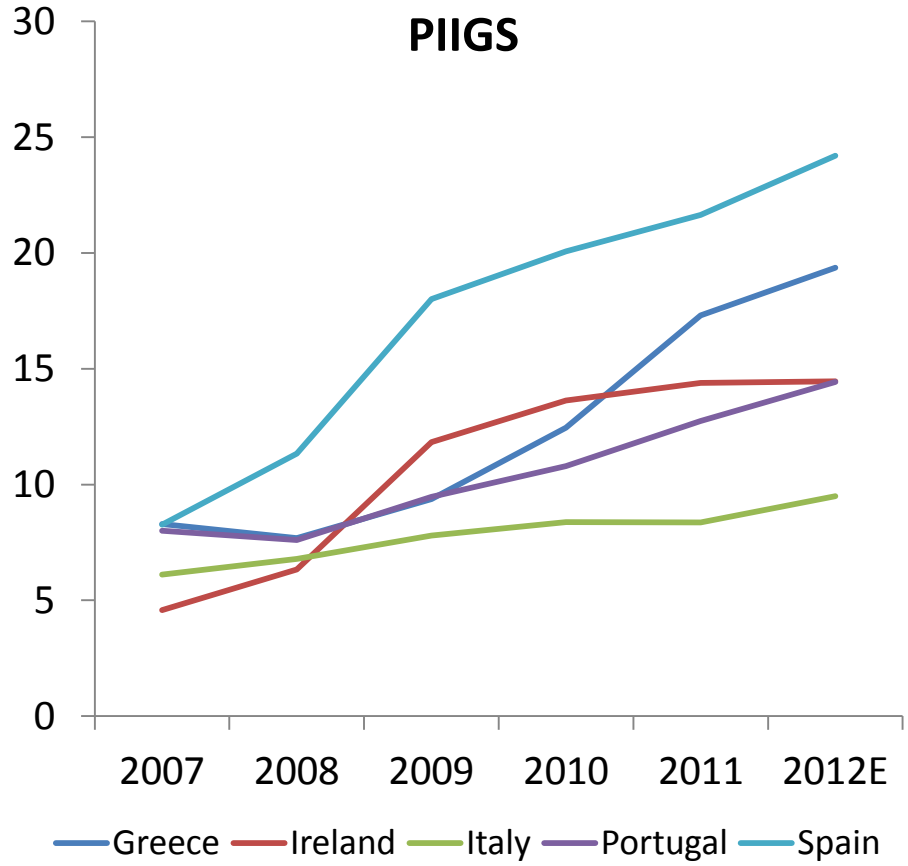




Source: IMF WEO IV 2012

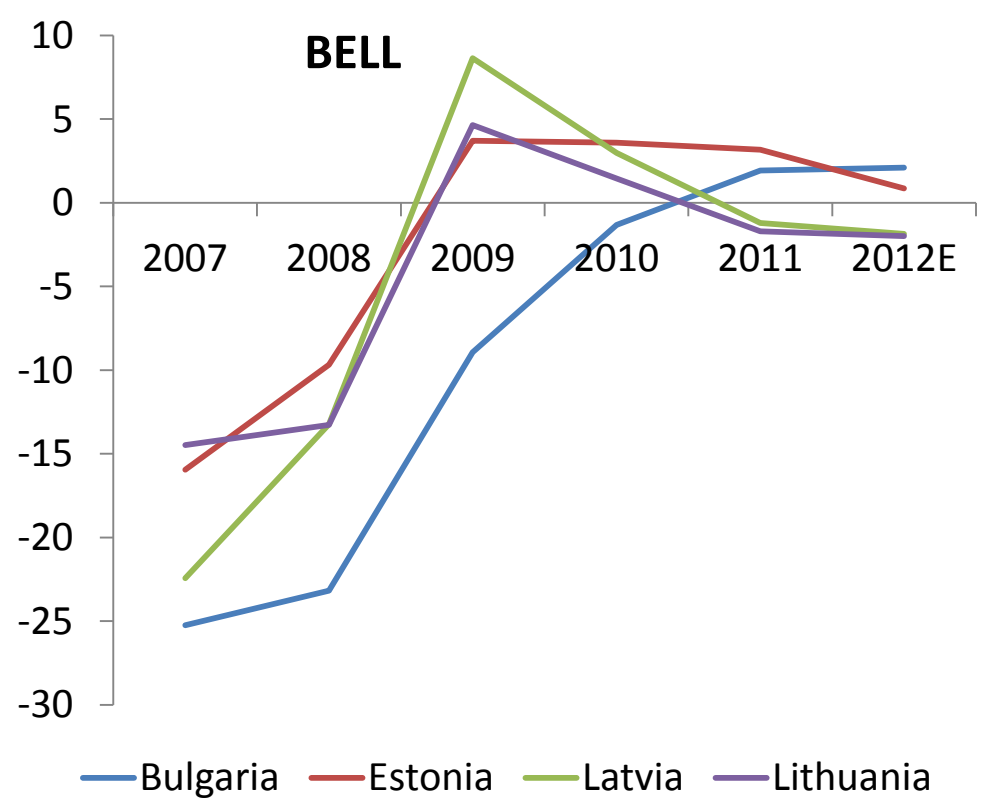
Unemployment rate (%)

