

Social Capital as Culture

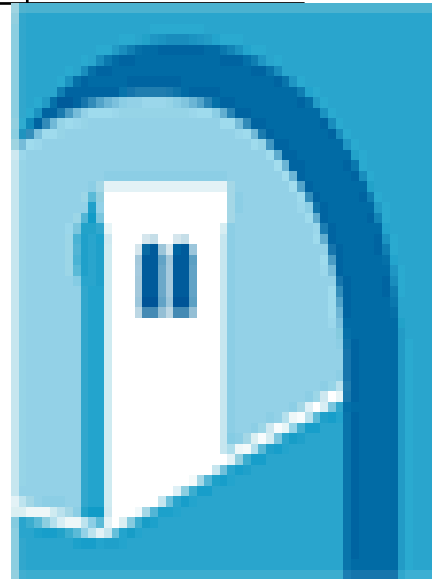
Luigi Guiso

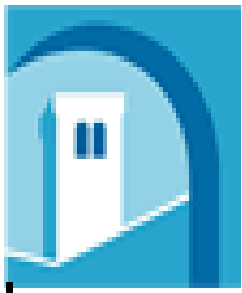
European University Institute

Marshall Lecture

European Economic Association

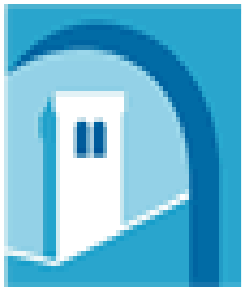
Budapest 2007





The rise of social capital

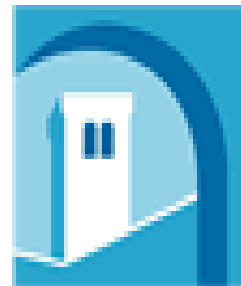
- “Social capital” has gained wider acceptance in social sciences: sociology, political science, social psychology
- Recently some economists have used it to explain an impressive range of phenomenon:
 - Economic backwardness, institutions design and performance, financial development, crime, the power of the family, innovation, spread of secondary education
- But there is still some (deserved) skepticism among economists about the value added of this concept



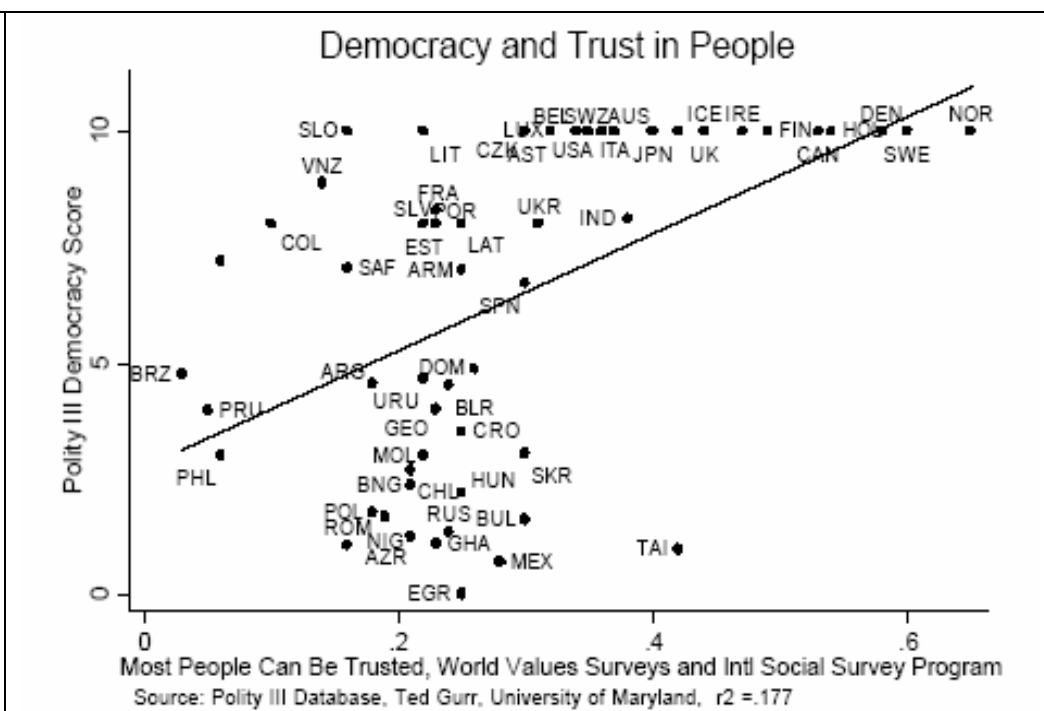
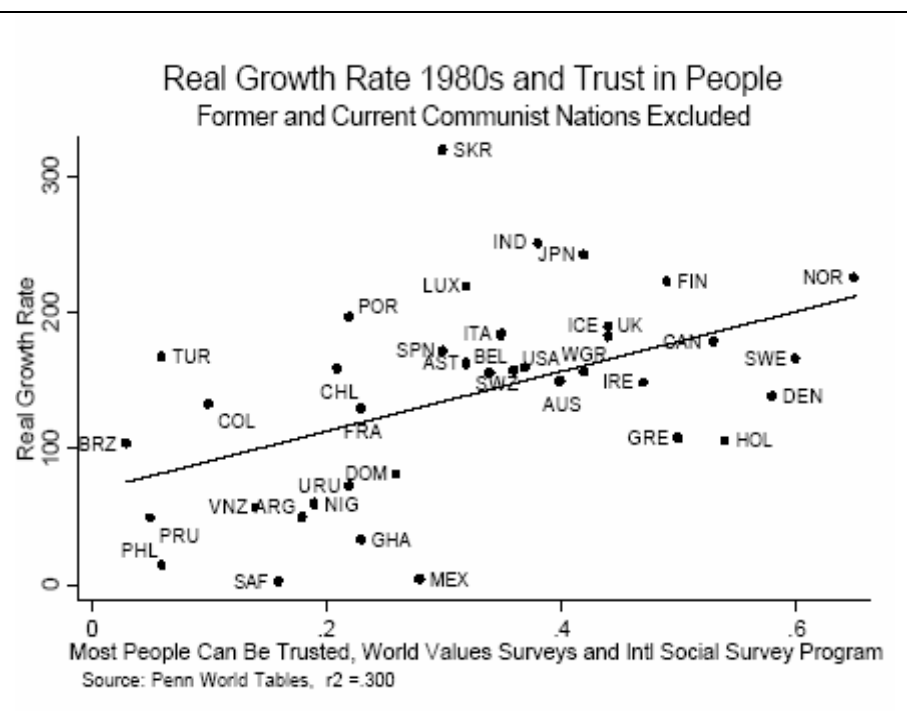
Reasons for success

