

The Brown-Bag Seminar Series
November 19th 2019
World Bank

**“Determinants of Trust in Institutions in Times of Crisis:
Evidence from Europe”**

by

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Introduction

- The relationship between citizens and institutions was significantly damaged during the financial crisis.
- Trust in the EU reached, on average, an unprecedented low of 31% in the Spring of 2012, while trust in National governments reached a low of 23% in the Autumn of 2013.
- Indeed, the last three decades there has been a tendency of distrust in institutions in the most developed-industrialized countries (e.g. Putnam, 2000; Dalton, 2004; 2005; Catterberg & Moreno, 2006 etc.).
- The issue of growing mistrust threatens the legitimacy and authority of institutions.
- Within this framework, special attention is given to the confidence invested in:
 - a) political institutions at European/National level and
 - b) the importance of abnormal macroeconomic events

Raw Probabilities to trust by country 2000-2014

Country	ECB	National Government	EU Parliament	European Commission
Austria	60.34%	44.08%	55.59%	50.64%
Belgium	64.59%	41.20%	67.96%	66.71%
Germany	62.78%	40.57%	59.93%	53.30%
Denmark	76.52%	50.24%	66.45%	62.71%
Spain	52.51%	39.18%	61.29%	58.89%
Finland	70.52%	47.58%	61.85%	60.64%
France	50.83%	35.20%	60.68%	57.56%
United Kingdom	37.74%	34.58%	34.93%	34.83%
Greece	47.14%	38.11%	58.14%	53.08%
Ireland	66.44%	35.37%	72.68%	71.35%
Italy	60.05%	37.54%	68.71%	66.32%
Luxembourg	74.21%	55.84%	73.54%	71.12%
Netherlands	75.52%	48.39%	63.45%	66.33%
Portugal	62.64%	35.10%	65.64%	64.76%
Sweden	67.69%	41.65%	63.00%	60.64%
Bulgaria	70.69%	30.94%	73.81%	72.15%
Cyprus	58.47%	51.76%	62.77%	60.55%
Czech Republic	61.97%	27.89%	58.77%	57.18%
Estonia	73.49%	48.89%	74.06%	74.55%
Croatia	47.35%	24.50%	50.33%	48.30%
Hungary	57.40%	33.37%	68.51%	66.23%
Lithuania	71.09%	26.25%	73.72%	74.33%
Latvia	54.80%	25.20%	56.12%	54.55%
Malta	74.90%	43.62%	74.59%	74.62%
Poland	64.79%	30.87%	67.53%	67.65%
Romania	67.15%	28.43%	73.84%	72.39%
Slovenia	58.03%	35.91%	58.86%	59.41%
Slovak Republic	66.65%	33.72%	69.47%	66.78%

Data

- Trust in institutions is based on data from the Eurobarometer surveys from 2000 until the first half of 2014.
- We built a pooled cross section dataset (non-repeated cross sections over time) of micro responses from individuals across several countries and time periods.
- The survey asks participants the following question: “I would like to ask you a question about how much trust you have in certain institutions. For each of the following institution, please tell me if you tend to trust it or tend not to trust it?”
- $Trust_{i,c,t} = \begin{cases} 0, & \text{if the } i^{th} \text{ type of institution at country } c \text{ in year } t \text{ is not trusted} \\ 1, & \text{if the } i^{th} \text{ type of institution at country } c \text{ in year } t \text{ is trusted} \end{cases}$
- The association of European and National Institutions is because European citizens are governed by a complicated multi-layered administrative system including both national and European institutions.

Control Variables: Socio-Demographic Attributes

Marital Status

- Married
- Single

Age Education

- up to 14-18 years old
- up to 19-21 years old
- up to 22 years old
- Still studying

Respondent's Occupation

- Self employed
- Managers
- Manual worker
- Unemployed
- Retired
- Students

Age Groups

- 15-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65 years and older

Number of persons present during the interview

- Number of persons

Following the literature, we add socio-demographic variables such as marital status, education, age and the respondent's occupation in order to control for the expectations already formed by those who respond

Macroeconomic Conditions

- People's perceptions of institutions can also be influenced by the phase of the economic cycle, holding institutions accountable for bad economic conditions (e.g. Inglehart, 1997; Hudson, 2006).
- We add real national GDP growth (GDP Growth) and the national unemployment rate (Unemployment Rate) as proxies for a country's macroeconomic conditions (source: Eurostat)
- The paper adds more extensive analysis on the crisis period by including financial stability and public finance variables
- As a proxy for Financial Stability we use the ratio of Non-Performing Loans to Total Loans as an inverse soundness indicator of the banking sector (source: IMF).
- Similarly, we also use Sovereign Bond Yields (10 YR Bond, Datastream) to capture sovereign financial distress (Walti, 2012).

