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Comments on «Fault Lines in the Public Sector»

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Discussion of Fault Lines in the Public Sector

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Draft version

Plan of the discussion

- Empirical analysis
  - In 2007-2009 the EA distressed countries fluctuations are NOT characterized by asymmetric shock RATHER by asymmetric policies.
  - Challenge this statement

- Structural Analysis
  - Implementation issues
  - The Elasticity of labor supply

Empirics: Asymmetric shocks ?

- The author argues that the story about EA asymmetric shocks in 2007-2009 is not supported by the data

- The analysis is based on the EA distressed countries real growth rates relative to the EA average

- The empirics shows that in the cross-country business cycles are alike and not markedly different from the EA average

- Hence, not very asymmetric shock but very asymmetric policies !

GDP growth original table

Table 5: Real and Nominal GDP Growth									
Change in Real GDP Growth	2002-06 Average	2007	2008	2009	2010	2011	2012	Diff in Diff 2007-2009	Diff in Diff 2009-2011
Cyprus	1.49	2.09	3.21	2.53	-0.68	-0.9	-1.82	0.44	-3.43
Greece	2.55	0.54	-0.59	1.25	-6.93	-8.54	-5.77	0.71	-9.79
Ireland	3.28	2.45	**-2.48**	-1.07	-2.76	0.00	1.55	**-3.52**	1.07
Italy	-0.71	-1.32	-1.53	-1.11	-0.27	-1.06	-1.76	0.21	0.05
Portugal	-1.03	-0.63	-0.38	1.48	-0.05	-2.99	-2.56	2.11	-4.47
Spain	1.58	0.48	0.52	0.64	-2.31	-1.02	-0.81	0.16	-1.66
Euro Area	1.76	3.00	0.38	-4.39	1.99	1.44	-0.61	-7.39	5.82
Std.Dev.	2	2.4	2.5	3.3	1	2	1.4	4.9	5

Inference from the table

1. During the 2007-2009, Ireland is the only country having a growth rate of one cross-section standard deviation less then the EA average

2. The diff in diff (w.r.t. EA average) growth rate between 2007-2009 reveals that cycles are alike. GR, IT, PT, CY, ES are positive (grow more then the average EA) and statistically close to zero

3. 1+2 => EA cycles are alike,
   No strong evidence that countries with weak fiscal stance after 2009 were hit by larger negative shock then the EA averge

4. Logical conclusion: Difference must come from different fiscal adjustments
   1. « what marks a crisis country in the European debt crisis is not that it was hit by a particularly adverse economic shock but rather an asymmetric fiscal adjustment relative to the euro-area average. »

Are EA cycles truly symmetric ?

- The statement that EA cycles are symmetric and only policy adjustements are asymmetric is a strong statement.
- Let’s challenge this claim.
- The 2007-20013 EA experience is characterized by largely heterogeneous responses of the labor market
- Were the labor market cycles of EA distressed country symmetric w.r.t. the EA average ?

  Not really.

A labor market table

Table 5: Annual Unemployment rates									
UR	2002-2006	2007	2008	2009	2010	2011	2012	Diff in Diff 2007-2009	Diff in Diff 2009-2011
Cyprus	4.4	3.9	3.6	5.4	6.3	7.9	11.9	-0.5	1.9
Greece	9.9	8.3	7.7	9.5	12.5	17.7	24.3	-0.8	7.6
Ireland	4.5	4.7	6.4	**12.0**	**13.9**	**14.7**	**14.7**	**5.4**	2.1
Italy	7.9	6.1	6.8	7.8	8.4	8.4	10.7	-0.3	0.0
Portugal	7.5	8.9	8.5	10.6	12.0	12.9	15.9	-0.3	1.7
Spain	10.3	8.3	**11.4**	**18.0**	**20.1**	**21.7**	**25.1**	**7.7**	3.1
EA	8.8	7.6	7.6	9.6	10.1	10.2	11.4	2.0	0.0
SD	2.08	1.84	1.68	1.69	1.74	1.69	1.76	0.81	1.12

Inference from the new table

1. While before 2007 (included) UR were comparables, since 2008 we observe unemployment gaps. In 2008 Spain is statistically above the EA average and in 2009 Spain and Ireland are above average

2. The diff in diff (w.r.t. EA average) growth rate between 2007-2009 reveals that cycles are NOT alike.
    1. GR, IT, PT, CY are negative (work more then the EA average) but statistically close to zero
    2. ES and IR are LARGELY positive (work much less then the EA average)

3. Ireland and Spain were experiencing the burst of the housing bubble. Country specific characteristics cannot be ignored.