- 3 reasons for success:
 - SC strongly **correlates** with economic performance across countries and regions
 - Recent empirical work suggests these correlations may reflect a **causal** link
 - It can explain long term **persistence** of performance and good institutions

Correlations: Knack& Keefer(1997), Zak&Knack (2001)



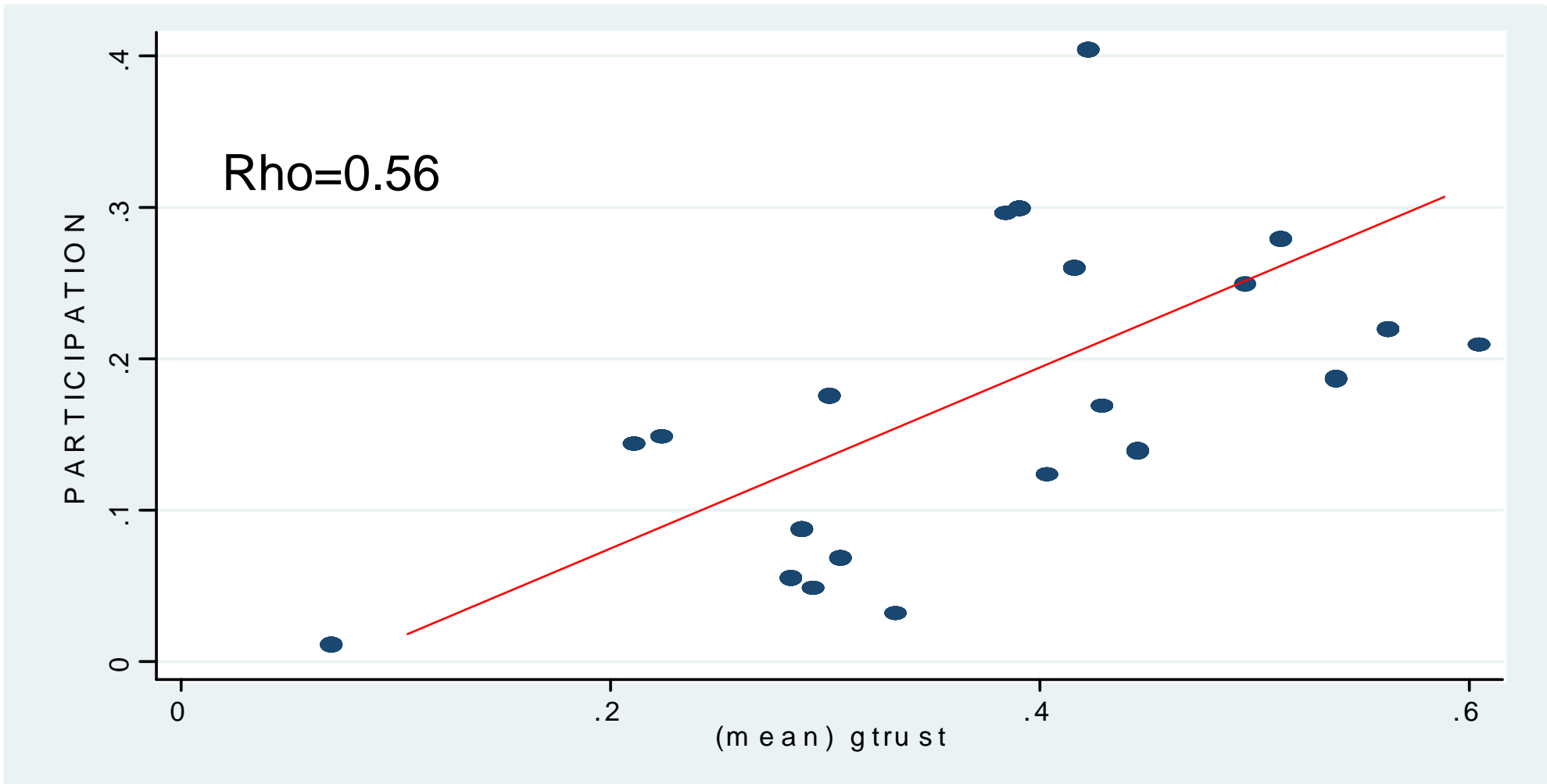
Real Growth, Democracy and Generalized Trust

