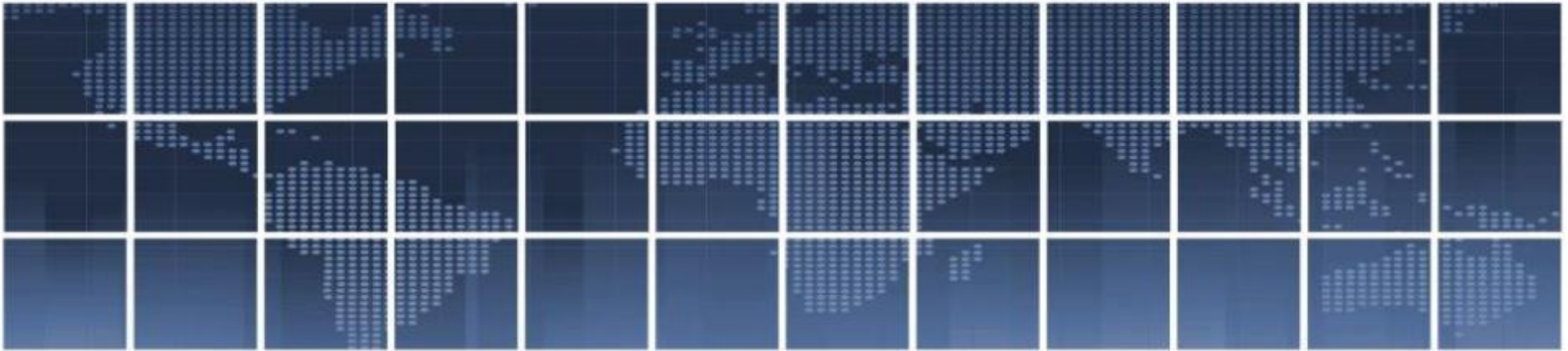


Ομιλία κ. Wolfgang Piccoli

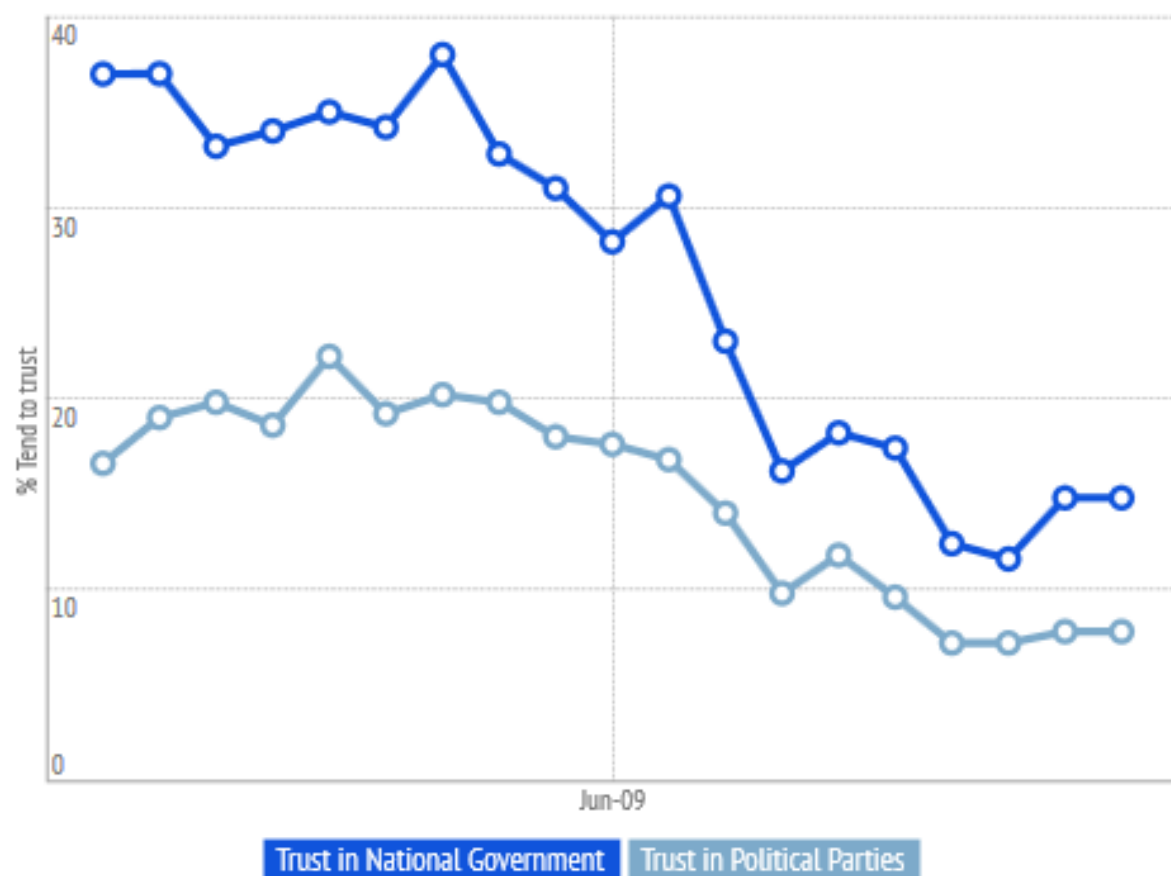
Διευθυντή Ερευνών της Teneo Intelligence