Events of Interest: Sovereign Credit Rating Episodes & Memoranda

- Following the crisis, a number of EU countries have witnessed several downgrade episodes something that might affect institutional trust (Source: Moody's).
- We create two dummy variables, capturing the upgrade and downgrade episodes.
- We also believe that trust in institutions is very likely to be affected in countries that followed a bail-out plan due to the agreed austerity measures.
- Based on this, we create a dummy variable to capture the fact that countries were in an economic adjustment program (EAP) during the period under consideration.

Econometric Methodology & Expectations

- The dependent variables (Trust) that we are trying to explain are discrete binary variables and must be modelled by a Probit model. We employ the following model:
- $$\Pr(L_{i,t} = 1) = \gamma_0 + \gamma_1 SOCIO + \gamma_2 GDP_cycle_cf + \gamma_3 UNEM_cycle_cf + \gamma_4 UPGRADE + \gamma_5 DOWNGRADE + \gamma_6 HYIELD + \gamma_7 NPL + \gamma_8 MEMO + \varepsilon_{i,t}$$

Our main priors are:

- $\gamma_5 < 0$ and $\gamma_4 > 0$, $\gamma_8 < 0$.
- With respect to socio-demographic factors we expect a positive effect on trust for education, age, marriage and managerial occupation.
- Regarding the variables relating to macroeconomic stance, we expect $\gamma_2 > 0$ and $\gamma_3 < 0$.
- A negative sign is expected for both NPL and HYield: γ_6 & $\gamma_7 < 0$. Finally, country and year fixed effects are also estimated.
- To control for potential endogeneity between the dependent variables (trust) and the macro fundamentals we detrended both variables using the Christiano-Fitzgerald filter (1999).

Marginal Effects for the Probability of tend to trust								
Covariate	ECB		National Government		EU Parliament		EU Commission	
	Robust	Cluster S.E.	Robust	Cluster S.E.	Robust	Cluster S.E.	Robust	Cluster S.E.
Married	0.046*** (0.003)	0.04*** (0.005)	0.001 (0.002)	0.003 (0.004)	0.034*** (0.003)	0.034*** (0.005)	0.037*** (0.003)	0.037*** (0.05)
Single	0.011*** (0.003)	0.006 (0.006)	-0.0005 (0.003)	-0.002 (0.005)	0.005* (0.003)	0.002 (0.007)	0.006* (0.003)	0.004 (0.006)
up to 14-18 years old	0.074*** (0.014)	0.088*** (0.02)	-0.004 (0.012)	-0.004 (0.012)	0.068*** (0.013)	0.08** (0.03)	0.074*** (0.014)	0.08** (0.03)
up to 19-21 years old	0.14*** (0.01)	0.15*** (0.02)	0.008 (0.012)	0.007 (0.014)	0.13*** (0.01)	0.14*** (0.03)	0.13*** (0.01)	0.15*** (0.03)
up to 22 years old	0.19*** (0.01)	0.20*** (0.026)	0.030** (0.01)	0.026* (0.014)	0.17*** (0.01)	0.19*** (0.03)	0.18*** (0.01)	0.19*** (0.03)
Still studying	-0.047*** (0.008)	-0.020* (0.011)	-0.013* (0.007)	-0.018* (0.010)	-0.02** (0.007)	0.045*** (0.01)	-0.016* (0.008)	0.041** (0.017)
15-24 years old	-0.021*** (0.005)	-0.019 (0.013)	-0.013** (0.005)	-0.008 (0.007)	0.017*** (0.005)	0.005 (0.015)	0.013** (0.005)	0.001 (0.01)
25-34 years old	-0.043*** (0.004)	-0.041*** (0.013)	-0.026*** (0.004)	-0.025*** (0.006)	-0.018*** (0.004)	-0.02* (0.012)	-0.012** (0.004)	-0.015 (0.014)
35-44 years old	-0.043*** (0.004)	-0.043*** (0.009)	-0.019*** (0.003)	-0.020*** (0.005)	-0.032*** (0.004)	-0.036*** (0.010)	-0.026*** (0.004)	-0.030** (0.011)
45-54 years old	-0.045*** (0.004)	-0.048*** (0.011)	-0.020*** (0.003)	-0.022*** (0.005)	-0.038*** (0.004)	-0.043*** (0.01)	-0.032*** (0.004)	-0.038** (0.01)
55-64 years old	-0.031*** (0.003)	-0.032*** (0.007)	-0.012*** (0.003)	-0.014** (0.005)	-0.028*** (0.003)	-0.030*** (0.008)	-0.023*** (0.003)	-0.025** (0.008)
Self employed	-0.003 (0.004)	-0.0003 (0.007)	-0.0006 (0.004)	0.005 (0.005)	-0.002 (0.004)	-0.003 (0.006)	-0.002 (0.004)	-0.003 (0.006)
Managers	0.037*** (0.004)	0.028*** (0.005)	0.007* (0.004)	0.013** (0.005)	0.036*** (0.004)	0.29*** (0.06)	0.04** (0.004)	0.02*** (0.007)
Manual worker	-0.058*** (0.003)	-0.059*** (0.006)	-0.004 (0.003)	-0.002 (0.003)	-0.046*** (0.003)	-0.047*** (0.05)	-0.045*** (0.003)	-0.048*** (0.005)
Unemployed	-0.11*** (0.004)	-0.10*** (0.007)	-0.017*** (0.004)	-0.014** (0.007)	-0.10*** (0.004)	-0.10*** (0.08)	-0.10*** (0.004)	-0.10*** (0.009)
Retired	-0.058*** (0.004)	-0.05*** (0.008)	-0.004 (0.004)	0.0003 (0.004)	-0.043*** (0.004)	-0.046*** (0.008)	-0.043*** (0.004)	-0.047*** (0.007)
Students	0.003 (0.007)	-0.020 (0.013)	-0.005 (0.006)	0.003 (0.011)	0.013** (0.007)	-0.047*** (0.013)	0.008 (0.007)	-0.046** (0.016)
Number of persons	-0.065*** (0.004)	-0.060*** (0.012)	0.00008 (0.004)	0.003 (0.005)	-0.041*** (0.004)	-0.042*** (0.01)	-0.043*** (0.004)	-0.046*** (0.01)

Empirical Results

Marginal Effects for the Probability of tend to trust								
	ECB		National Government		EU Parliament		EU Commission	
	Robust	Cluster S.E.	Robust	Cluster S.E.	Robust	Cluster S.E.	Robust	Cluster S.E.
Unemployment	-0.005***	0.001	-0.0014	0.004	-0.003***	-0.001	-0.004***	0.0002
Rate_cycle_cf	(0.000)	(0.003)	(0.001)	(0.007)	(0.001)	(0.003)	(0.000)	(0.003)
GDP	-0.002***	-0.003***	0.003***	0.004	-0.0005	-0.0019	0.0002	-0.001
Growth_cycle_cf	(0.00)	(0.00)	(0.0005)	(0.002)	(0.0005)	(0.001)	(0.0005)	(0.001)
NPL	-0.0008***	-0.001***	-0.0001***	-0.0004**	-0.0007***	-0.0006**	-0.0009***	-0.0008***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
HYield	-0.065***	-0.022*	-0.03***	-0.019*	-0.030***	-0.034	-0.040***	-0.034
	(0.03)	(0.03)	(0.003)	(0.01)	(0.003)	(0.03)	(0.003)	(0.03)
Downgrade	-0.002***	-0.002	0.0007	0.014	0.011**	0.001	-0.005	0.005
	(0.003)	(0.01)	(0.003)	(0.012)	(0.003)	(0.01)	(0.003)	(0.01)
Upgrade	-0.04***	-0.04	0.059***	0.050**	0.010	0.013	-0.001	0.001
	(0.009)	(0.05)	(0.008)	(0.019)	(0.008)	(0.03)	(0.009)	(0.03)
Memorandum	-0.07***	-0.11***	-0.002	0.014	-0.05***	-0.12***	-0.058***	-0.12***
	(0.005)	(0.02)	(0.005)	(0.03)	(0.005)	(0.02)	(0.005)	(0.024)
Diagnostics								
Observations	265276	223478	277971	233580	280999	237811	268051	226343
Wald test	22000.94	.	7791.73	.	18608.89	.	18745.77	.
	(0.00)		(0.00)		(0.00)		(0.00)	
Pseudo R²	0.065	0.068	0.022	0.029	0.05	0.05	0.05	0.05
Log Likelihood	-168481.31	-140266.88	-176876.5	-148531.06	-179372.92	-149998.72	-171937.32	-143677.88

Notes: (a) ***, **, * denote statistical significance at the 1%, 5% and 10% level respectively, (b) numbers in brackets denote robust standard errors (c) country and year fixed effects are included.