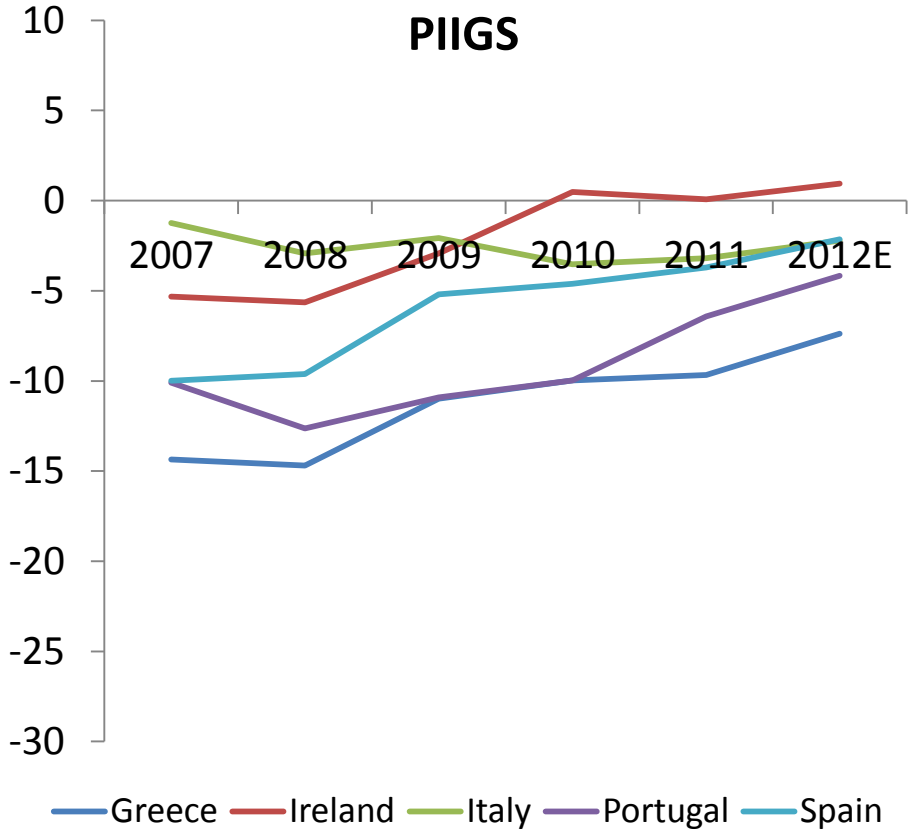




Source: IMF WEO IV 2012

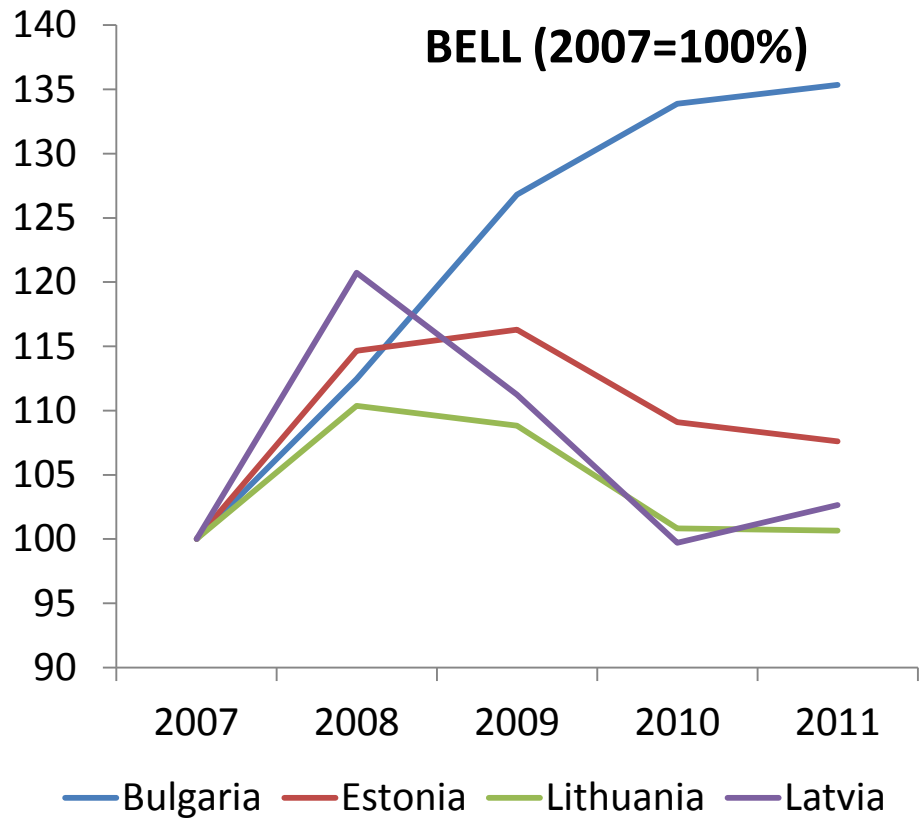
Current account balance (% GDP)