## Can Euro-economics survive Euro-politics?

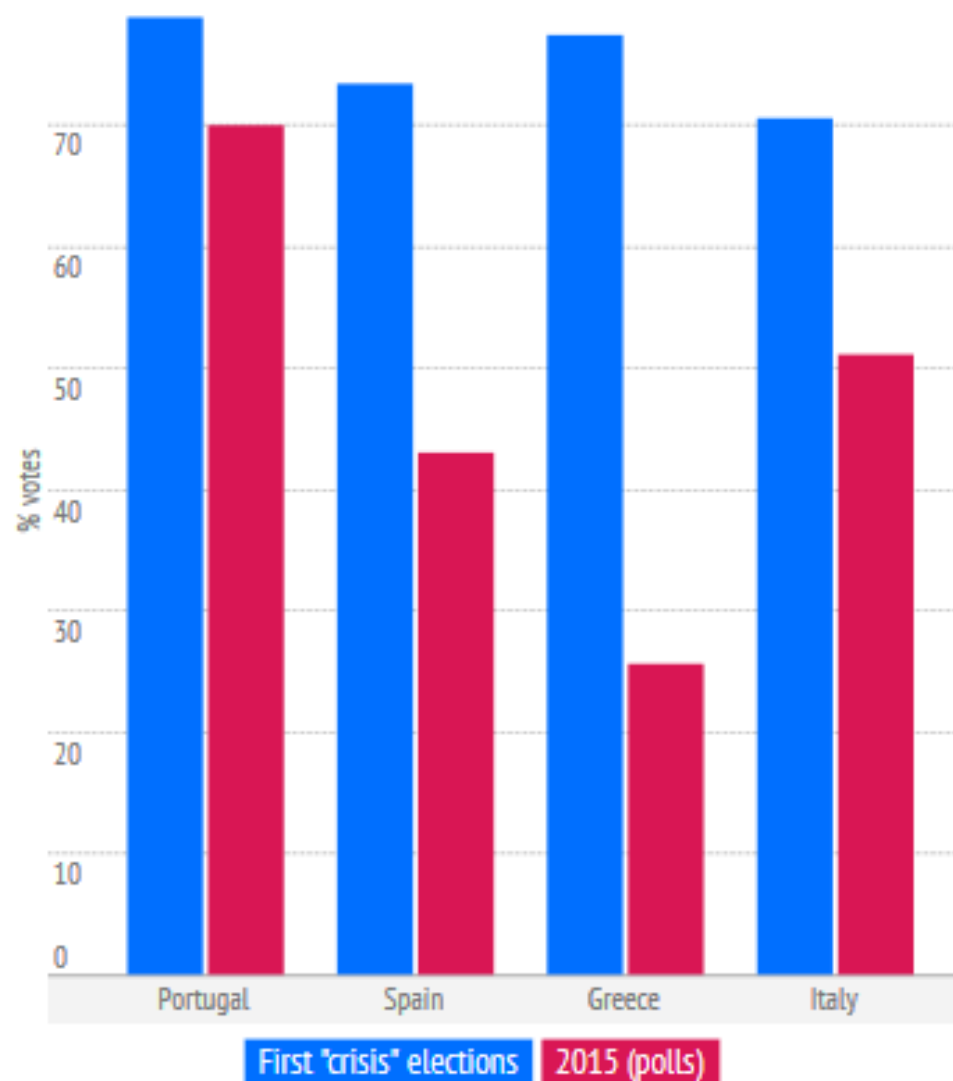
Wolfgang Piccoli, Managing Director  
[wolfgang.piccoli@teneointel.com](mailto:wolfgang.piccoli@teneointel.com)

# Trust in National Governments and Political Parties in France, Greece, Italy, Portugal and Spain

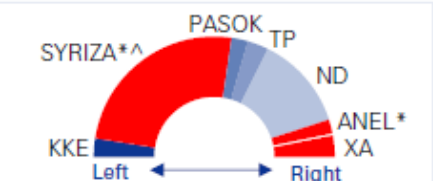


Source : Eurobarometer

## Decrease in support for mainstream parties (2008-2015)

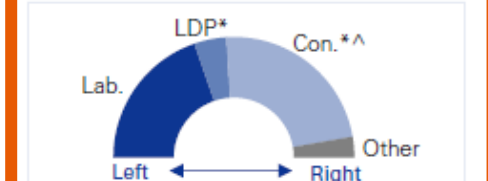


January 25  
**Greek Parliamentary Election**  
 300 seats, 7 parties



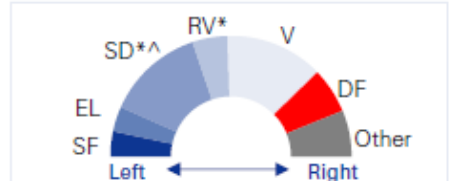
Party	Vote
Radical Left Coalition (SYRIZA)	36%
New Democracy (ND)	28%
Golden Dawn (XA)	6%
The River (TP)	6%
Communist Party (KKE)	6%
Panhellenic Socialists (PASOK)	5%
Independent Greeks (ANEL)	5%

May 7  
**UK General Election**  
 650 Seats, 13 Parties



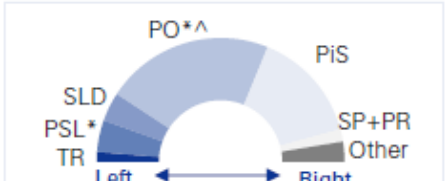
Party	Vote	Polls
Conservative (Con.)	36%	34%
Labour (Lab.)	29%	34%
Liberal Democrat (LDP)	23%	8%
UK Independence (UKIP)	3%	13%
Scottish National (SNP)	2%	N/A
Green	1%	5%

September (on/before the 14th)  
**Danish General Election**  
 179 Seats, 9 Parties



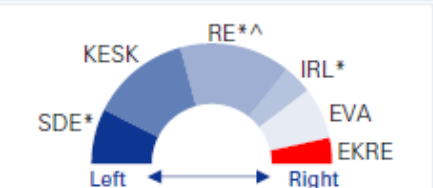
Party	Vote	Polls
Liberal (V)	27%	23%
Social Democracy (SD)*^	25%	23%
Danish People's (DF)	12%	19%
Radical Left (RV)*^	10%	7%
Socialist People's (SF)	9%	6%
Red-Green (EL)	7%	8%

October (date TBD)  
**Polish Parliamentary Election**  
 460 Seats, 6 Parties



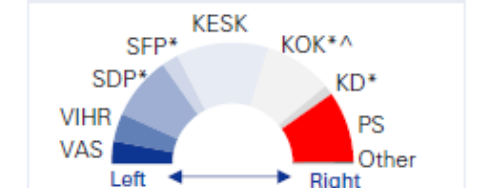
Party	Vote	Polls
Civic Platform (PO)	39%	37%
Law and Justice (PiS)	29%	32%
Your Movement (TR)	10%	2%
Polish People's (PSL)	8%	6%
Dem. Left Alliance (SLD)	8%	7%
United Right (SP+PR)	N/A	N/A
Coalition for Renewal of the Republic (KORWiN)	N/A	4%

March 1  
**Estonian Parliamentary Election**  
 101 Seats, 6 Parties



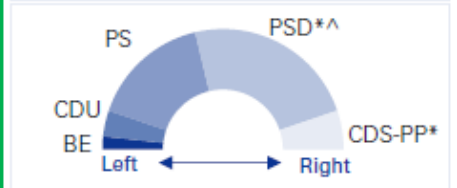
Party	Vote
Reform (RE)	28%
Centre (KESK)	25%
Social Democratic (SDE)	15%
Pro Patria/Res Publica (IRL)	14%
Free (EV)	9%
Conservative People's (EKRE)	8%

April 19  
**Finnish General Election**  
 200 Seats, 10 Parties



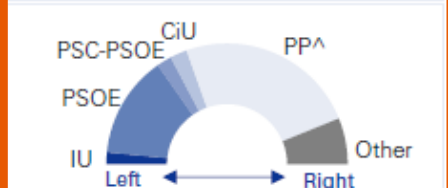
Party	Vote
Finnish Centre (KESK)	21%
National Coalition (KOK)	18%
Finns (PS)	18%
Social Democratic Party	17%
Green Alliance (VIHR)	9%
Left Alliance (VAS)	7%
Swedish People's (SFP)	5%
Christian Democrats (KD)	4%

October (date TBD)  
**Portuguese General Election**  
 230 Seats, 5 Parties



Party	Vote	Polls
Social Democratic (PSD)	39%	28%
Socialist (PS)	28%	38%
People's (CDS-PP)	12%	7%
Democratic Unity (CDU)	8%	9%
Left Block (BE)	5%	4%

December (on/before the 20th)  
**Spanish General Election**  
 350 Seats, 17 Parties



Party	Vote	Polls
People's (PP)	45%	25%
Socialist Workers' (PSOE)	29%	21%
Convergence-Union (CiU)	4%	3%
Socialists of Catalonia (PSC-PSOE)	N/A	N/A
United Left (IU)	7%	5%
Podemos	N/A	22%
Citizens (C's)	N/A	12%



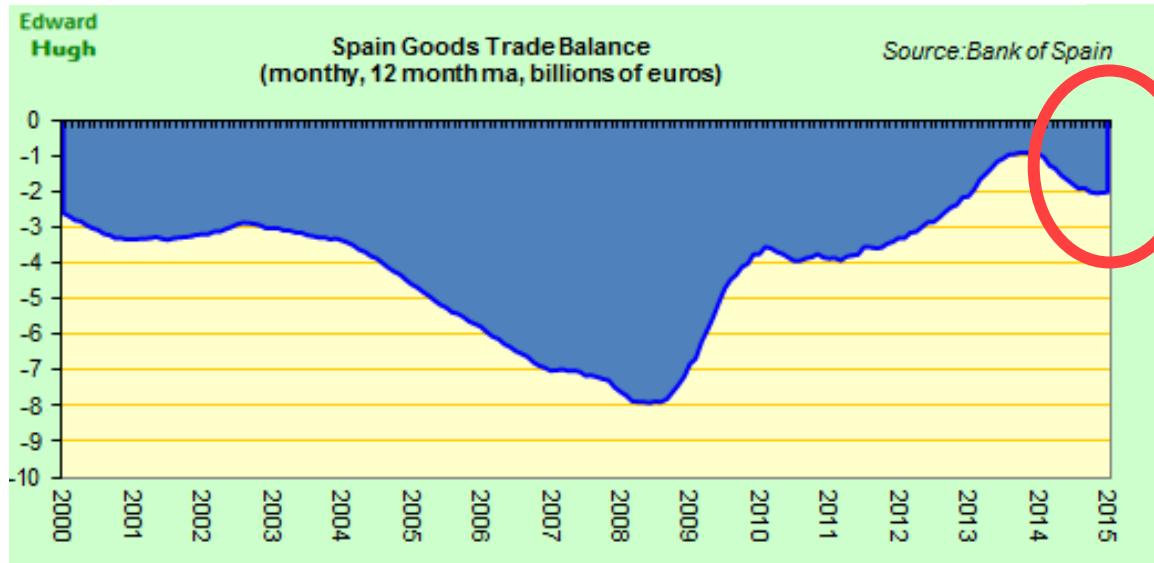
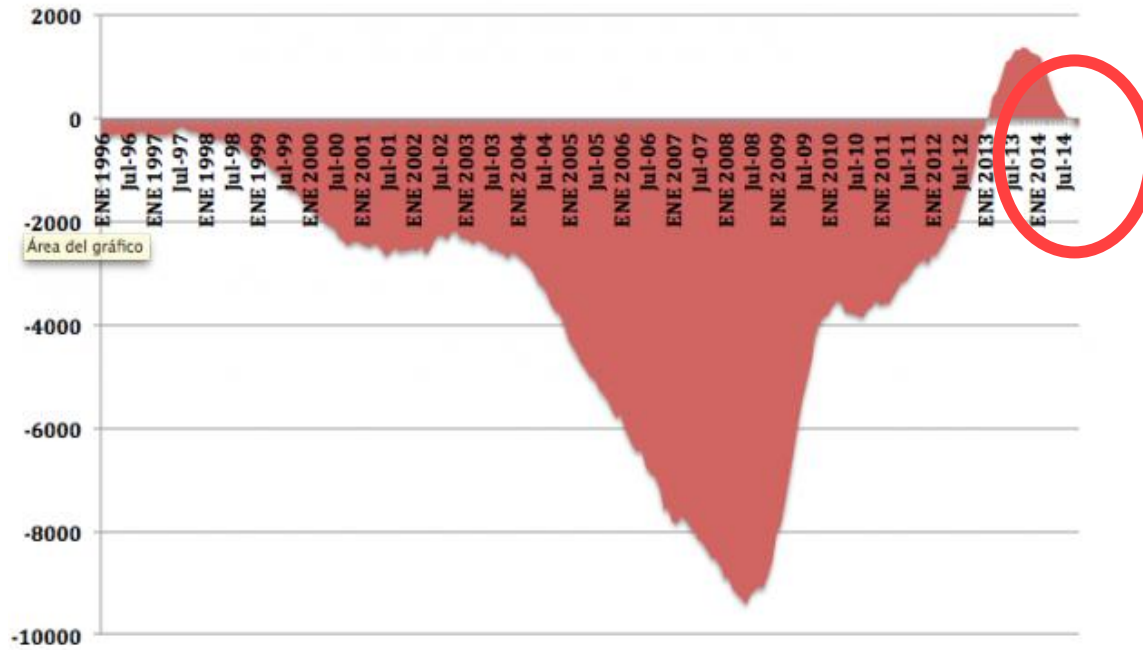
Source: National legislatures, Parties and Elections in Europe database, Norwegian Social Science Data Services, various polling firms, Goldman Sachs Global Investment Research.

# **Result: Governing Europe increasingly difficult**

- No “big shift” scenario
- Reforms: Policy stand-still
- No treaty change (forget it!),  
no EU institutional change
- ECB left with heavy-lifting

# Reforms: Policy stand-still

- Domestic:
- Structural change? More is needed
- Countries need to own reforms, but there is no narrative





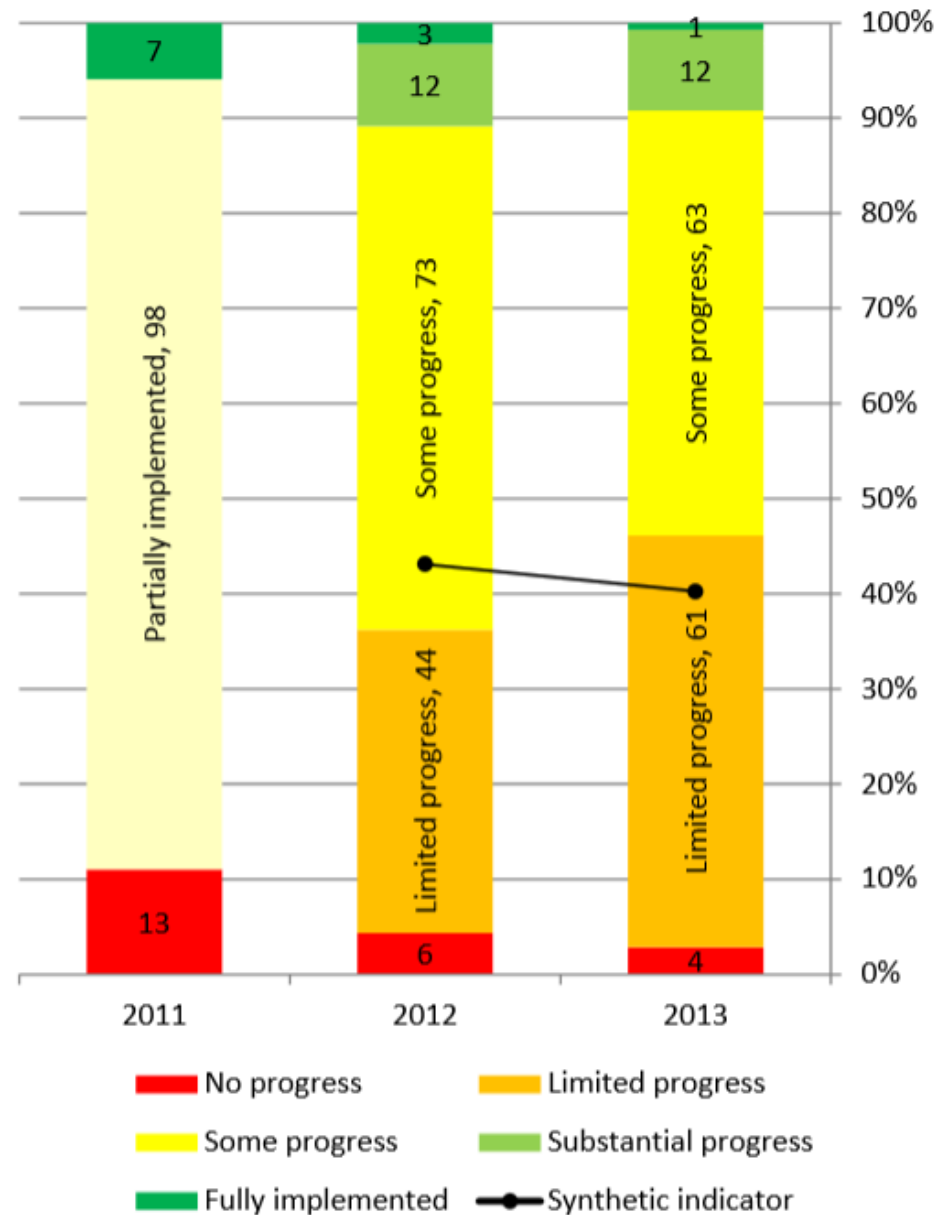
# Reforms: Policy stand-still

- EU: Current economic coordination model not working

# Example: Country-specific recommendations (CSR)

- Do not take into account EU-wide spill-over effects
- Contradictory objectives
- Limited compliance