Empirical Results (1)

- Regarding the National Government, married respondents display considerably lower levels of trust (0.01 pp) relative to EU commission which reveals a strong increase of 3.7 pp. **When marital status changes to single, the tendency to trust remains positive in EU commission , though not for national government.**
- **Individuals with higher level of education and more prestigious occupation are more likely to trust more the EU commission than the National government.**
- **Besides, contrary to our expectations the probability to mistrust is common for all age groups in our sample.**
- **Regarding macroeconomic variables our results show that the cyclical component of real GDP growth has a negative impact on trust for the case of EU Commission, but positive for National Government.** One explanation might be that according to Munoz et.al. (2011) when the performance of national institutions increases, trust in the European institutions tends to weaken.
- The cyclical component of **unemployment rate negatively influences trust in both National Government** (though non-significant) **and EU Commission**, however not significant when clustering by country.
- Similar results for financial distress and public finance variables. **NPL and High Yield leads to a greater trust deterioration for EU Commission rather than National Government.**

Empirical Results (2)

- Downgrade episodes exert a non-significant impact on trust.
- **When upgrade episodes occur the National Governments rip the trust benefit.**
- **For countries in a memorandum program we find a higher probability of deterioration to trust for the EU Commission (5.8 pp). The probability of mistrust when clustering by country is even more emphatic.**
- This is anticipated as the European Commission was part of the monitoring group along with IMF and ECB.
- **Surprisingly, the corresponding probability to trust for the National Government remains positive**, a result perhaps suggesting that, in the public's conscience responsibility for participation in a memorandum agreement lies outside the national borders.
- In what follows we will further explore these impacts, by testing for three different settings.

Predicted Probability of Trust across sample subgroups

	ECB	National Government	EU Parliament	EC
Scenarios based on a single characteristic	Mean Value	Mean Value	Mean Value	Mean Value
Being in Memorandum/ Not being in Memorandum	0.32/0.59	0.30/0.36	0.40/0.60	0.37/0.59
No downgrade/ Downgrade	0.59/0.45	0.36/0.32	0.60/0.51	0.58/0.50
No upgrade/ Upgrade	0.57/0.68	0.35/0.42	0.59/0.72	0.57/0.71
GDP growth <-0.1	0.52	0.35	0.55	0.54
GDP growth >= -0.1 or <3.6	0.57	0.35	0.59	0.57
GDP growth >= 3.6	0.64	0.35	0.65	0.63
Unemployment<5.9	0.64	0.41	0.61	0.59
Unemployment>=5.9 or <10.1	0.57	0.35	0.59	0.57
Unemployment>=10.1	0.50	0.31	0.55	0.53
Being Employed/ Unemployed	0.58/0.47	0.36/0.32	0.60/0.49	0.58/0.48
NPL<11.19	0.64	0.41	0.62	0.60
NPL>=11.19 or <37.78	0.57	0.35	0.59	0.57
NPL>=37.78	0.49	0.30	0.54	0.53
No High Yield/ High Yield	0.59/0.53	0.36/0.33	0.59/0.58	0.58/0.56
Scenarios based on two characteristics				
If Employed before 2010	0.66	0.38	0.65	0.64
If Employed after 2010 inclusive	0.53	0.34	0.56	0.55
If Unemployed before 2010	0.57	0.35	0.58	0.56
If Unemployed after 2010 inclusive	0.41	0.30	0.45	0.44
If Employed in memorandum absence/ presence	0.59/0.33	0.36/0.30	0.61/0.41	0.59/0.38
If Unemployed in memorandum absence/ presence	0.49/0.24	0.32/0.28	0.51/0.31	0.50/0.29
If downgraded in memorandum absence/ presence	0.48/0.35	0.33/0.31	0.54/0.43	0.52/0.40
If upgraded in memorandum absence	0.68	0.42	0.72	0.71
If high yielded in memorandum absence/ presence	0.55/0.30	0.33/0.31	0.60/0.39	0.58/0.36
If not high yielded in memorandum absence/ presence	0.60/0.34	0.37/0.28	0.60/0.40	0.59/0.37
Scenarios based on three characteristics				
If not downgraded and being employed in memorandum absence	0.60	0.36	0.61	0.60
If downgraded and being unemployed in memorandum presence	0.26	0.29	0.34	0.31
If not upgraded and being employed in memorandum absence	0.59	0.36	0.61	0.59
If not high yielded and being employed in memorandum absence	0.61	0.37	0.60	0.59
If high yielded and being unemployed in memorandum presence	0.21	0.29	0.29	0.26
If not high yielded and not being downgraded in memorandum absence	0.61	0.37	0.60	0.59
If high yielded and being downgraded in memorandum presence	0.34	0.32	0.43	0.40
If not high yielded and not being upgraded in memorandum absence	0.60	0.37	0.60	0.58
Notes: Sociodemographic variables are not mentioned in the table				