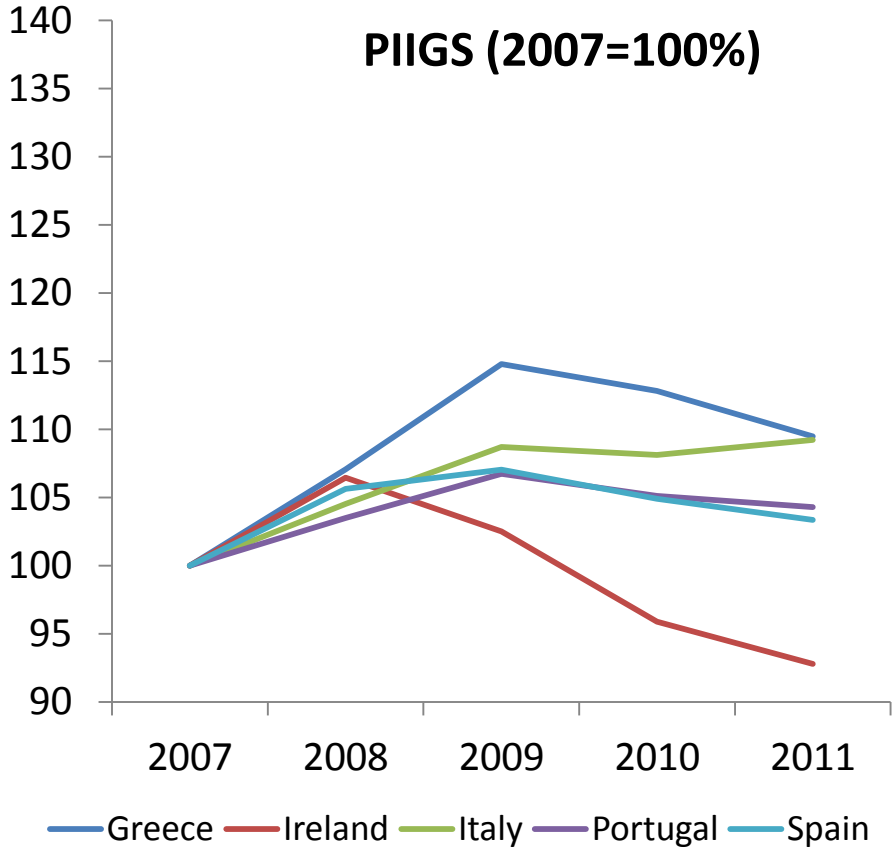




Source: IMF WEO IV 2012

Unit Labor Costs (2007=100%)





Source: ECB SDW

Contents: