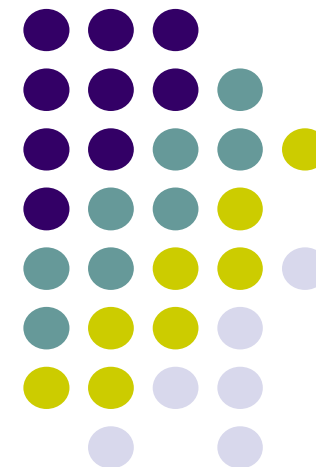


What is social capital? Does it matter for economics and where does it come from?

Luigi Guiso
European University Institute



Outline



- 1) What is social capital?
- 2) How can we measure S.C.?
- 3) Does S.C. matters for economics and why?
- 4) Look at determinants of social capital

Useful link

<http://www.socialcapitalgateway.org/NV-eng-basicreadings.htm>

What is social capital?



- Putnam (1993) on social capital:

*“features of social life - **networks, norms, and trust** - that enable participants to act together more effectively to pursue shared objectives”.*

=>One important component is trust

Gambetta (1988) on trust:

*“When we say we trust someone or that someone is trustworthy, we implicitly mean that the **probability** that he will perform an action that is beneficial ... is high enough for us to consider in **engaging in some form of cooperation** with him.”*

The social capital-trust link?



- Social capital => trust, the opposite is not necessarily true
- **Example:** in a police state I may “trust” others, but not cooperate with them.
- Social capital is a more general concept, it captures also
 - “sense of duty”,
 - Machiavelli’s civic virtue

Three types of social capital



- Depending on the level of analysis we can distinguish three forms of social capital:
 - 1) At the level of individuals/ small groups: **network** capital
 - 2) At the level of firms: **organizational** capital
 - 3) At the level of larger communities/nations: **civic capital**.
- These three notions are clearly related. But they do not always go hand-in-hand.

Network and civic capital



- A very strong network capital in small groups tend to be accompanied by low levels of civic capital:
 - Banfield (1958): amoral familism => very strong ties within the family (a small group) but weak ties outside the family network
 - Fukuyama (1995): strong trust within the family is associated with an extremely low level of trust toward people in general.



Measuring social capital

How to measure Social Capital?



- **Focus on Civic Capital:**
- Social capital is hard to measure:
 1. The set of ties are not observable
 1. The concept is not univocal: in Putnam definition *features of social life - networks, norms, and trust - that enable participants to act together more effectively..*

But if one wants to make progress and test its relevance it needs to be measured, albeit imperfectly

Outcome based measures : 1

Idea: instead of estimating the “capital” estimate its output. This is the route taken in practice

- One can rely on several proxies that capture one of the features of social capital
- Examples from Putnam (1993)

1. Attitudes towards cooperation: number of cooperatives across locales
2. Measures of social behavior: participation in voluntary associations
3. Attitudes towards free riding and cheating: compliance with taxes, littering, queuing etc.

All these variables are indicators of the civiness that social capital produces



Outcome based measures : 2



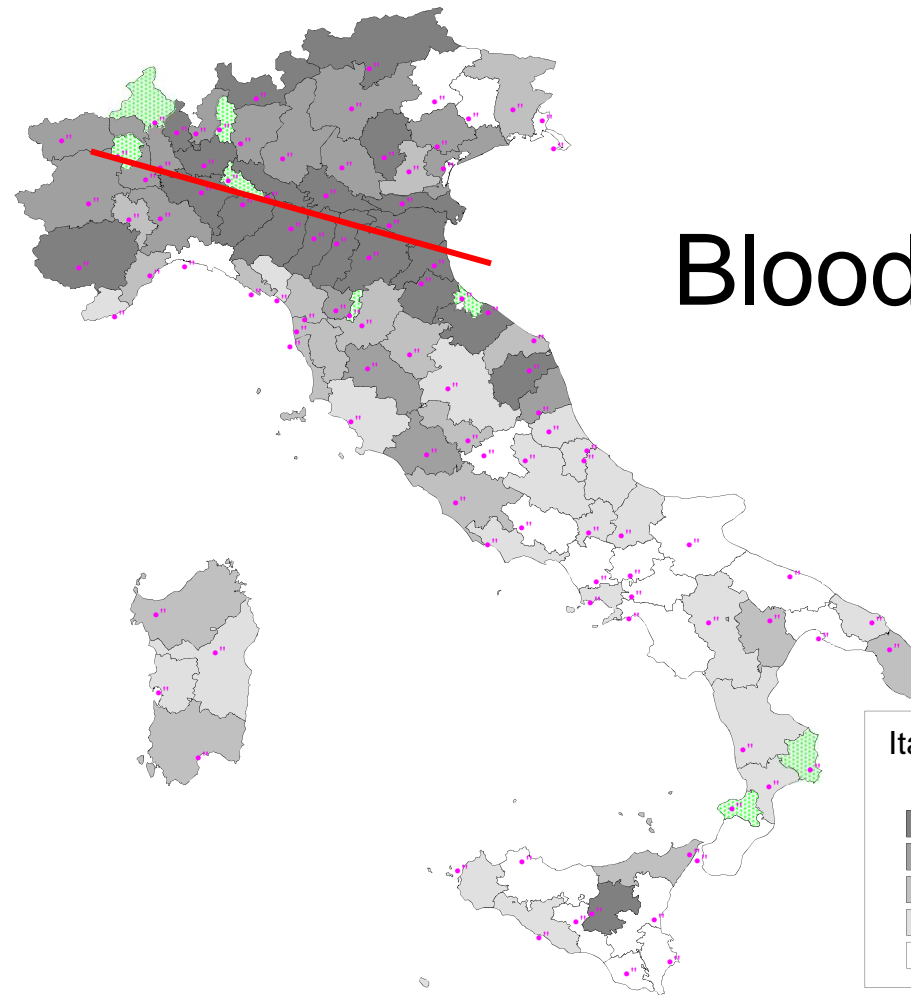
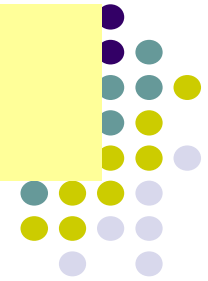
- But some of them may be inadequate: they may proxy for other features that are unrelated to social capital (an output may be produced by various inputs not only by social capital)
 - Tax incentives can affect the number of cooperatives, or cooperatives may reflect patterns of industrial specialization (difficult to run a car industry as a cooperative)
 - Differences in tax compliance and littering across communities may result from differences in the quality of legal enforcement or the legal punishment of tax evasion which may have nothing to do with social capital
- One needs to be careful..

Outcome based measures : 3



- Examples of good measures of social capital from Guiso, Sapienza & Zingales
 1. **Blood donation** across Italian provinces:
 - only one voluntary collector (Avis)
 - is not subsidized
 - Is well defined
 - Does not depend on formal enforcement mechanisms
 2. **Participation in referenda** across provinces
 - Voting is a right and a (moral) duty, but no legal punishment from non participation
 - Voting at referenda is free from possible contamination in the incentives to vote from exchange votes (is not a political election)
 - It only reflects moral duties; from a purely rational viewpoint one should not vote and free ride

Social capital across provinces



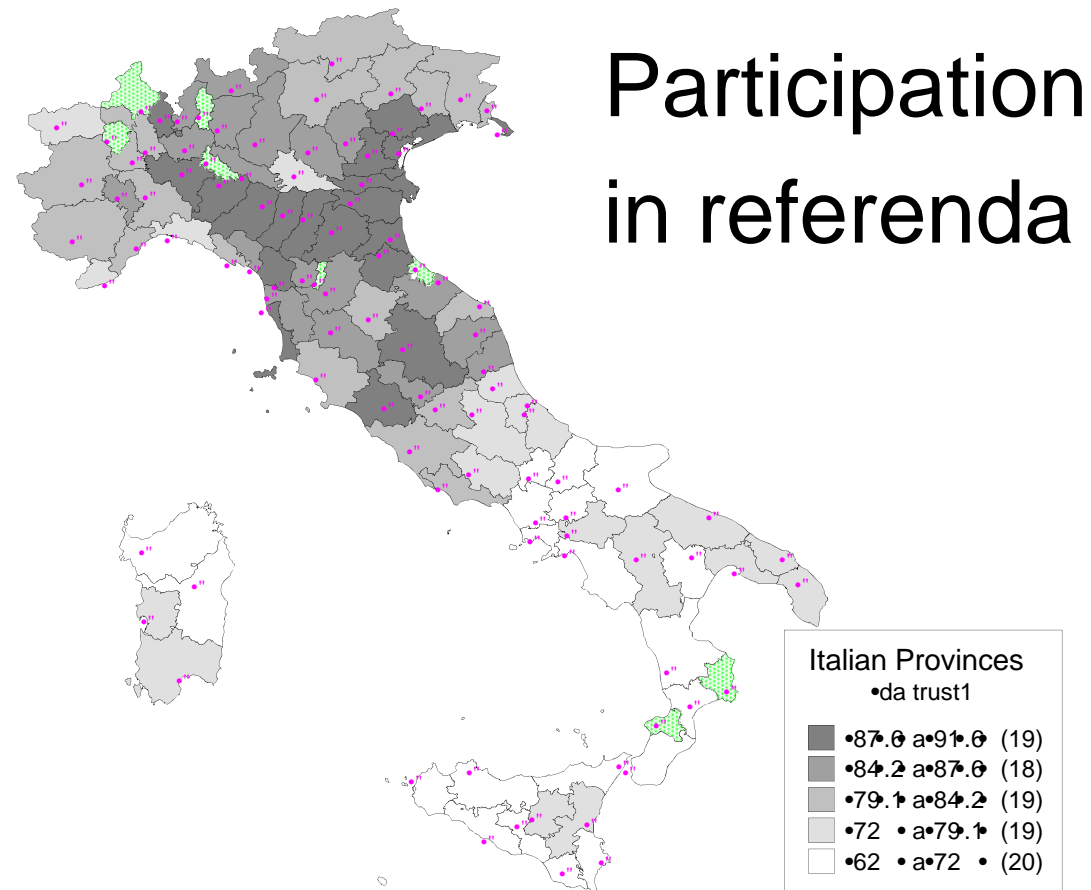
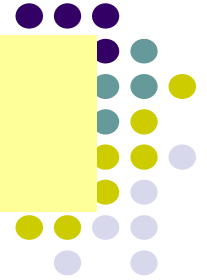
Blood Donation

Italian Provinces

•da donation

- 47 a •100 (21)
- 34 a •47 (16)
- 17 a •34 (18)
- 8 a •17 (20)
- 0 a •8 (20)

Social capital across provinces



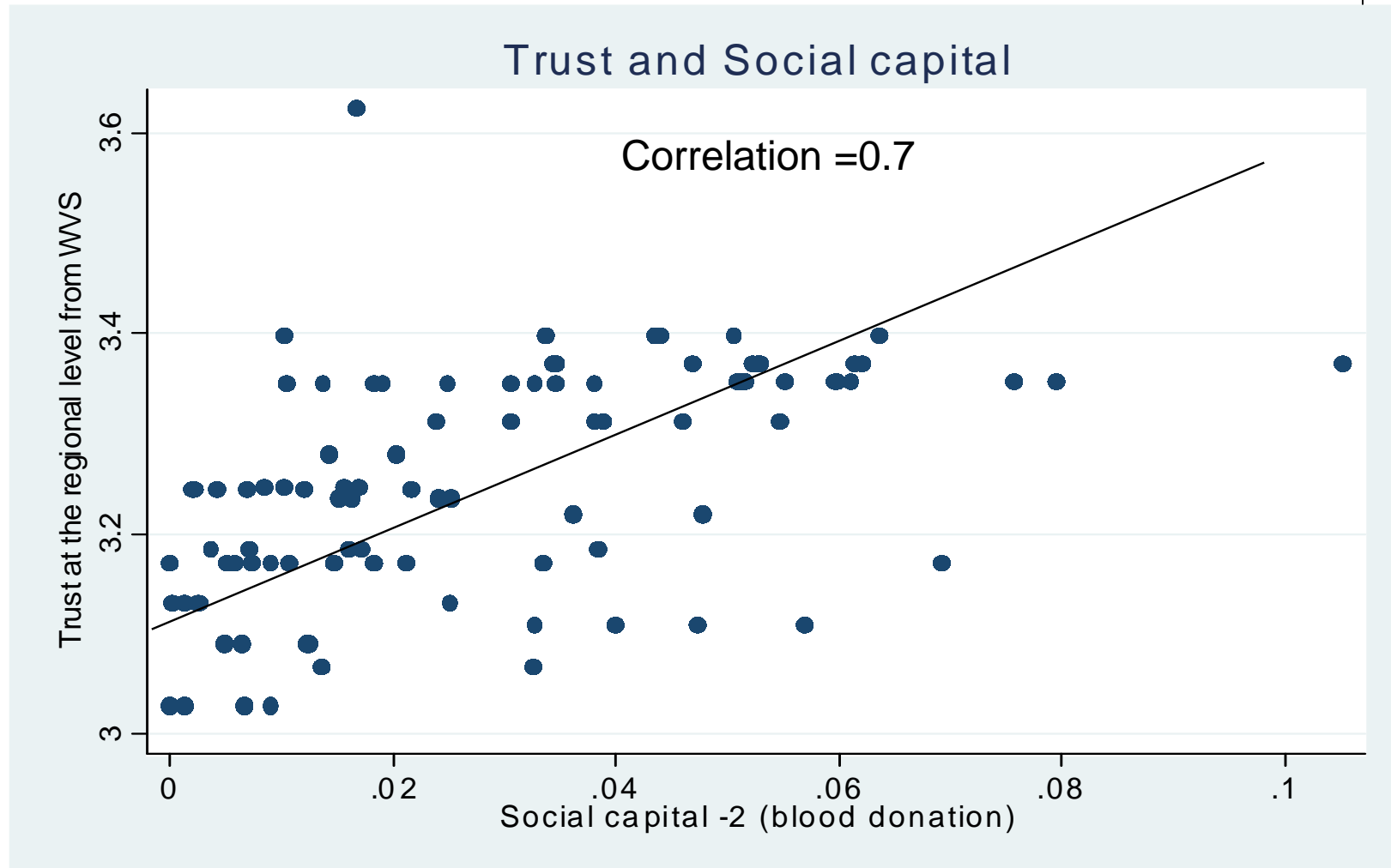
Features on these measures: 1



1. There is considerable variation across local communities
2. There is a clear north-south divide with the North leading the South in terms in terms of social capital intensity
3. the two measures are highly correlated, areas where people donate more blood are also areas where people participate more in referenda (donate their time to the benefit of all)
4. High correlation across outcome based measures is a general feature

As trust is a component of social capital it is highly correlated with it

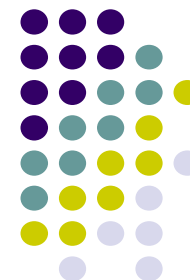
Generalized trust and social capital (Italian provinces)



Features on these measures: 2



1. These measures refer to the 1980s and 1990s. They are highly correlated with measures of social capital from the late 1870s=> social capital tends to depreciate very slowly (hence it deserves the name “capital”)
2. Since Social Capital evolves very slowly at each point in time it is **predetermined** and thus acts as a constraint on the economy: over the short run (decades) most of the causation is from social capital to the economy



Social capital and the economy

Social capital and the economy



- Having addressed what social capital **is** and how it can be measured let us ask why social capital **may matter** for economic performance
- One channel is finance
- **Intuition:** all financial contracts are promises. They are an exchange of money today against a promise of (more) money tomorrow
- But what makes sure the promise is kept? How do we know the borrower returns capital and interest?

Social capital and finance: 2



- The normal answer is that one relies on contracts and contracts are enforced by courts
- **Hence** a lender is willing to lend because the contract is granted perfect legal protection
- => in a word where this is true there is no role for social capital
- In practice legal protection is imperfect

When is legal enforcement imperfect?



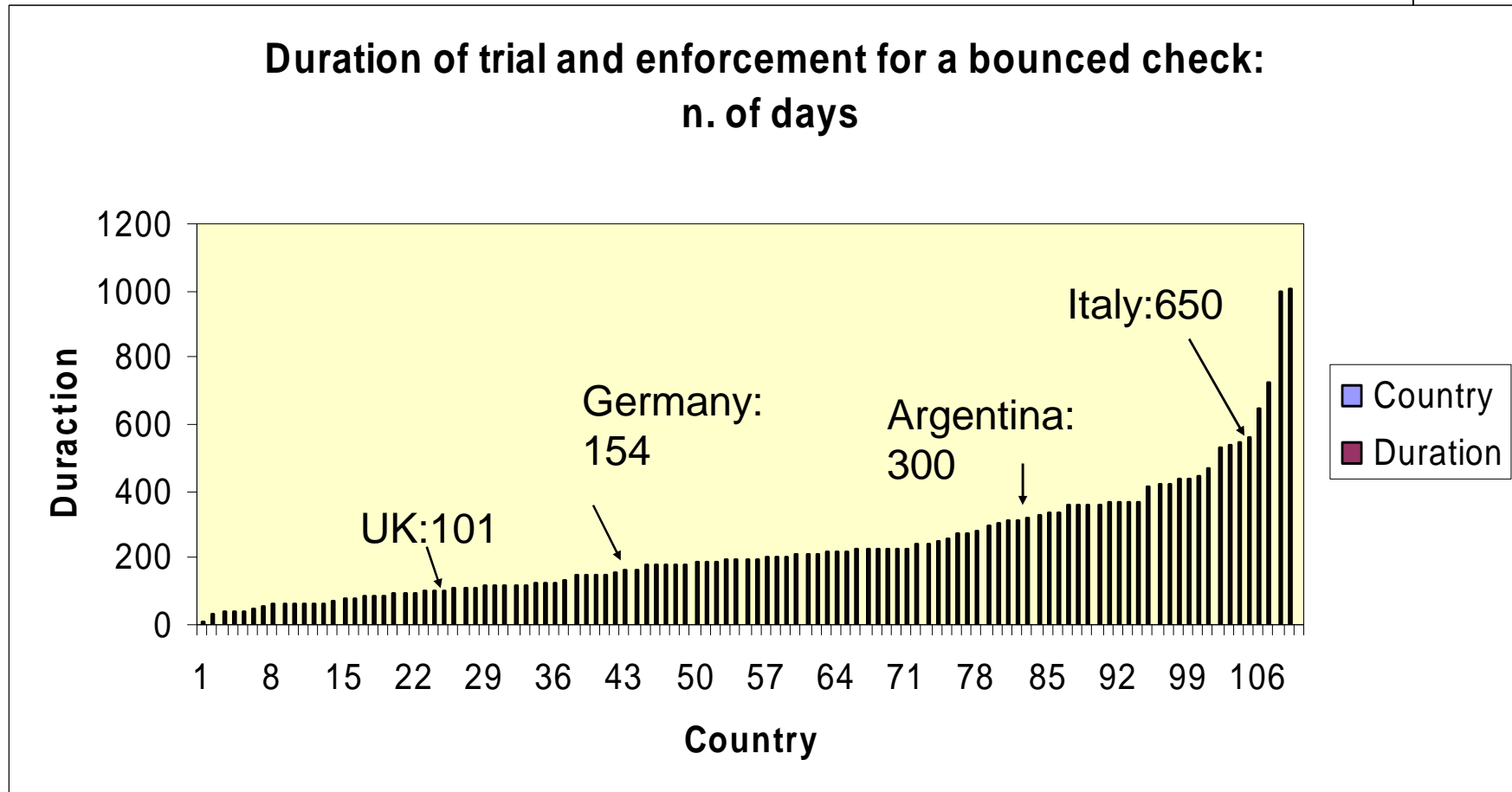
- Legal enforcement is normally imperfect for a number of reasons
 1. **Courts, as all institutions, are imperfect** and cannot grant prompt enforceability in case of misbehavior: they are slow, they are costly
 2. **Contracts are normally incomplete**: law can grant protection for something that the two parties have established in a contract => not all contingencies can be written, simply because cannot be foreseen
 3. **Courts can enforce promises that are verifiable** => in many instances this is not the case (e.g. the output of a firm)

A role for social capital: 1



- When legal enforcement is imperfect there is a potential role for social capital
 1. Where ties among individual are stronger **social networks can provide social punishment** and enforce contracts this way
 2. If social punishment is strong individuals will anticipate this at time of contracting and will trust counterparts more => they will be more willing to lend (exchange promises) as they expect the promises to be kept
 3. **In sum social capital can be a substitute for** imperfect courts

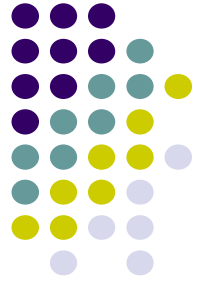
Is this role realistic? Yes, in many countries



Source: Shleifer et. al. "Courts: The Lex Mundi Project", QJE

<http://www.andrei-shleifer.com/data.html>

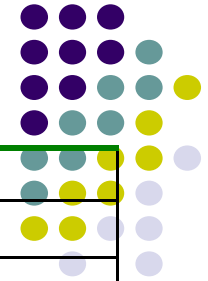
A role for social capital: 2



- This role is not limited to finance but it extends to businesses more generally
- In Arrow (1972) words:

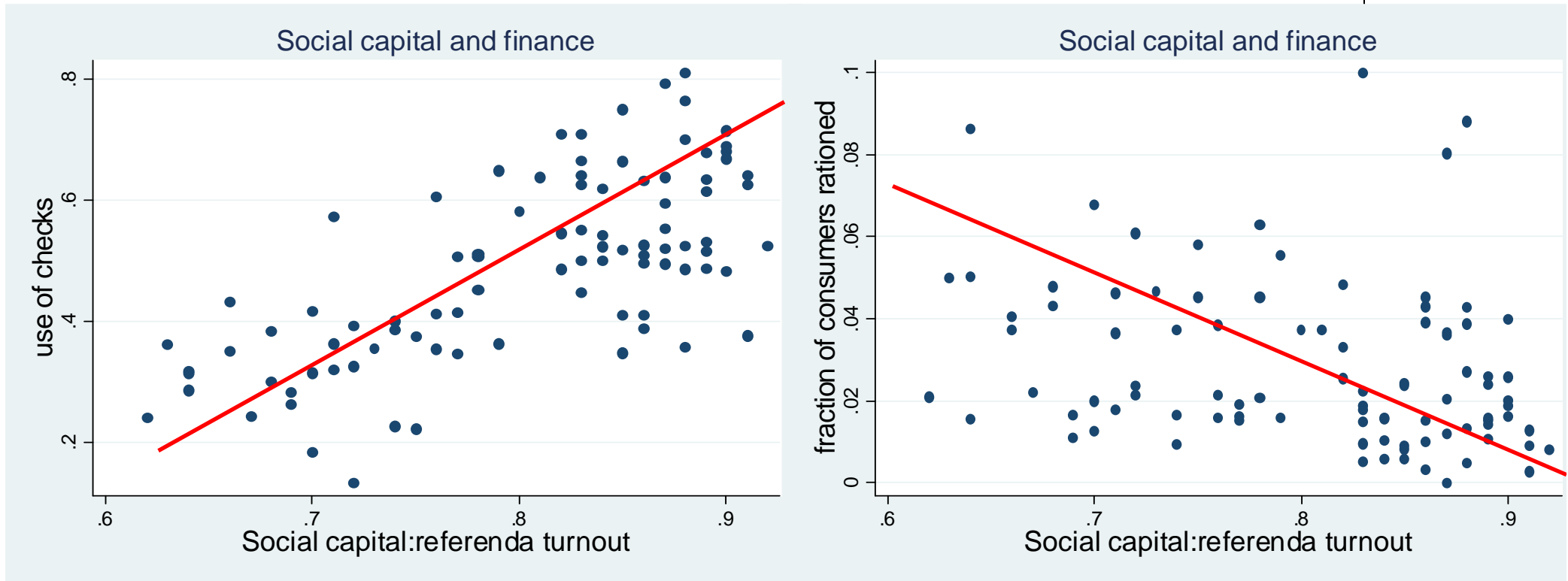
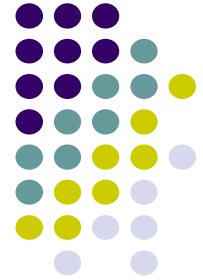
"Virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time. It can be plausibly argued that much of the economic backwardness in the world can be explained by the lack of mutual confidence."

Is there really a role?



nation	trust	nation	trust	nation	trust
Peru	.049	Moldova	.218	Switzerland	.301
Brazil	.050	France	.223	Czech	.302
Philippines	.055	S. Africa	.223	Montenegro	.304
Puerto Rico	.059	Croatia	.228	Italy	.306
Turkey	.070	Slovakia*	.230	Spain	.310
Colombia	.107	East Ger	.232	West Ger	.319
Macedonia	.075	Poland	.234	S.Korea	.331
Venezuela	.133	Armenia	.235	India	.332
Romania	.158	Belarus	.237	Japan	.384
Slovenia	.158	Mexico	.240	Britain	.384
Ghana	.167	Estonia	.243	Iceland	.402
Pakistan	.187	Dominican Republic	.252	Taiwan	.402
Nigeria	.187	Lithuania	.260	U.S.A.	.415
Azerbaijan	.194	Bulgaria	.262	Australia	.422
Bangladesh	.205	Bosnia	.269	Ireland	.428
Argentina	.210	Austria	.284	Netherlands	.445
Portugal	.210	Serbia	.284	Canada	.495
Uruguay	.211	Ukraine	.288	Denmark	.511
Georgia	.212	Hungary	.289	Finland	.537
Chile	.216	Russia	.293	China	.54
Latvia	.218	Belgium	.293	Sweden	.562

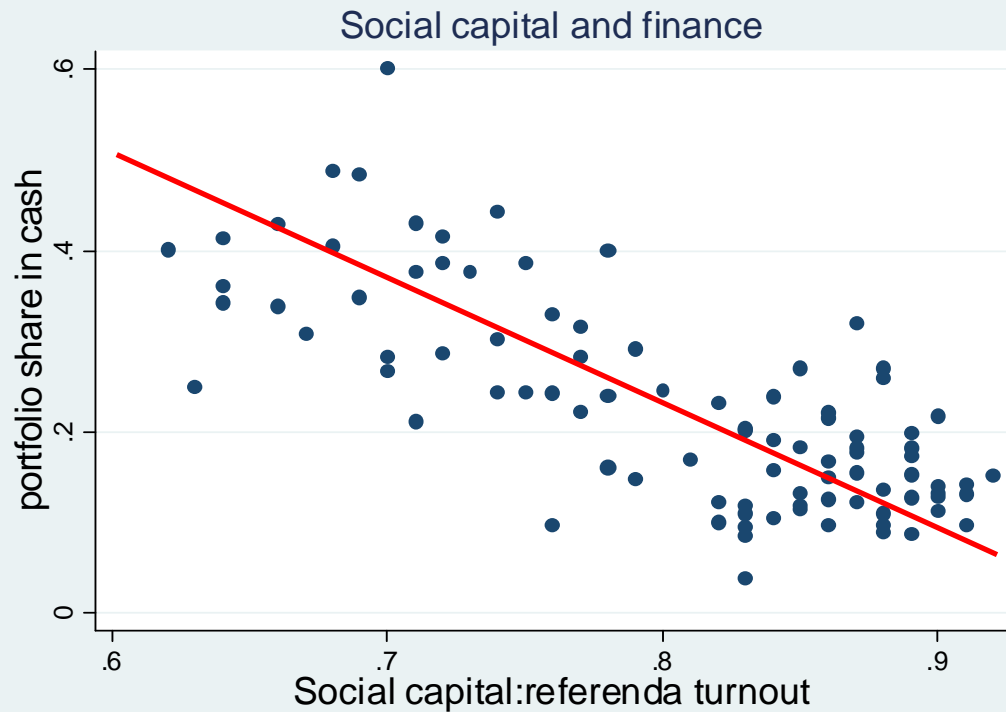
Social capital and finance: 1



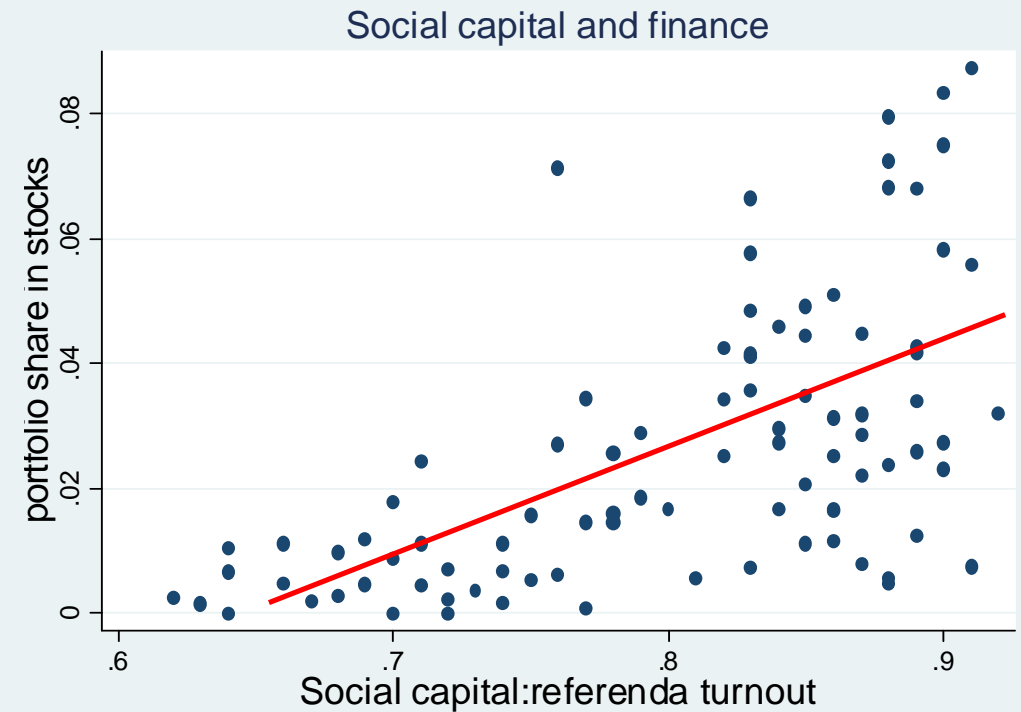
Use more checks

Less likely to be denied a loan

Social capital and finance: 2



Invest less in
cash



..and more in
stocks



Determinants of social capital

Pending Questions



- What can explain the differences in the level of social capital across areas belonging to the same country that over the past 160 years has the same laws, tax rules, formal institutions etc.?
- Why does social capital (trust) differ so much across countries
- Ultimately, what originates social capital?

Where Does Social Capital Come from ?

- These are difficult questions to answer and we are not going to answer them fully
- Focus on behavioral approach to social capital
- Provide empirical evidence on it



Theoretical Foundations of Social Capital:1



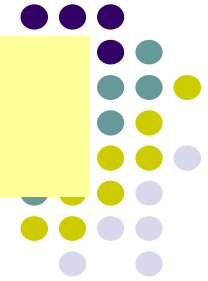
- According to the behavioral approach people act in a certain way because of strong internalized norms (e.g. among the Jews, fathers must send sons to school to learn the Torah)
- Unclear where in general these norms come from but several factors may matter. We focus on two:
 - => religion
 - => past history

Determinants of social capital: religion



1. One dimension of social capital are social norms and beliefs
2. Guiso, Sapienza and Zingales (2003) look at how religion shapes individuals beliefs and norms of behavior
3. Data from World Values Survey
 1. A sample of about 1,000 individuals from a set of over 60 countries
 2. Information on demographics and, beliefs and attitudes, religiosity etc.

How do they define religiosity?



- 4 categories
 1. Raised religiously at home (54%)
 - Exogenous component, not linked to individual characteristics.
 2. Currently religious = attend religious service at least once a year (59%)
 3. Actively religious = attend religious service at least once a week (24%)
 4. Does not believe in God (15%)
- They control for health, education, gender, income, and social status.

Effects of religion on civic attitudes



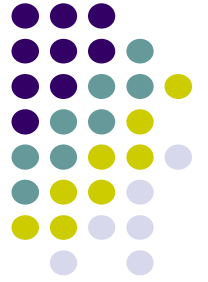
Upbringing Currently Actively Cumulative

Attitudes towards cooperation

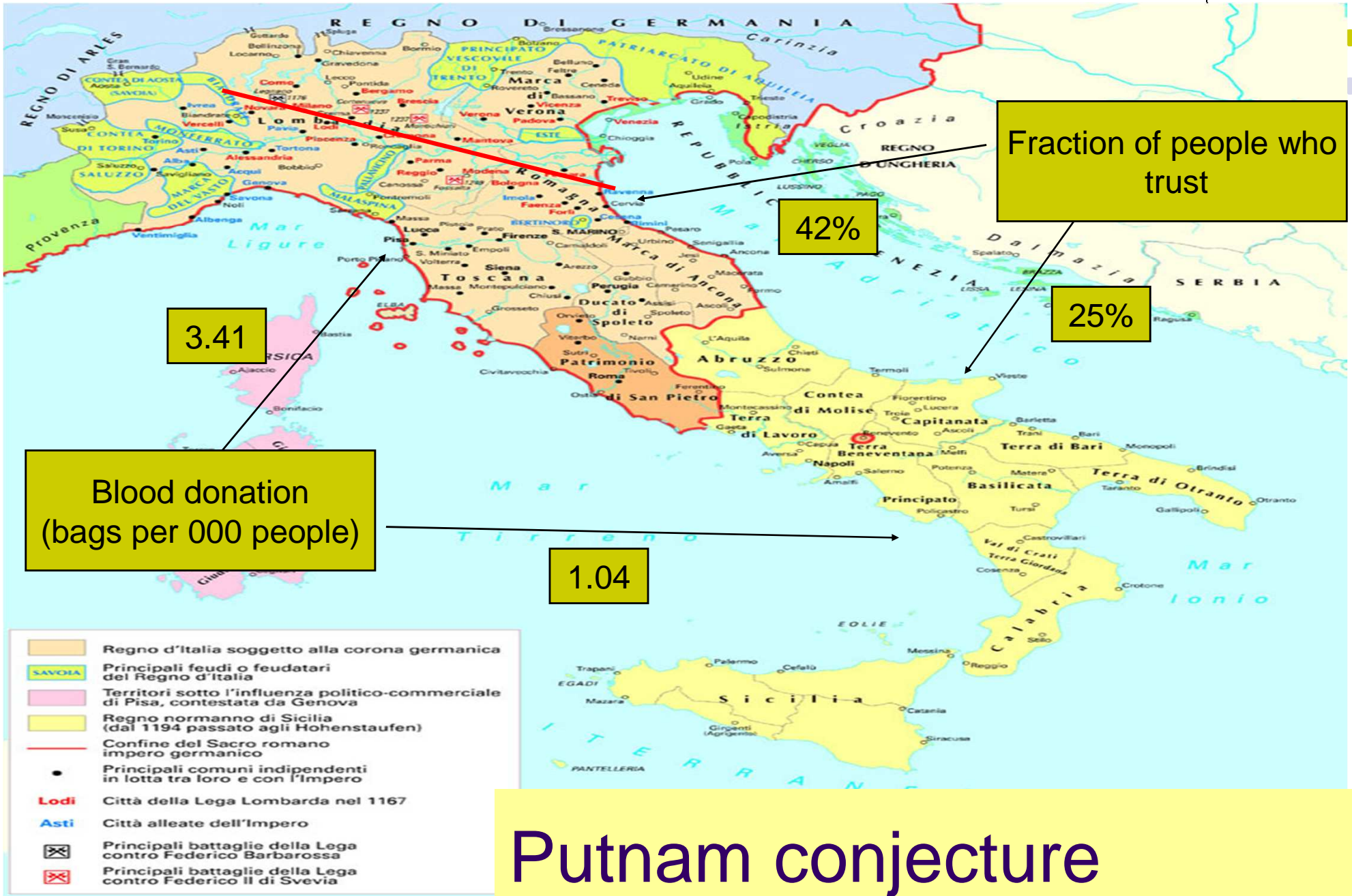
1. Intolerant towards other races (0,1)	+	+	+	+
2. Intolerant towards immigrants (0,1)	+	+	+	+
3. It is justified to cheat on taxes?	-	-	-	-
4. It is justified to buy a stolen object?	-	-	-	-
5. It is justified to accept a bribe?	-	-	-	-
6. It is justified to cheat on taxes?	-	-	-	-
7. It is justified to buy a stolen object?	-	-	-	-
8. It is justified to accept a bribe?	-	-	-	-

Religion can explain differences across countries but not within Italy

Determinants of civic capital: History



1. Putnam (1993) traces the difference in social capital in the North and South of Italy, to history around year 1,000
2. The North solved the disorder of the middle age by inventing the city-state
3. Horizontal linkages and political independence educated individuals to social and civic participation, building social capital
4. The South was dominated by the Normans, in a highly hierarchical regime inimical of horizontal linkages and thus of cooperation among individuals