Empirical Results (3)

Focusing on the most concrete scenario of 3 characteristics:

- The average tendency to trust is significantly lower for people who are unemployed in a country that was downgraded and simultaneously follows an economic adjustment program. Results show that institutional trust is between 0.29 and 0.31 for these countries, compared to a level between 0.36 and 0.60 (depending on the institution) for the opposite case.
- A similar picture emerges when we introduce two additional scenarios with high yields, downgrades and memorandum presence.
- These results emphatically suggest that under harsh economic conditions and especially within an environment of abnormal events the tendency to trust is significantly affected.
- The overall lowest levels of trust are recorded for National Governments by unemployed respondents who live in a country participating in a memorandum agreement and is financially challenged either by having being downgraded or by suffering from high sovereign bond yields.

Conclusion

- Our results confirm that countries that experienced worsening macroeconomic conditions witnessed a decline in public trust.
- National conditions do matter for trust, however individuals relative to specific attributes behave differently. The worst the scenario the more the tendency to mistrust.
- The decline in trust was even more emphatic for their national governments relative to EU institutions.
- Whilst in the case of upgrading episodes national governments fail to capitalize in trust levels when compared to European Institutions.
- **This introduces the idea of the different ways trust is built when it comes to comparing the national government with European Institutions.**
- **Policy implications are therefore derived regarding the channels of information dissemination on the role of European Institutions.**

Let's kick off
the discussion...



Food for thought: How to improve the trust to public institutions (1)

- Due to the financial crisis, by 2012, on average only four out of ten people in OECD member countries expressed confidence in their government.
- As governments search for a path to economic recovery, the challenge they face is not only knowing what policies to choose, but also how to implement those policies. Yet, capacity to implement depends crucially on trust.
- Without trust in governments, markets and institutions, support for necessary reforms is difficult to mobilise, particularly where short-term sacrifices are involved and long-term gains might be less tangible. Good example: European South
- The OECD has proposed the following components:
 - **Reliability**
 - **Responsiveness**
 - **Openness and inclusiveness**
 - **Integrity**
 - **Fairness**

Food for thought: How to improve the trust to public institutions (2)

- Trust in government is multi-layered and based on a mix of economic, social and political interactions between citizens and government.
- Bouckaert (2012) argues that trust in government can be analysed at three levels.
- At the macro-level, trust relates to political institutions and the functioning of democracy.
- At the meso-level, trust relates to policy making
- Finally, at the micro-level, trust refers to the impact of government on people's daily lives through service delivery.
- Although distinct, these three levels interact and a significant lag in trust at one level may affect trust at other levels and influence policy outcomes.
- Efforts to strengthen trust therefore need to reinforce synergies across each of these different spheres

Food for thought: How to improve the trust to public institutions (3)

- Professor Smith in one of his recent speech in 2018 on how to restore public trust, noted the following steps:
- Raise the level of public trust and prevent the possibility of non-transparent activities by establishing electronic systems for government duties. (e-government)
- Greater commitment to integrity, transparency and proper process, and the second by ensuring the public sector spends more time genuinely listening to and engaging with the citizens it serves.
- Integrity consists of more than just obeying the letter of the law: it includes a commitment to acting in the public interest at all times.
- Good process in the day to day service to citizens which stems from solid, transparent and predictable routines. These routines need to be robust, to overcome unforeseen challenges and the pull of mediocrity. They need to become habitual to the point that we all take pride in holding ourselves accountable.
- Good process and well implemented routines help to drive these outcomes, and will also act to increase public trust in our institutions.
- Encourage participation. Citizens should expect to be participants in the services they demand, not just recipients. They will expect to exercise choice as well as voice. Governments will therefore need to be more responsive and more agile.”

The dilemma for politicians

Former UK Prime Minister Tony Blair said in 2007 that the real dividing line in politics had moved from the traditional positions of right versus left to “what I would call the modern choice, which is open versus closed.”

A close-up photograph of a pen writing the words "Thank you!" on a piece of paper. The pen is positioned at the end of the phrase, and the paper is slightly tilted. The background is a solid blue color.

Thank you!