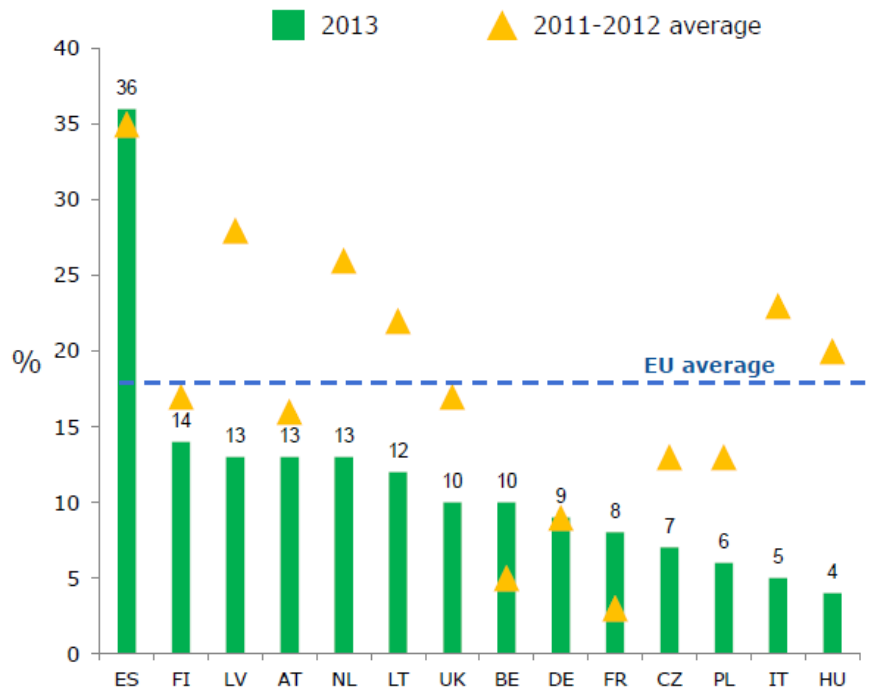
**Chart 7 EU-wide CSR implementation over time**



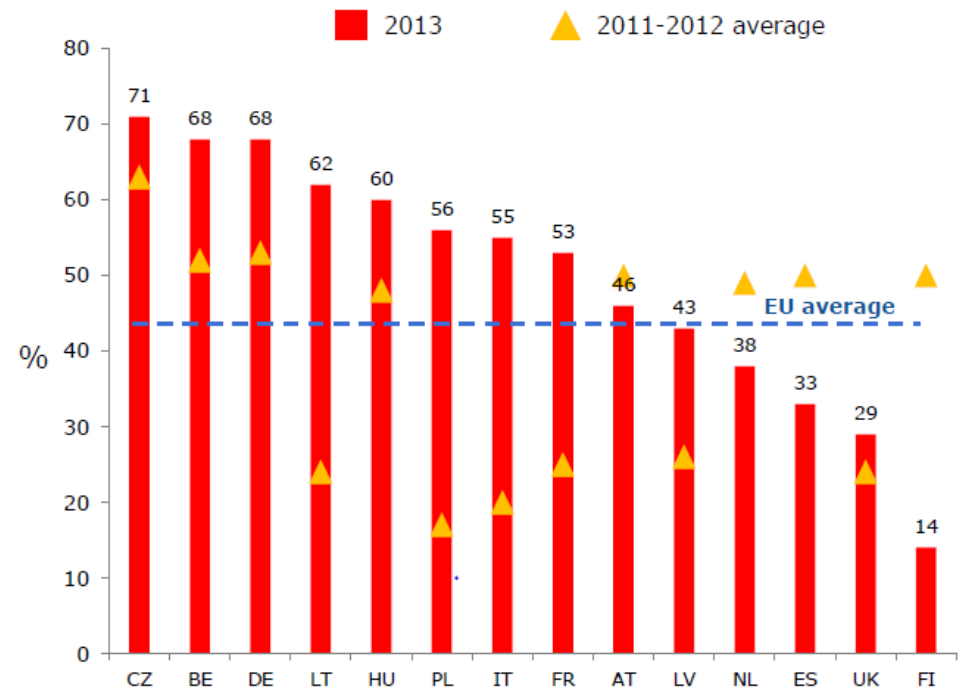
Source: European Commission European Semester staff working documents 2012, 2013 and 2014.

# Implementing reforms

**Full implementation of EU country-specific recommendations**



**Non-implementation of EU country-specific recommendations**



# ECB left with heavy lifting

- Can QE work if fiscal policy is not aligned?
- ELA (not Eurogroup) keeping Greece afloat
- But Draghi already on the margins of his mandate...

## **In sum:**

- **A brewing political mess in some member states**
- **Lack of domestic reform and policy coordination**
- **But ECB cannot replace tough political decisions**



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Francesco Pappada Banque de France

Yanos Zylberberg University of Bristol



# AUSTERITY PLANS AND TAX EVASION : THEORY AND EVIDENCE FROM GREECE <sup>1</sup>

Francesco Pappadà  
*Banque de France*

Yanos Zylberberg  
*University of Bristol*

IOBE workshop “Greece and the Eurozone”, Athens

April 29, 2015

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<sup>1</sup>*The views expressed in this presentation are those of the author and do not necessarily represent those of the Banque de France or of the Eurosystem.*

# Austerity plans

Greece (2010) : first adjustment program

- ▶ Objectives : deficit reduction 6% of GDP, decomposed into expenditure cuts (2.9%) and an increase in tax revenue (3.1%)
- ▶ Results : Greek authorities only collected an increase in tax revenue of 1.5% of GDP → repeated austerity plans

A deeper than expected recession is not able to explain such leakages in tax receipts

Was the response of tax evasion to tax hikes underestimated ?

# An aggregate measure of tax evasion

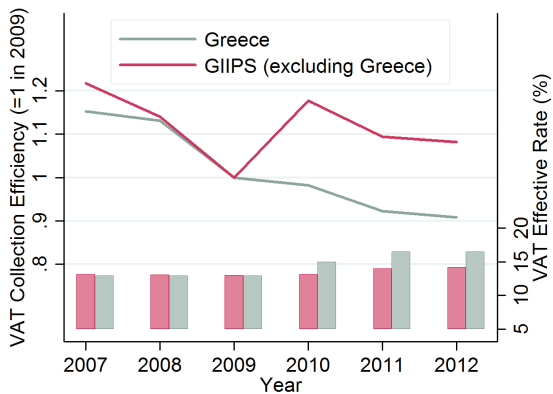
Denote :

- ▶  $TR_t$  the VAT revenues in year  $t$
- ▶  $\tau_{i,t}$  the VAT rate for good  $i$
- ▶  $C_{i,t}$  the reported consumption of good  $i$  in year  $t$

our measure of **collection efficiency** is written as:

$$CE_t = \frac{TR_t}{\sum_i \tau_{i,t} C_{i,t}}.$$

# VAT collection efficiency



# What we do in this paper

- ▶ We provide empirical evidence for the response of tax evasion to the 2010 tax hikes in Greece
- ▶ We simulate the response of the Greek economy to the change in the VAT rates according to the austerity measures implemented in 2010.
- ▶ We report the *transparency* response to the change in tax rates associated with the austerity plan.

# Preview of results

We **quantify** the elasticity of tax receipts to the austerity plans :

$$\varepsilon_{\gamma\tau v} = (1 + \varepsilon_{\gamma} + \varepsilon_v) = 0.56$$

- ▶ transparency response  $\varepsilon_{\gamma} = -0.34$
- ▶ value added response  $\varepsilon_v = -0.10$

The response of tax evasion **affects the borrowing capacity of firms**, substantially reduces their investment and contributes to non-negligible output losses.

## Related Literature

- ▶ Tax evasion in Greece:  
Artavanis et al. (2012)
  
- ▶ Fiscal multiplier and elasticity of output to taxes:  
Alesina and Ardagna (2009), Romer and Romer (2010),  
Ilzetzki et al. (2013), Favero et al.(2011), Auerbach and  
Gorodnichenko (2012)
  
- ▶ Empirical literature on tax evasion:  
Kleven et al. (2011), Cai and Liu (2009)
  
- ▶ Transparency and access to finance:  
Straub (2005), Desai et al. (2007), Ellul et al. (2014)

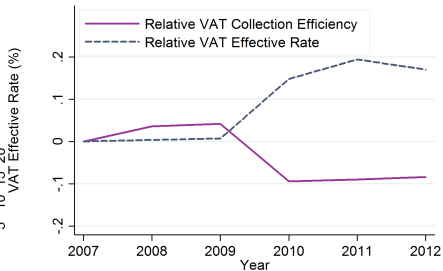
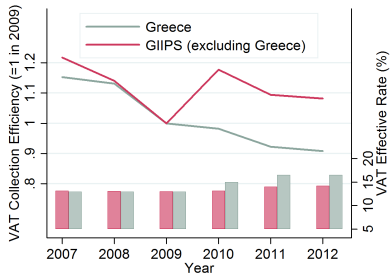
# Outline

- ▶ Empirical evidence : the response of tax evasion to the 2010 Greek austerity plan
- ▶ A quantitative analysis based on a model of firm transparency and investment
- ▶ Concluding remarks



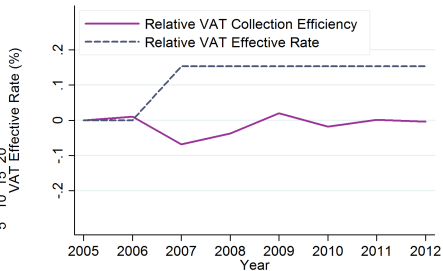
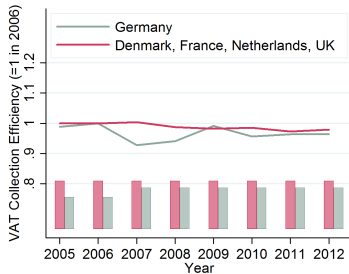
# The response of tax evasion to tax hikes

## VAT collection efficiency and VAT rates



# The response of tax evasion to tax hikes

## VAT collection efficiency – the 2007 German reform



# The heterogenous response of tax evasion

Data : Elstat

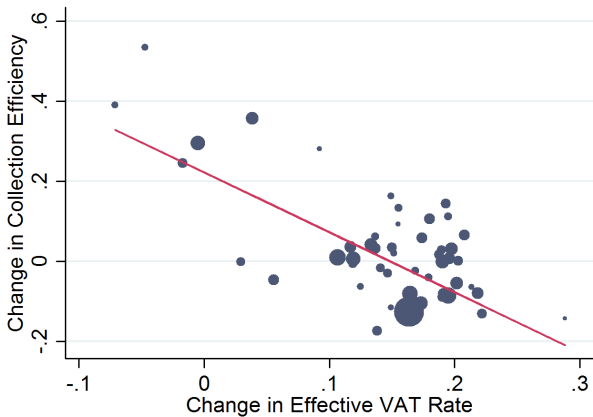
- ▶ annual VAT revenues
- ▶ annual value added in each 1-digit industry between 2006 and 2011 for 51 regional units

This allows us to compute the regional collection efficiency  $CE_{j,t} \forall$  region  $j$

We also compute  $\Delta CE_j$ , that is the gap (in percentage points) of the regional collection efficiency between the pre-reform period (2006-2009) and the post-reform period (2010-2011).

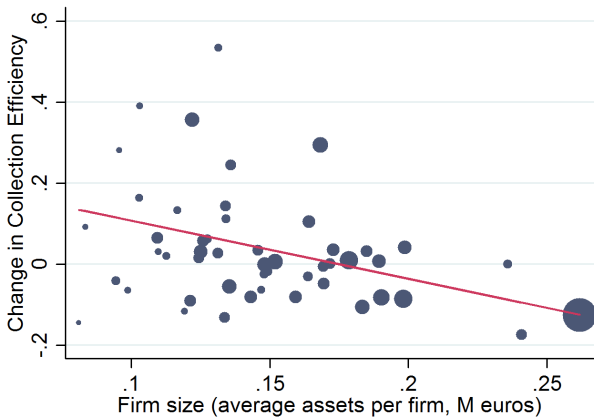
# The heterogenous response of tax evasion

Regional response of VAT collection efficiency and tax pressure



# The heterogenous response of tax evasion

Average regional VAT collection efficiency and firm size



# The impact of tax evasion on credit access

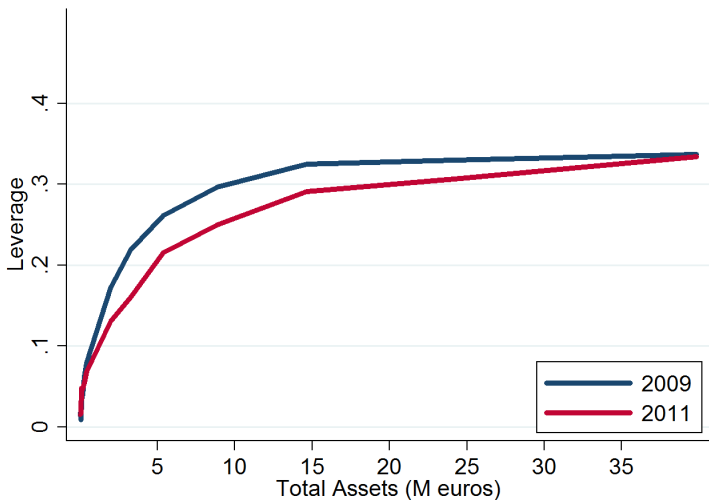
Data : Hellastat

- ▶ Firm-level balance sheets data : comprehensive balance sheet information of Greek firms over the period 2001-2011
- ▶ firms have to publish their balance sheets whenever two of the following three criteria are fulfilled : (i) Turnover: 3 million, (ii) Total Assets: 1.5 million, (iii) Average staff: 50 people.

We therefore observe the universe of registered firms above these thresholds in Greece. We also observe smaller firms that publish their accounts on a voluntary basis.

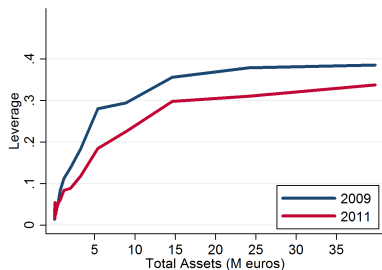
# The impact of tax evasion on credit access

Leverage as a function of firm size before and after the 2010 tax reform

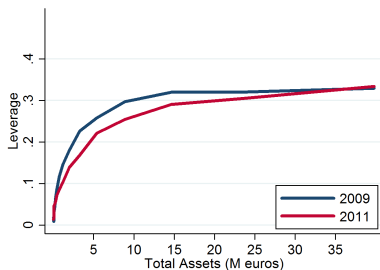


# The impact of tax evasion on credit access

Leverage for subsamples of regions with high/low tax evasion response



(a) High evasion response

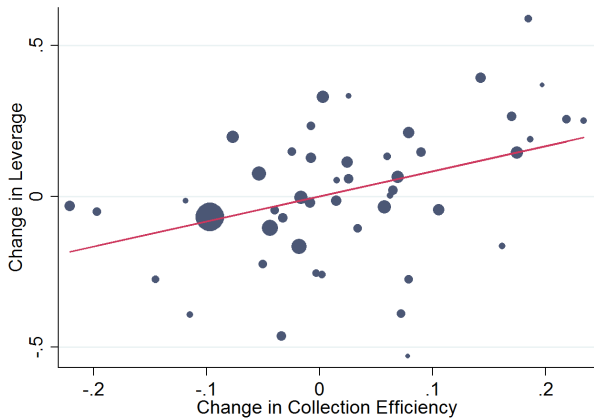


(b) Low evasion response



# The impact of tax evasion on credit access

The trade-off credit access-tax evasion

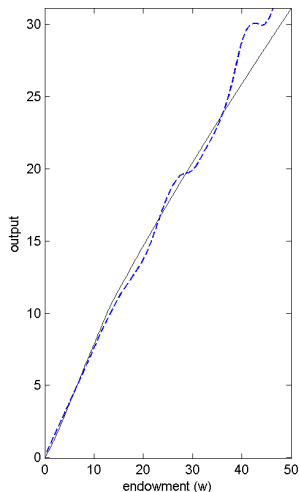
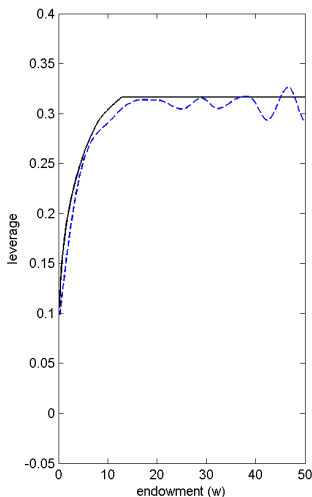