4. 1+2 => EA cycles are NOT alike. Either because of the intensity of the shocks, of the lag structure or of the transmission mechanism

5. Since the cycles are asymmetric, fiscal policy adjustements while ex ante symmetric can deliver asymmetric outcomes.

Data rich(er) environment

- Focusing on single variables is tricky and potentially misleading

- Data rich environment.
  - Ferroni and Klaus (2013) look at the co-movements of a large number of EA country specific variables (180) and compress the information by extracting common dynamic components (dynamic hierchical factor analysis).

- Finding
  - While for FR,IT, DE, business cycles gaps look independent and identically distribute (i.i.d.) and unpredictable, BC gaps are significant and very persistent in Spain. In Spain, there is some 'structure' left unexplained by the EA common factor.
  - Spain was overheated before the crisis and over-depressed in the aftermath (relative to an average EA behavior)

Business Cycles gaps

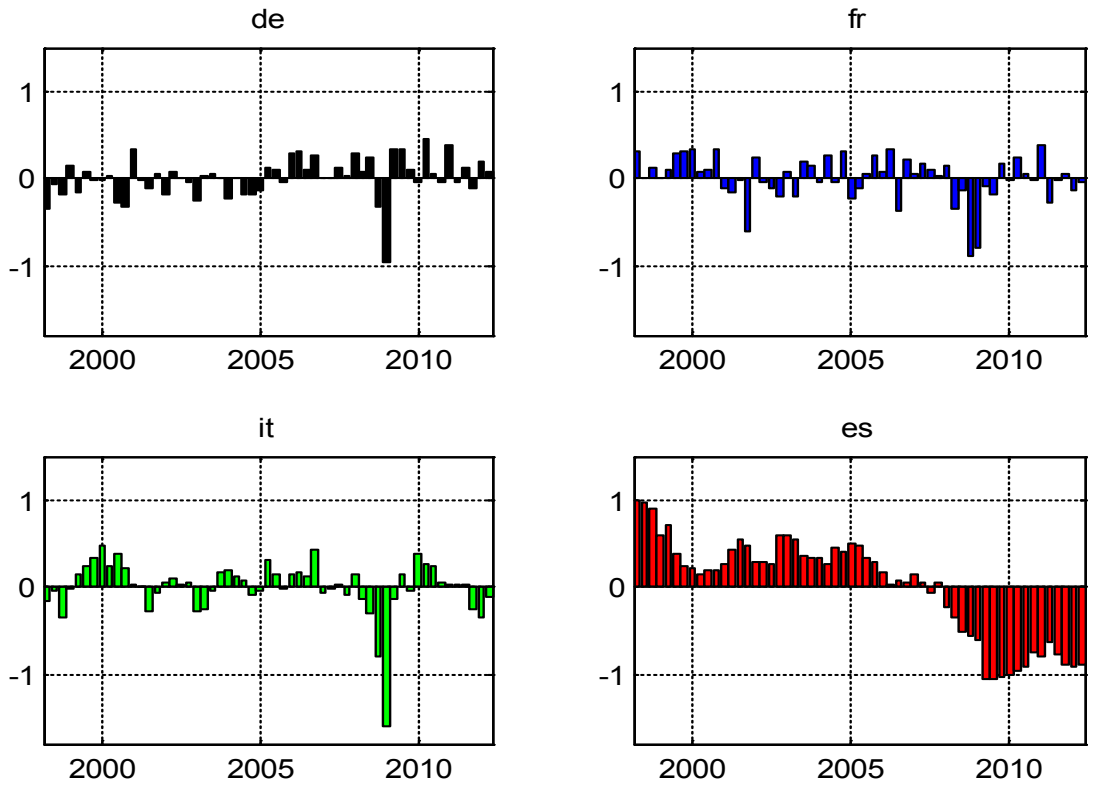


Figure 1: Difference between the country business cycles indicator and the EA business cycles index. From top right to bottom left, Germany France, Italy and Spain.

Structural Analysis

- The author advocates a structural analysis of sustainability (fiscal limits, balance sheet approach)
- Structural = general equilibrium, microfounded tools
- This echoes a long tradition, e.g. Leeper (2010), Bohn (1995, 2007)
- I could not agree more and the author should be praised for his eloquent plea

Structural Analysis

- The author develops two theoretical approaches that could prove useful in assessing the budgetary situation of a government
- The first one is the notion of *fiscal limit*. It's more or less like the notion of liquidity
- The second is the balance sheet approach. That's a bit like the notion of solvency
- The two methods should hence be seen as complementing each other.