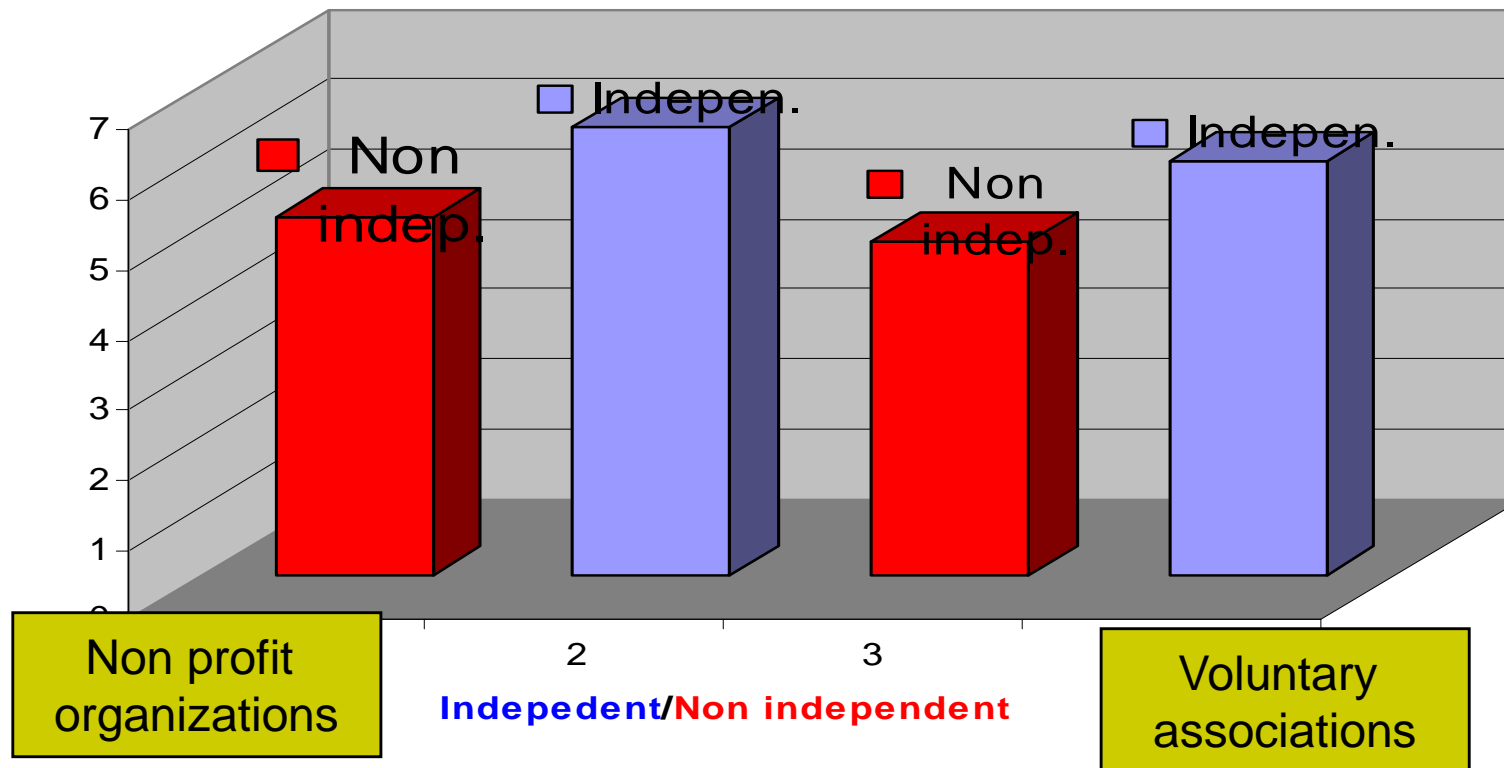
Is Putnam Right?



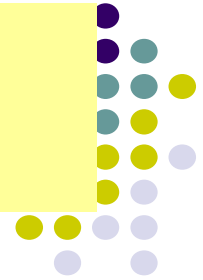
- Use data on the history of Italian towns located in North
 1. Whether it has been an independent town during the 11-14th century
- Correlate these measures with today measures of Social Capital in the city:
 1. Number of non-profit organizations
 2. Number of voluntary associations

Is Putnam right? Apparently yes!
Having been independent city after the XI century
raises today's voluntary associations by 25%

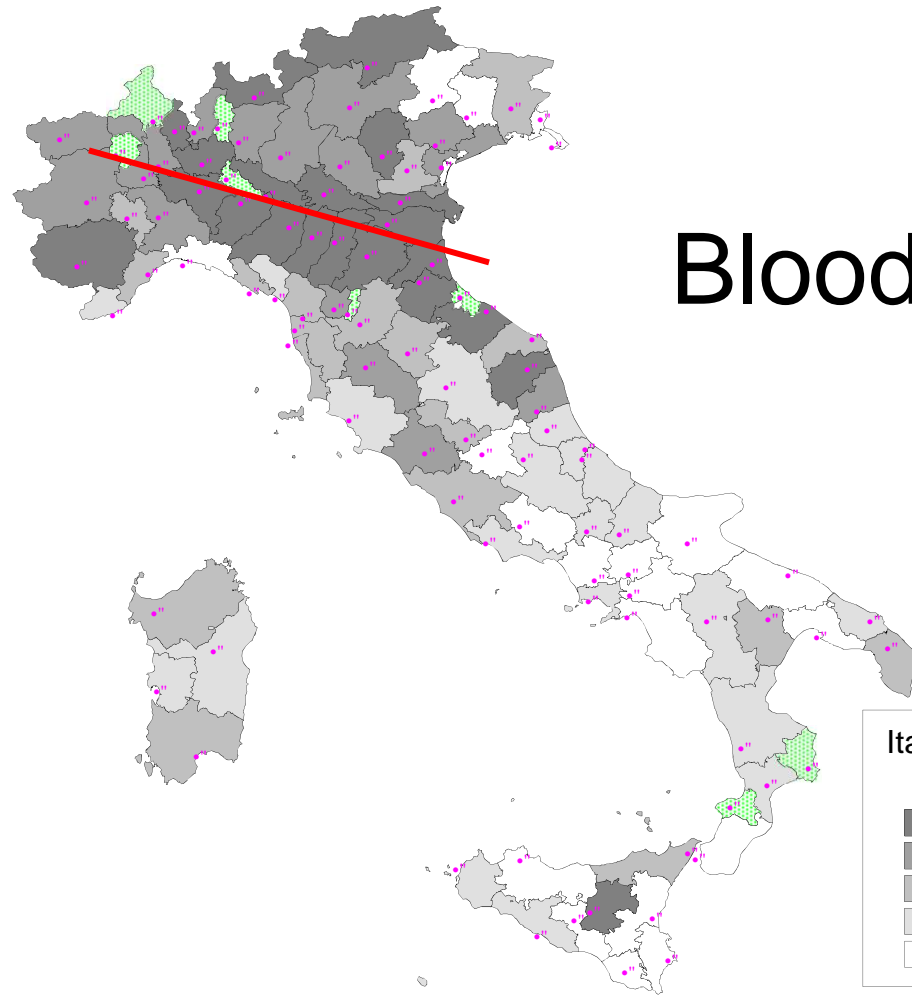
Effect of city independence on social capital



Why social capital is more intense along the red line?



