





Explanations so far...

- Ardagna & Caselli 2012
 - High coordination costs
 - Many countries involved
 - Different value assigned to a bailout by different countries
 - Our view: the main actor is largely Germany alone



Our view

- EU integration is a merger of countries with different cultural norms
- Cultural clash between different shared norms: Germany-Greece
- Cultural clash generates inefficient economic outcomes
- How can we adjust this?
- Focus on: Idiosyncratic policies/cultures, not idiosyncratic shocks





Before the Crisis: Potential for a Cultural Clash Measures of Civic Values (WVS 2000) Differ. Germany Greece t-test Claiming unfair Government benefits 9.00 6.96 2.04 24.7 Avoiding a fare on public transport 19.19 9.04 7.57 1.47 Cheating on taxes 9.27 8.63 7.83 0.80 Cultural Norms Indicators (Tabellini (2009)) Germany Greece Differ. t-test 0 52 0.19 10.42 Respect 0.71 Obedience 0.14 0.110.03 2.51 7 00 0.25 3.70 Control 7.25 Generalized trust 0.38 0.24 0.14 7.58



More Responsible Behavior Among German













Evolutionary games

- Consider first each economy in isolation
- Large number of expected transactions
- Pairs of individuals randomly matched: player 1-player 2
- Programmed to play one of the two pure strategies available
- x ∈[0,1]: the fraction of first movers programmed to play Cheat (1-x play Responsible)
- y ∈[0,1]: the fraction of second movers programmed to play Forgive (1-y play Punish)



Findings 1: two steady states

- Two steady states :
- iff $y > \overline{y}_r$ converge to all cheaters and forgivers (Greek equilibrium)
- Otherwise converge to a steady state with first movers all responsible and a critical mass of punishers (German equilibrium)
 - Culture is the strategy people play



Findings 2: Monetary Union (without additional Institutions)

- Common currency: lower barriers, more cross-country matches,
- Clash of individuals of different cultures: programmed to play different strategies
- Worst possible match: Cheater-Punisher (Greek agent, German Principal): Payoff (0,0).
- No monetary union if no extra benefit
- If monetary union implies surplus creation (λ > 1): Monetary union preferred by both provided small cultural distance between the two countries



Findings 3: Crisis and Break-up: bad shock to lambda

- λ is expected to be high ex-ante but subject to shocks=> monetary union preferred ex ante
- Ex-post λ is revealed to be low (e.g. a major crisis happens) then no union may be preferred to a monetary union
- Bad matches (0,0) have a high relative weight in welfare and so breakup may be natural outcome



Cultural Conformity Constraint: from Agents to Leaders

- All inefficiency stems from excessive punishment
-punishment outcomes (0,0) prolong the crisis
- German leader sees the bad consequences of punishment but has to conform to the German culture/social norm
- => No end to the crisis, procrastination of intervention and aggravation of the crisis may=> exit only outcome
- (more micro founded model of the political constraint?)



German Support for Greece (Politburo 2010/2011)

Should Greece receive financial aid? (Feb Should Greece be given a second rescue I (June 2011)	•	Yes 33% 36%	
Should other European-States to support (October 2011)	Greece	? 42%	53%
Will Greece have to leave if it not accept (Nov. 2011)	EU tern	ns 82%	15%
Greek bankruptcy entail consequences fo Germany? (Sept 2011)	or	30%	68%
New government in Greece helps overcou crisis ? (Nov. 2011, Politb)	ming th	e 23%	60%
Who should stay in the Euro? (July 2011,)	YES	NO	
- Greece	47%	53%	
- Spain	77%	23%	
- Italy	73%	27%	
- Ireland	67%	33%	

Evidence of German-Greek Post Crisis Resentment

German View (Spring 2012)

	Greece	Italy	Spain	France	UK
Somewhat unfavorable	50	31	25	17	27
Very unfavorable	23	2	1	2	2
Total unfavorable	79	33	26	19	29

Greek view (Spring 2012)

	France	Italy	Spain	Germany	UK
Somewhat unfavorable	28	21	14	29	36
Very unfavorable	17	10	11	49	26
Total unfavorable	45	31	25	78	52



higher in Germa	ny than	amon	g othe	r EU coun [.]	tries
French View (Spring 20	012)				
	Greece	Italy	Spain	Germany	UK
Somewhat unfavorable	32	26	23	11	18
Very unfavorable	22	7	6	5	5
Total unfavorable	<u>54</u>	33	29	16	23
British view (Spring 20	12)				
	Greece	Italy	Spain	Germany	France
Somewhat unfavorable	33	18	14	14	21
Very unfavorable	12	5	3	7	8
Total unfavorable	55	23	17	21	29



Due to the Greeks behavior leading to the crisis, not a pre-crisis German bias

Eurobarometer (survey data 1970-1995)

Country receiving trust	Germans trusting a lot	Greeks trusting a lot
Greeks	11%	-
Germans	-	18%
Italians	8%	12%
Spanish	14%	21%
Portuguese	11%	17%
Irish	13%	17%
French	21%	26%
British	15%	16%
Average of countries	<u>16%</u>	<u>17%</u>





Germans Support for Merkel (Politb.)