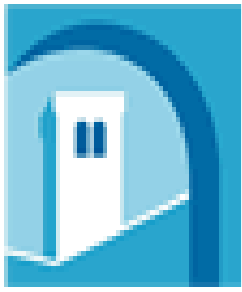


Correlations: GSZ(2005)



Financial development and trust around the world



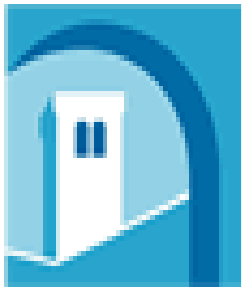


Reasons for skepticism:

Solow (1995) in his critique of Fukuyama writes:

“If 'social capital' is to be more than a buzzword, something more than mere relevance or even importance is required. Those cultural ...formations should be closely analogous to a stock or inventory, capable of **being characterized as larger or smaller than another such stock**. The stock of social capital should **somehow be measurable, even** inexactly.”

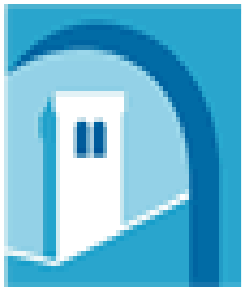
Necessary requirements for an economic definition of SC



- 1) Be measurable
- 2) Explain how investment and the depreciation take place
- 3) Have a non negative economic payoff
- 4) Differ from standard human capital

Do current definitions fit these criteria?

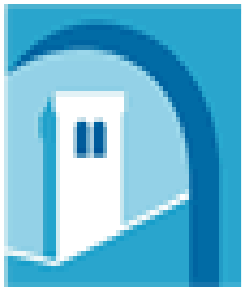
Our Goals:



1. Show how the current definitions of social capital **do not fit** these criteria
2. Introduce a **new definition** of social capital as culture that fits the requirement
3. Show that this definition can easily be **incorporated** in standard economic models
4. Present evidence that this definition of social capital has high **economic payoff**



1) Shortcoming of current definitions



Coleman's definition:

“The extent and completeness of horizontal relations within a community and its role is to enhance the power and efficient allocation of social sanctions”

- Social pressure can be a positive but also a negative
 - Gangs
 - Mafia

=> Not a good economic definition



Bourdieu's definition:

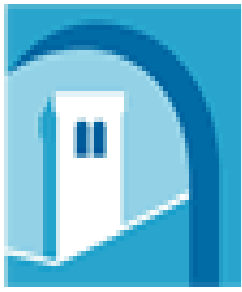
“the advantages and opportunities accruing to people through membership in certain communities”

- It can be measured and accumulated but
- It belongs to an individual. **No different than his human capital**
 - Only whom you know, rather than what you know

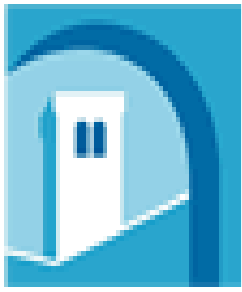


2) Introduce a new economic definition

Our definition:1



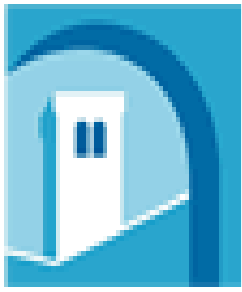
*Those shared **customary beliefs and values** that ethnic, religious, and social groups transmit from generation to generation and enable their members to **act together more effectively to pursue shared objectives***



Our definition: 2

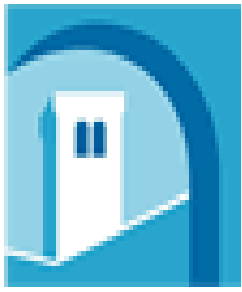
Social Capital = “Good” Culture

- 1) We can measure it
 - We can measure beliefs and values
- 2) We can explain how the process of accumulation takes place
 - For values see Tabellini (2007), Bisin, Topa & Verdier (2004), Bisin & Verdier (2000, 2001)
 - For beliefs see later
- 3) We can explain how it has a nonnegative economic payoff
- 4) It is different from human capital, because the values of those beliefs and norms are contingent on the norms and beliefs of the other people in our community



Direct measures of social capital

- **Survey based measures** of norms and beliefs
 - WVS, GSS, Eurobarometer, GSEP provide several: generalized trust, tax compliance, attitudes towards cheating on taxes, government benefits etc; honest behavior etc.
 - Widely used: (a few examples): Shleifer et. al. , Alesina & La Ferrara, Uslaner (2005) trust], GSZ (2003), [attitudes towards cheating], Knack and Keefer [1997],
- **Experimental based measures** of norms and beliefs:
 - Henrich et al. (2001) attitude toward cooperation in different ethnic groups; Bornhorst et al., 2005, beliefs of northern and southern Europeans.

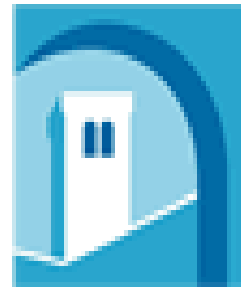


Indirect measures of social capital

We want to measure outcomes that:

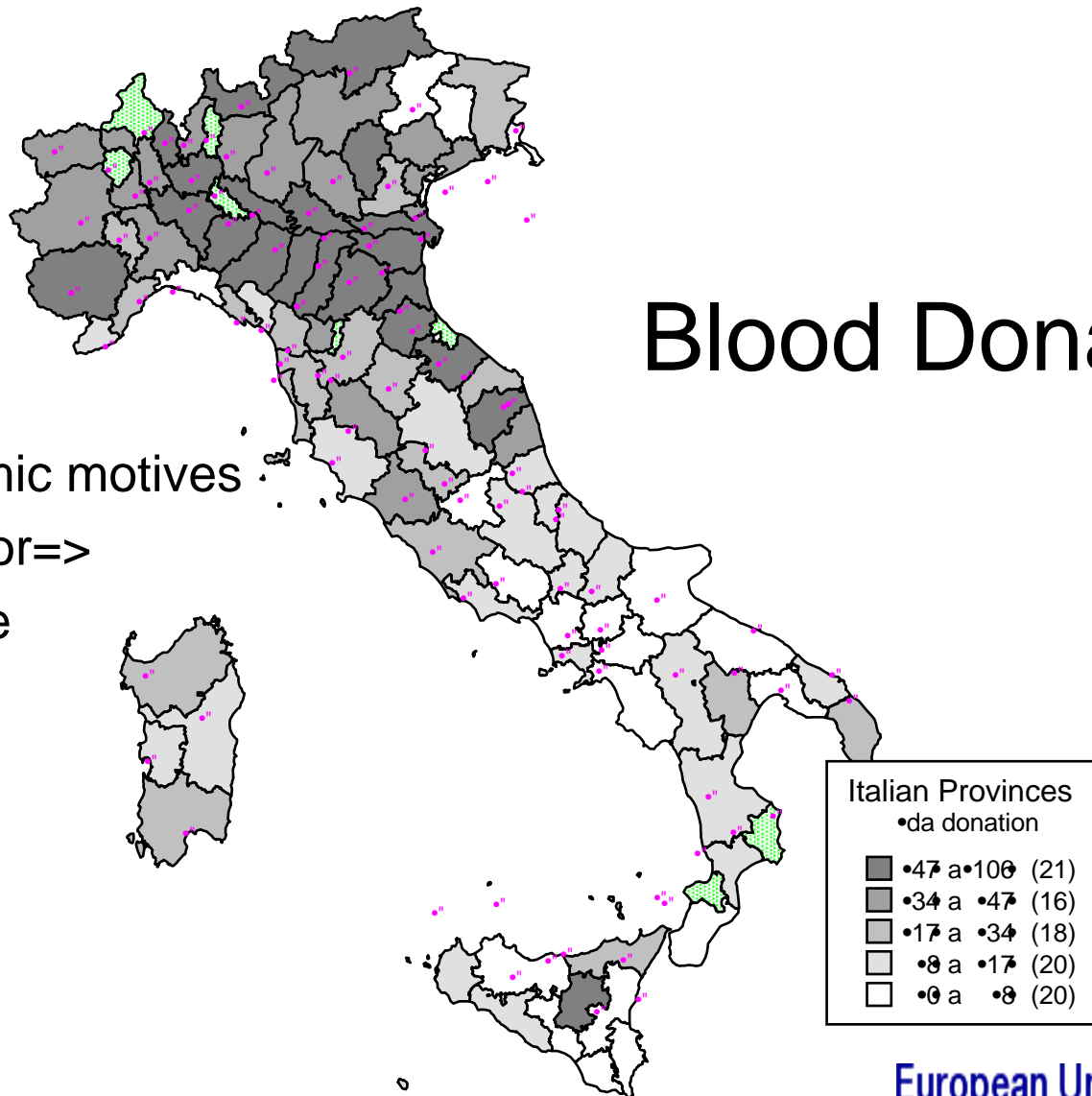
- 1) Are related to values and beliefs
 - 2) Ideally impossible to explain with standard economics.
- Examples:
 - Blood or organ donations (best)
 - Referenda turnout
 - Participation in voluntary associations

A “good” measure of social capital:1 GSZ (04)

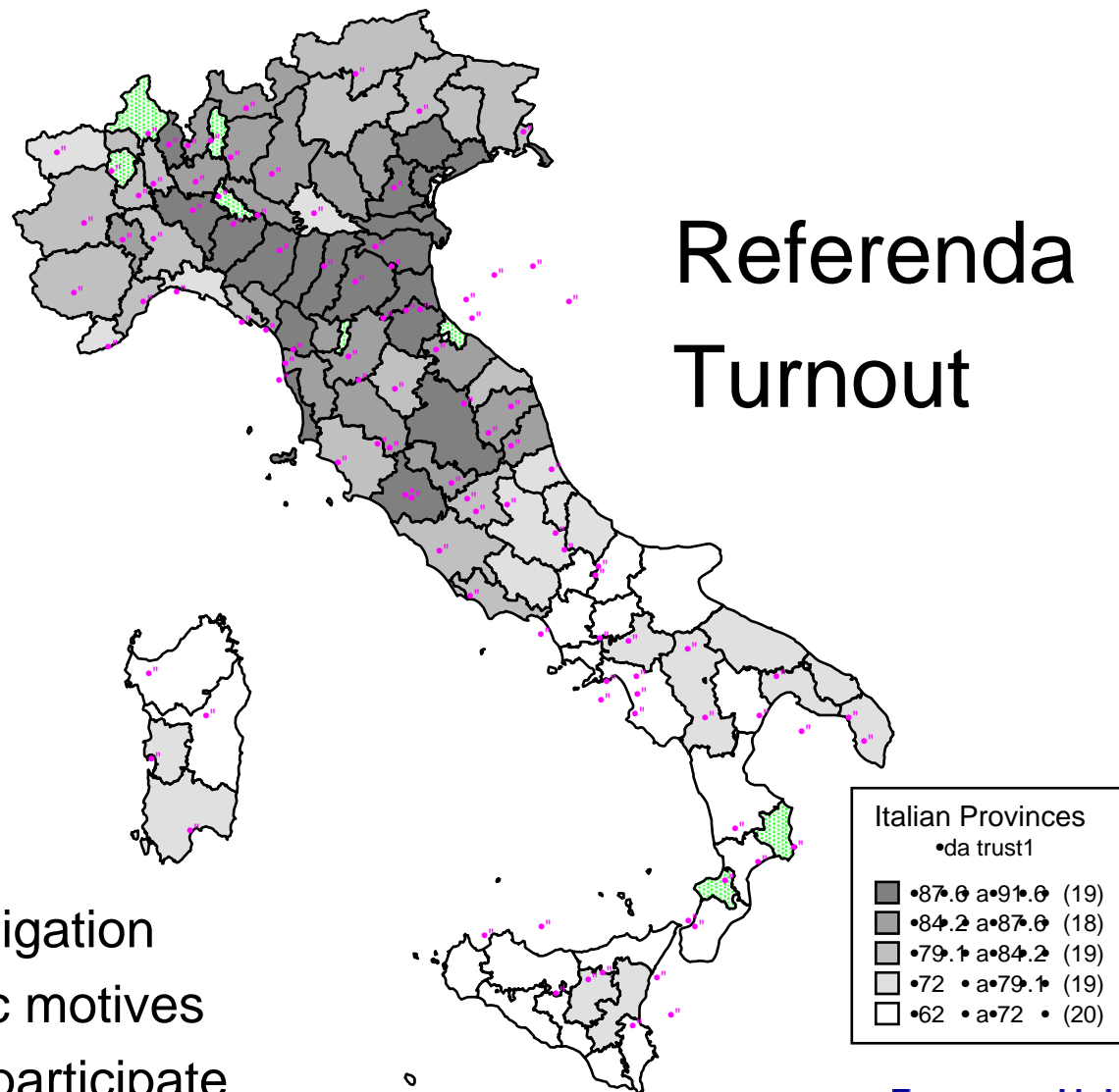


Blood Donation

- Purely voluntary
- Not driven by economic motives
- Purely selfish behavior=>
Nobody should donate



A “good” measure of social capital: GSZ (04)



A moral duty not an obligation
Not driven by economic motives
The selfish should not participate



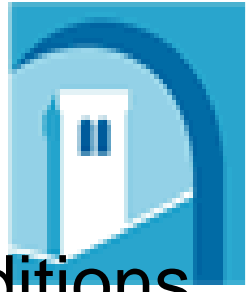
3) Show this definition can easily be incorporated in standard economic models

Transmission of values in a standard economic model



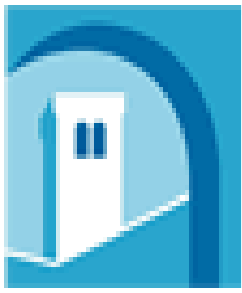
- Tabellini (2007) builds an elegant and rich model of intergenerational transmission of norms
- Individuals inherit norms of cooperative behavior (**social capital**) from their parents
- Parents choose which norms to teach (**investment in SC**); what they teach depends on the **return** to these norms
- In environments where the payoff to cooperation is high because others cooperate, parents will teach cooperation; the opposite in environments where the payoff is low

Transmission of values in a standard economic model



=>two equilibria are possible depending on initial conditions
(**history**)

- Bad initial conditions => norms of limited cooperation and poor legal enforcement are chosen and transmitted
- Good initial conditions => norms of cooperative behavior and external enforcement are chosen and transmitted
- These equilibrium, sustained by culture persist



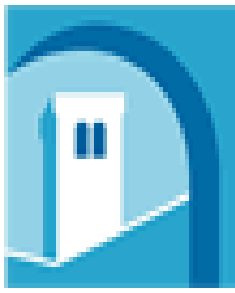
Not just values

- Evidence shows that
 - Descendants of immigrants in the United States retain a level of trust similar to that of their ancestors (GSZ, 2006), (Tabellini, 2007)
- If transmission based only on values, this could not be the case
- There must be some transmissions of beliefs too.
How?