Main Comment

- In this discussion, I will focus on the notion of a fiscal limit
- This concept is intimately linked to the more familiar notion of Laffer curves
- In a nutshell, the fiscal limit is just the top of the Laffer curve
- Past that level, governments face serious liquidity problems since their fiscal revenues cannot be increased
- Once reached, the fiscal limit signals necessary budget adjustments

Main Comment

- Though perfectly sound from a theoretical point of view, the notion of fiscal limit raises a severe empirical challenge
- I'm going to try to illustrate this through two simple examples
- Odd as it may seem, both examples revolve around the *elasticity of labor supply*
- Both also make the same point: Structural is not simple
  - raising taxes depends on labor elasticity
  - The mix between taxes and the provision of public goods affects this elasticity

Laffer curves= f(labor supply)

- The notion of fiscal limit is closely related to the top of the Laffer curve
  - In turn, the top of the Laffer curve depends drammatically on structural parameters (true in steady state or along a stochastic path)
  - Key parameter: labor supply elasticity
  - Problem: that's the most debated parameter in the history of macroeconomics

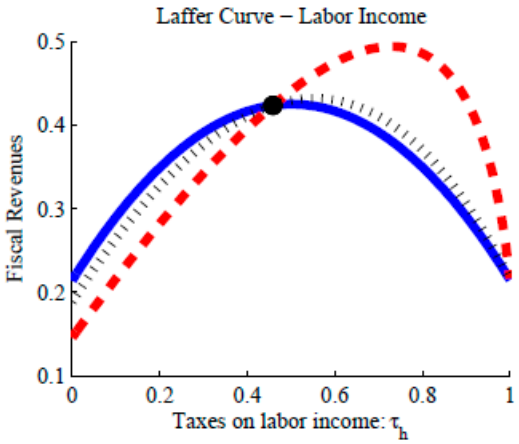
Laffer curves = f(labor supply)

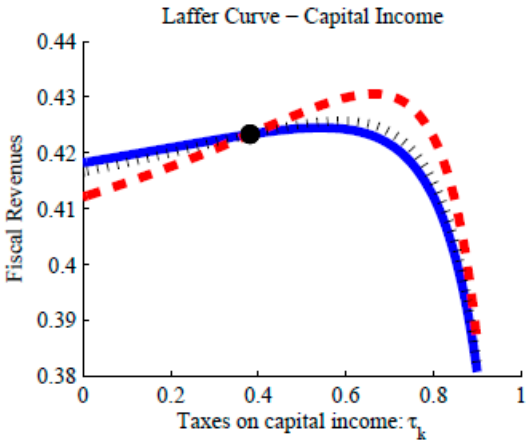
simulation based on Matheron et al.

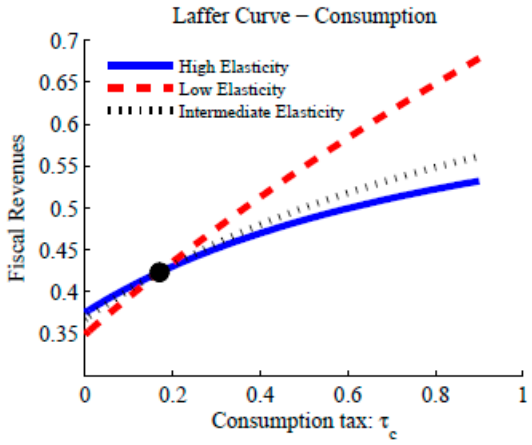
- Consider a neoclassical growth model calibrated to French data
  - Take tax rates as measured by the Mendoza, Razin & Tesar approach
  - Consider three scenarios on labor supply: large elasticity (indivisible labor) , medium elasticity, small elasticity

Laffer curves= f(labor supply)

simulation based on Matheron et al.







Going back to the euro area experience:

Greece could increase its fiscal revenues/ GDP from 2008 to 2013

Contrasts with the decline in Portugal from 2011 to 2012

Laffer curves= f(labor supply)

- One has to be very careful with policy implications of models too sensitive to labor elasticity
- They highly depend on this parameter at the center of the most important controversies in macro economics
- In Bi and related papers, more attention could be paid to this issue
- In the end, this will be central to the policy diagnostic

Are public spending and taxes always bad?

- Prescott (2004) also suggests a Laffer effect
  - If really true, Scandinavian countries should have an even lower labor supply than Italy or France
  - Rogerson (2007) argues that labor supply elasticity to taxes is not invariant to nature of expenditures
    - Basically, labor supply by women (probably) does not depend on France blowing atolls in the Pacific, but sensitive to the provision of daycare.

- When a country consolidates, risk of extra depressing effects when social transfers shut down, for example if these transfers boost the labor supply by women

Bottom line

- Suggestion of a transparent, structural approach is welcome
- A truly structural approach should not be univocal
- The structural approach should incorporate competing forces if it is to be used by policymakers