Cities
belonging
To the
Lombard
league



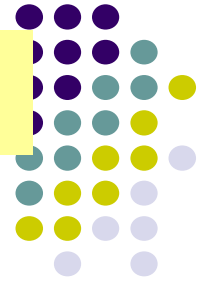
Blood Donation

Conclusions



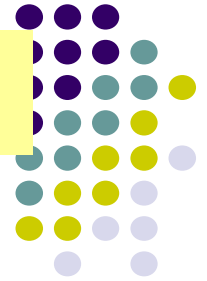
- In spite of a recent boom, the literature on social capital and trust is still in its infancy.
- Strong evidence that civic capital (and the trust it sustains) matters for economic performance
- A lot of progress has been made but many issues still remain pending. Two are particularly important:
- Why social capital persists so much? What is the mechanism that generates persistence?
- Since it appears so central to economic performance what policies, if any, can sustain its accumulation?

Is independent city proxying for something else?



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

In search for instruments for independent cities



1. History suggests three potential instruments
2. Whether a city was had a archbishop
 - Easier to obtain independence from the Emperor as an authority to coordinate with was already available
3. Whether it was founded by the Etruscans
 - Etruscans were organized in city states that valued and enjoyed independence and self-administration
4. Whether it was on the track of the Emperor's route on his trips to Rome
 - If on the track of the Emperor's trips likely to be a "rebellion" city: since Emperor was defeated (as we know) cities with a stronger desire for independence had a greter chance to get it

Is Putnam Right? Yes even using IV!

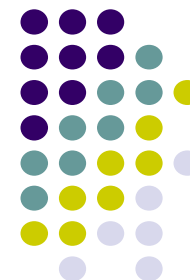


	N. non profit organizations		N. of voluntary associations	
	IV: 1 instrument	IV: 3 instruments	IV: 1 instrument	IV: 3 instruments
Independent city	0.4897	0.8737*	0.2791	0.7380*
City heighth	0.0014**	0.0014**	0.0013**	0.0012**
Steepness	0.0002	0.0002	0.0002	0.0002
Located at a cross between roman roads	1.1455***	1.0540***	1.1082***	0.9989***
Gini land ownership inequality	-1.3144*	-1.3950*	-1.2165*	-1.3129*
Gini Income per capita inequality	13.2757***	12.6127***	11.2217***	10.4294***
Population	-0.0000*	-0.0000**	-0.0000*	-0.0000**
F for excluded instruments	130.22	67.17	130.22	67.17
Partial R2 for excluded instruments	0.264	0.358	0.264	0.358
Sargan test of over identifying restriction (p_value)	-	0.342	-	0.174
Observations	376	376	376	376



Key: are the instruments good?

1. Three requirements for good instruments :
2. Have predictive power on variable to be instrumented (not weak)
3. Be orthogonal to error term (Sargan test of OIR)
4. Be consistent with expectations or priors



Key: are the instruments good?

Instrument	
City has an archbishop	0.3781*** (9.75)
City is on the itinerary of the Emperor	0.3099*** (4.86)
City was founded by the Etruscans	0.1900*** (4.21)
Partial R-squared of excluded instruments:	0.3582
Test of excluded instruments:	$F(3, 361) = 67.17$

Take outs



- In spite of a recent boom, the literature on social capital and trust is still in its infancy.
- There is little agreement on what social capital is, and how is it formed.
- The empirical evidence is still scant but progressing
- This makes it difficult yet to provide a definite view of the interaction between business behavior and social capital.
- Nevertheless, we do know that social capital and trust are very important for business and particularly for finance

Is Putnam Right? Apparently yes!



Non profit organizations (5.4)	(1)	(2)	(3)	(4)	(5)	(6)
	Only History	History and geography	History, geography and endowment	History, geo, endow and Income per capita	No province capitals	No large towns
Independent city	1.2931***	1.3096***	1.2327***	0.7990***	1.2397***	1.2724***
City heighth		0.0012*	0.0014**	0.0016***	0.0008	0.0012*
Steepness		0.0000	0.0002	0.0006**	0.0000	0.0002
Located at a cross between roman roads		1.1554***	0.9685***	0.8249***	0.6362	1.1659***
Population		-0.0000*	-0.0000***	-0.0000***	-0.0000***	-0.0000***
Gini land ownership inequality			-1.4705*	-0.2416	-1.5287*	-1.6384**
Gini Income per capita inequality			11.9928***	-1.9946	11.8305***	11.6843***
Income per capita				0.0004***		
Observations	376	376	376	376	317	359

Is Putnam Right? Apparently yes!



Voluntary association (5.0)	Only History	History and geograph y	History, geography and endowmen t	Hist., geo, endow. and Income per capita	No province capitals	No large towns
Independent city	1.1518** *	1.1904** *	1.1322***	0.7375** *	1.0854** *	1.1729** *
City heigth		0.0011*	0.0012**	0.0014** *	0.0007	0.0010*
Steepness		-0.0000	0.0001	0.0005**	-0.0000	0.0001
Located at a cross between roman roads		1.0563** *	0.9050***	0.7743** *	0.6259	1.0892** *
Gini land ownership inequality			-1.3957**	-0.2772	-1.4729*	-1.5489**
Gini Income per capita inequality			9.7487***	-2.9832	9.6549** *	9.4745**
Income per capita				0.0004** *		
Population			-0.000***	-0.000***	-0.000***	-0.000***
Observations	376	376	376	376	317	359