Transmission of beliefs in a standard economic model

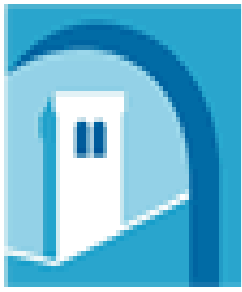


- GSZ(2007a) build a model where parents transmit priors to their kids => focus on trust, the probability that other people are trustworthy
- To avoid kid's making mistakes and them paying for these mistakes they transmit conservative priors
- Based on these priors individuals decide whether to trade; if they trade they can learn and update belief



Implications -1

- Young are excessively cautious
- If inherited prior low \Rightarrow no trade and no learning \Rightarrow economy is stuck in low trust/low trade equilibrium
- \Rightarrow 1) Trust should increase with age
- \Rightarrow 2) The rate of learning should be a function of the initial level of trust
- Using the WVS we find evidence consistent with both implications



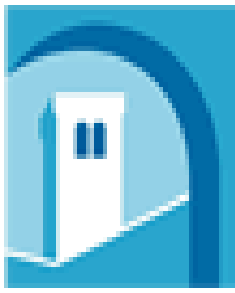
Implications - 2

- If there is a large shock to
 - the return to trade
 - the cost of being cheated (legal enforcement)
- Even with conservative priors, the young generation will experiment.
- The investment in trust of one generation is transmitted to all subsequent generations
- This trust is permanently acquired even if the return to trade reveals to be temporary

This stock of trust is what social capital is



4) Present evidence this definition of social capital has high economic payoff



The identification debate

- Identification is hard (Brock, & Durlauf, 2001; Durlauf, 2002).
- Main problems. Measures of SC may:
 - reflect the working of institutions (e.g. trust more where legal structure is better)
 - reflect unobserved factors that also affect performance
 - Be caused by economic forces (Glaeser et. al. 2002)=> reverse causality
 - **Need exogenous variation in “social capital”**
 - This is made easier by our narrower definition of social capital as culture.



Two approaches

1. Rely on **past history** and argue that past political institutions shape cultural traits

- Need make sure that current institutions are held constant (Tabellini (2007), Putnam (1993), GSZ (2007))

2. Rely on **movers** and cultural portability

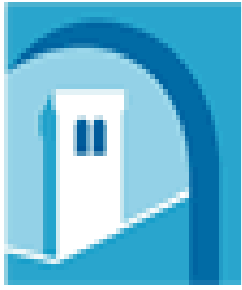
i. **culture is portable**: it is ingrained in the brain of individuals, moves with them and continues affect their behavior=> even hard to get rid of it!

ii. **institutions are not portable**: they do not move with *single* individuals as they leave their country (though they can be transplanted when *many* move)

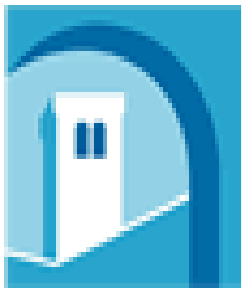


- Focusing on movers' behavior one can tell the cultural component of SC apart from institutions
 - The institutions that matter for the behavior of a mover are those of the country where he lives
 - The SC that matters – given its persistence – is also that of the country of origin
- Fernandez and Fogli (2005, 2006) follow a similar approach and they call it the “epidemiological approach”; also Algan & Cahuc (2007)

GSZ (2004): findings

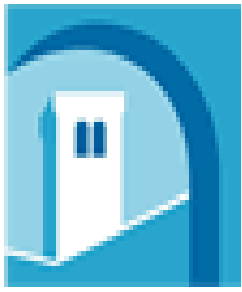


- Use variation in social capital across Italian provinces and individual level data on reliance on financial contracts
- Strong effect of the level of social capital in the province where movers come from on the use and availability of financial contracts by movers
- More social capital in area of origin of mover=>
 - larger investment in stocks less in cash
 - more reliance on checks
 - easier access to credit markets
 - less use of informal, family-based loans



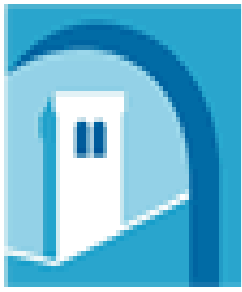
GSZ: economic effects loom large

- One standard deviation increase in SC
 - raises stock investment by 11% of sample mean
 - Lowers investment in cash by 1/3
 - Lowers the probability of being turned down in the credit market by 16% of sample mean
- Identify one channel through which social capital affects economic performance=> enhancing financial development



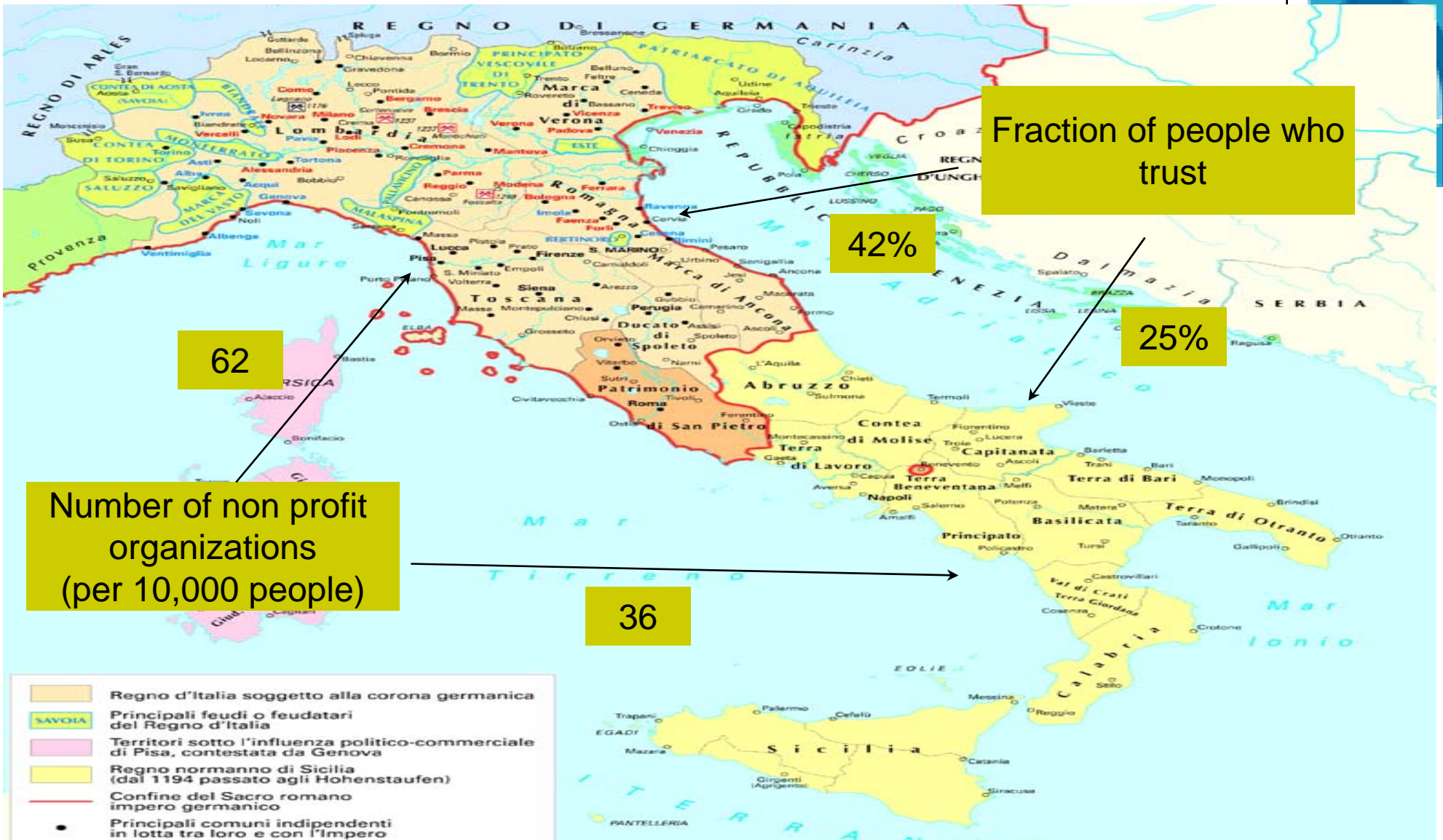
Summary up to now

- Social capital seems to exert an effect on economic performance that is distinct from that of local institutions
- This effect works through the norms of extended cooperation and the trust they entail



Pending question

- Why is there more SC in some areas than in others?
- Putnam (1993) traces the difference in social capital in Italy to history. **1,000 years old history!**
- The Center North solved the disorder of the middle age by inventing the free city-state
 - Horizontal linkages and political independence educated individuals to social and civic participation, building social capital
- The South was dominated by the Normans
 - a highly hierarchical regime inimical of horizontal linkages and thus of cooperation among individuals
 - Note that the Norman Kingdom brought progress (South more developed than North then), but prevented free city state experience.



Fraction of people who trust

42%

25%

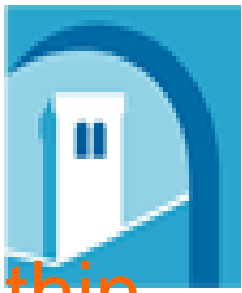
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Number of non profit organizations (per 10,000 people)

36

- Regno d'Italia soggetto alla corona germanica
- Principali feudi o feudatari del Regno d'Italia
- Territori sotto l'influenza politico-commerciale di Pisa, contestata da Genova
- Regno normanno di Sicilia (dal 1194 passato agli Hohenstaufen)
- Confine del Sacro romano impero germanico
- Principali comuni indipendenti in lotta tra loro e con l'Impero
- Lodi Città della Lega Lombarda nel 1167
- Asti Città alleate dell'Impero
- Principali battaglie della Lega contro Federico Barbarossa
- Principali battaglie della Lega contro Federico II di Svevia

Is Putnam Right?