# Key features of the model

1. firms choose the extent to which they declare their activity (no binary choice).
2. access to external financing is conditional to the existence of pledgeable capital and **concealed activity is less pledgeable than declared activity**, such that tax evasion reduces the capacity to levy funds.
3. small firms invest less and mainly operate in the informal sector with the traditional technology and without external financing

We calibrate the model to the Greek economy in 2009

# Empirical vs. theoretical leverage and output



Note : Benchmark calibration. The solid black lines are the calibrated leverage and output, the dashed blue lines are the empirical leverage and output for firms with assets between 0.5 and 50M euro.

# Numerical simulations

We simulate the response of the Greek economy to the austerity measures implemented in 2010.

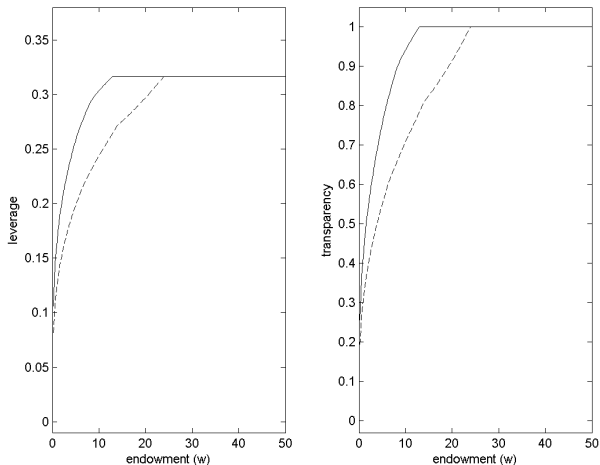
Changes in VAT rates : 4.5 to 5.5%, 9 to 11%, 19 to 23%.

## **Outcome of austerity measures :**

- ▶ Results by firm size
- ▶ Aggregate results

# The impact of the first adjustment program (2010)

## Leverage and transparency by firm size



Leverage and transparency along firm size for the benchmark calibration (solid line) and the 2010 austerity plan simulation (dashed line).

# The impact of the first adjustment program (2010)

	Austerity Plans	Fixed transparency
<i>Percentage changes</i>		
Tax rate	+21.41	+21.41
Tax base	-9.22	-1.50
Output	-2.07	-1.15
Transparency	-7.34	-0.33
<i>Elasticities</i>		
$\varepsilon_{T\gamma V}$	0.56	0.95
$\varepsilon_{\gamma}$	-0.34	0
$\varepsilon_V$	-0.10	-0.05

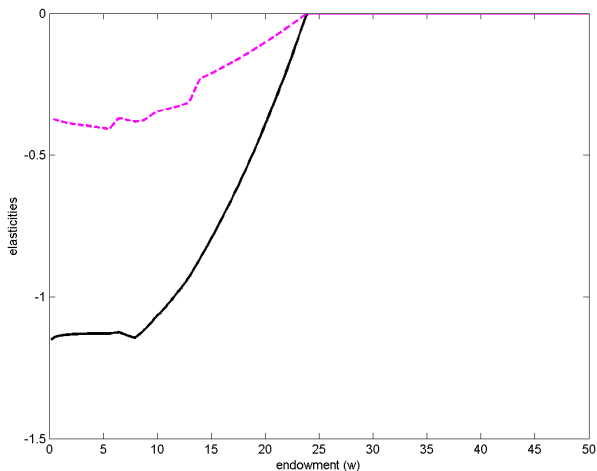
Elasticity of tax receipts to the austerity plans :  $\varepsilon_{\gamma TV} = (1 + \varepsilon_{\gamma} + \varepsilon_V)$

# Concluding remarks

- ▶ when firms **adjust the degree to which they declare their activity**, an increase in taxes is diluted through the usual contraction of output, but also through a lower aggregate transparency
- ▶ since **transparency guarantees a better access to credit market**, its decrease aggravates the contraction in formal activity. This mechanism is mainly carried out by small-medium firms, which are very sensitive to changes in the trade-off credit/tax evasion
- ▶ **following a tax increase** the transparency response accounts for about 3/4 of the elasticity of tax receipts to the austerity plan

## Hints for policy

### Transparency and output elasticity by firm size



The solid line is the elasticity of transparency  $\varepsilon_\gamma$ , the dashed line is the elasticity of output  $\varepsilon_V$  as a function of firm size. Both are computed using the 2010 austerity plan.



# Research agenda (with Y. Zylberberg)

## State capacity and the cyclicity of fiscal policy - In progress

- ▶ build a new database of collection efficiency for developed and emerging countries
- ▶ provide a rationale for the observed cyclicity of fiscal (tax) policy :
  - ▶ **counter-cyclical** in developed countries with high state capacity
  - ▶ **pro-cyclical** in developing countries with weak state capacity
- ▶ state capacity increases the probability to reach a debt ceiling, thus forcing the government to adopt pro-cyclical fiscal policies