Support for Merkel: Satisfied with Merkel's handling of the crisis? VEC

NO

	TES	NO
September 2011	45%	65%
October 2011	51%	49%
November 2011	56%	44%
January 2012	63%	37%
May 2012	80%	20%

Support for Merkel's Political Party:

Vote intentions	Christian Democrat	Social Democrat
September 2011	35%	28%
October 2011	32%	30%
November 2011	34%	31%
January 2012	35%	30%
November 2012	39%	30%

Correlation (57%)



Dealing with alternative explanations

- Higher risk of contagion in Mediterranean countries => had stronger incentives to bail Greece than Germany (<u>GO</u>) NO (Spread In Ireland decreasing early 2010)
- Germans weaker incentive to bail out Greece (compared to that of other Euro area countries) reflect a lower exposure of the German banks to the Greek sovereign debt (<u>GO</u>) NO (70% of total debt in D&F banks)
- Germany desire to "punish" Greece arises as an optimal strategy to discipline future moral hazard by the Greeks (<u>GO</u>) NO (should attenuate after fiscal compact)



Fiscal Union: Central Authority

- Fiscal union eliminates independent sovereignties
- New enforcement authority endowed with a fixed probability of for giveness y' > 0
- Both leaders agree on a new institution with frequency of punishments $(1-y^\prime)$
- The $y' \in (y_r, 1)$ is intermediate between German and Greek cultures:
- Greeks need to punish more, German less than home cultures prescribes
- Higher cultural difference $(1 y_r)$, greater scope for intermediate policy with cost C of lost coversignty both couptries prefer a fiscal
 - With cost *C* of lost sovereignty both countries prefer a fiscal union if *C* not too high and *lambda* sufficiently low. Net benefit increases with cultural distance

Conclusions

- Two general contributions
- 1. Role of culture for economic outcomes:
 - Culture matters also for macroeconomic outcomes at business cycle frequency. Here through a specific channel, the conformity constraint on political leaders
- 2. Interplay between culture and institutions:
 - Culture is slow moving, institutions can jump. The latter may serve to temper the consequences of cultural clashes



Conclusions

- German "natural" punishing behavior clashes with Greek rule bending
- Politicians have to conform to the culture of their electorate
- The cultural clash generates inefficient outcomes
- Elimination of state sovereignty on these matters
- International Eurozone institutions that regulate "punishments"





Differ	ential e	xposure	to sovere	eign de	bt Back
		•		C	
Claims of Gerr	nany				
	Greece	Ireland	Portugal	Spain	Total PIGS
Public Sector	22.8	2.5	10.3	32.7	68.3
Total	44.4	176.9	41.0	202.4	464.8
Claims of Fran	ice				
	Greece	Ireland	Portugal	Spain	Total PIGS
Public Sector	30.6	6.1	20.8	48.1	105.6
Total	108.3	84.8	52.0	248.2	493.3

bn\$. Q4 2009. Source: BIS Quartely Bullettin.

• France and Germany

Punishing future moral hazard **Back**

- Under moral hazard, Germans sentiments towards Greece should be mitigated by the introduction of the Fiscal Compact agreement (Spring of 2012)
- Under the cultural clash explanation Germans' sentiments may even amplified by the bail out packages
- Data more consistent with the latter than with the former story

Somewhat unfavorable Very unfavorable	45 12	
Somewhat unfavorable	•	ig 2010
Total unfavorable	79 Sprin	ig 2010
Very unfavorable	23	
Somewhat unfavorable	50	
	Spring	2012

A. German View towards Greece

Casual evidence

- Thomas Wiser: Chairmen of EU Economic and Financial Committee Committee prepares economic agenda for European Finance meetings: place where negotiations on European sovereign debt crises happen
- All the problems Europe in facing in dealing with the Greek crisis can be explained in terms of religious background:
 - Protestant (no forgiveness)
 - Catholic (forgiveness, if repent)
 - Orthodox (no need to repent to go to paradise)