GSZ (2007b): Testing Putnam's conjecture - 1

- Use heterogeneity in history across cities **within Center-North**
- Not all towns that existed in year 1,000 became free cities between the XII-XIV century
- Not all those that became free cities maintained independence for the same length



GSZ (2007b): Testing Putnam's conjecture - 2

- Obtain measures of whether a city in Center-North became a free city (and for how long)
 - Focus on largest 400 cities at unification (1870)
- Correlate these measures with **today** measures of Social Capital in the city:
 - Number of non-profit organizations
- Control:
 - Geography: altitude, steepness, proximity to the sea, location on Roman road
 - City size : population linear, square
 - Inequality in endowments: income and land ownership

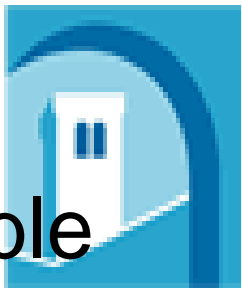


Is Putnam Right? Apparently yes!

	History, geography and endowment	No large towns	No province capitals
Free city	1.0464***	0.9293**	1.6961***

Economic effect:

a town that has been a free city in the XI century has today **20% more SC** than one that has not been a free city



Objections

- Could be proxying for some unobserved variable that affects both SC and history
 - If so it must be a very persistent variable: e.g. geography, that is not picked up by our controls
- Deal with this with instruments for independent cities. What sort of instruments?
- Rely on history

In search for instruments for independent cities



History suggests two potential instruments

- Whether a city was a **Bishop city in year 1,000**
 - Lack of authority was initially made up with an informal agreement among the main families to run the city (*Patto giurato*)
 - Presence of Bishop facilitated coordination and made easier to run the pact and obtain independence; Bishop towns in year 1,000 became such in IV-VII century
- Whether it was **founded by the Etruscans**
 - Etruscans were organized in independent city states; for this they built cities that were easier to defend=> an easy-to-defend city is more likely to gain independence

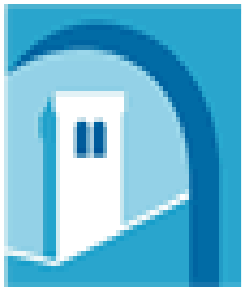
Orvieto, the capital of the Etruscans



Is Putnam Right? Yes, even using IV!



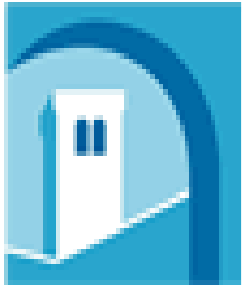
	Non profit organizations	Referenda turnout	Organs donation organization
Free city	1.0285**	1.8816**	0.4168***
F-test of excluded instruments	65.77	64.8	65.77
Sargan test: p-value	0.1507	0.0107	0.9928



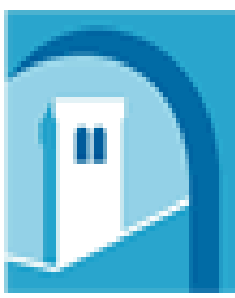
Using history to validate the instruments

- If instruments are good they should not predict differences in SC across cities in the South
- They should only matter because they affected the emergence of free cities which was inhibited by the Normans in the South
- We find no effect
- Diff in diff approach confirms our results.

Putnam was right!



Back to the causality debate



Economic effects: Income per capita on the LHS

	IV: free city	IV: Bishop city, Etruscan city
Social capital	0.5721***	0.7041***
Sargan test (p-value)		0.7859
F-test for excluded instruments	29.68	10.44

1 SD more SC => per capita income higher by 7,000-8,000 euros (60-70%)

=> vindicates Arrow's (1972) statement that much of economic backwardness is due to lack of trust (and social capital)

The persistence of history



- A shock to the benefits of cooperation that took place around the XI century is still affecting economic performance today
- This persistence cannot be due to the survival of the original institutions (as in Acemoglu, Johnson and Robinson): the communal institutions have long disappeared (over 700 years ago)
- It **reflects cultural transmission of beliefs and values** from one generation to another

Taking stock



- Our definition of SC as “good” culture is able to overcome Solow’s criticism. This SC:
 1. is measurable
 2. Can be accumulated and has a positive return
 3. Is easily embedded into standard economic models
 4. Is distinct from other types of capital
 5. Has a strong effect on economic performance

Deserves the label Social Capital

The big question

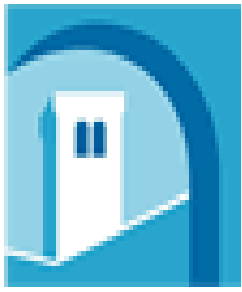


- If SC is so useful how can it be raised?

=> Need a “cultural reversal”

But how can cultural reversals be achieved?

- Tabellini (2007) paper is illuminating: if one could raise the degree of formal enforcement in a sustained way, a society could increase permanently its level of SC



Calls for further questions

- How can societies (or politicians) commit to raise enforcement for a sufficiently long time as to induce parents to teach kids norms of cooperation?
- What kind of political economic mechanism can facilitate a cultural reversal?
- Since the factory of preferences and beliefs is the family, can one replace its role instead? Can we instill norms of extended cooperation at school? Is this desirable?

Conclusion



“Those concerned with democracy and development should build a more civic community, but they should lift their sight beyond instant results. ... Building social capital will not be easy, but it is the key to making democracy work”

Putnam (1993)