

## Economic growth and social capital: happily together ever after?

Economic growth  
and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

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Preliminary results

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Much of the economic literature refers to SC as a catalyst of economic interactions.

“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.”

*(Arrow, 1972, p. 357)*

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

# Social capital and economic growth

Economic growth  
and social capital

Many empirical works found evidence of a positive correlation between proxies of SC and economic growth.

(La porta et al., 1999; Whiteley, 2000; Zak and Knack, 2001; Beugelsdijk et al., 2004;... just to name a few!)

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

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(La porta et al., 1999; Whiteley, 2000; Zak and Knack, 2001; Beugelsdijk et al., 2004;... just to name a few!)

- Knack and Keefer (1997): trust and civic cooperation are strongly and positively associated with economic performance (1980 - 1992);
- Helliwell and Putnam (1995): civic community and GDP growth between 1950 and 1990 are positively associated;
- Narayan and Pritchett (1997): higher levels of group membership are correlated with higher incomes.

## There are many reasons to argue that SC supports economic growth

- it reduces incentives for free-riding and moral hazard;
- it reduces transaction costs;
- it attenuates the principal-agent problem;
- it solves collective action problems.

Overall, higher social capital frees resources favouring new investments.



# SC and GDP: happily together ever after???

Economic growth  
and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

*“If anyone here has anything against,  
speak now or forever hold your peace.”*

A matter of lobbies:

- Olson (1982): associations can act as “distributional coalitions” that lobby for policies to protect interests of special groups inhibiting economic growth.



- the increase over time in associational strength, cohesion and influence tends to weaken economic growth.

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion



# Different views

A bad deal:

The US are characterized by a long-term decline in SC (*Putnam, 2000*).

- increase in business and time pressure, female participation to the labor market, residential mobility, disruption of marriage and family ties.
- the market tends “to reduce society to a desert” (*Polanyi, 1968; Hirsch, 1976; Bartolini and Bonatti, 2008*)



Economic growth  
and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

Some evidence:

- Putnam (2000): the decline of SC in US over the last 30 years;
- Helliwell (1996): evidence of a negative relationship between trust and productivity growth (1960 - 1992);
- Roth (2009): documents a negative correlation between trust and economic growth during the '90s.

# The research question:

Economic growth  
and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

Does an increase in social capital go with economic growth?

My aim is to explore the relationship **over time** between social capital and economic growth overcoming the limitations of previous works:

- using a larger set of proxies of social capital;
- adopting WVS/EVS data on the period 1980 - 2009.

## GDP:

log of the GDP per capita (constant 2000 US \$).

Source: World Development Indicators

Economic growth  
and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

## GDP:

log of the GDP per capita (constant 2000 US \$).

Source: World Development Indicators

## Social Capital:

- group membership: share of the population participating in at least one group or association;
- trust in others: “generally speaking would you say that most people can be trusted, or that you can’t be too careful in dealing with people?”
- civic cooperation: observed through answers to questions the justifiability of:
  - “claiming government benefits which you are not entitled to”;
  - “avoiding a fare on public transport”;
  - “cheating on taxes if you have the chance”;
  - “accepting a bribe”.

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

## Is economic growth associated with an increase of social capital?

Economic growth  
and social capital

Introduction

Data

Results

**at least 10 years**

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

Is economic growth associated with an increase  
of social capital?  
The answer seems to be...



Economic growth  
and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

# SC and GDP over at least 10 years

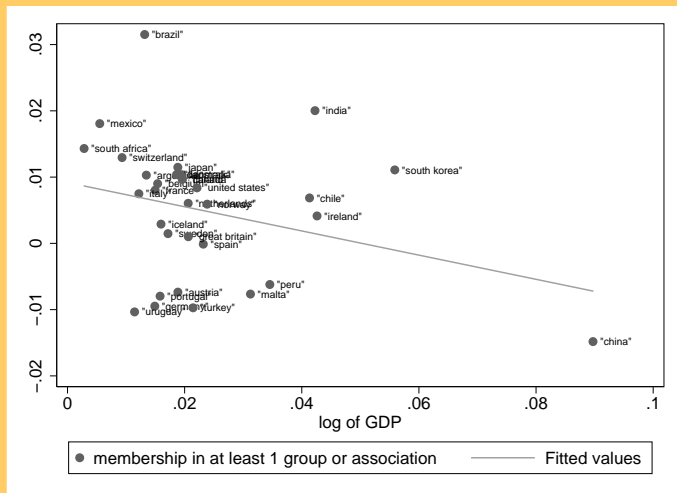


Figure: Correlations between time trends of group membership and of the logarithm of GDP per capita.

Economic growth and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

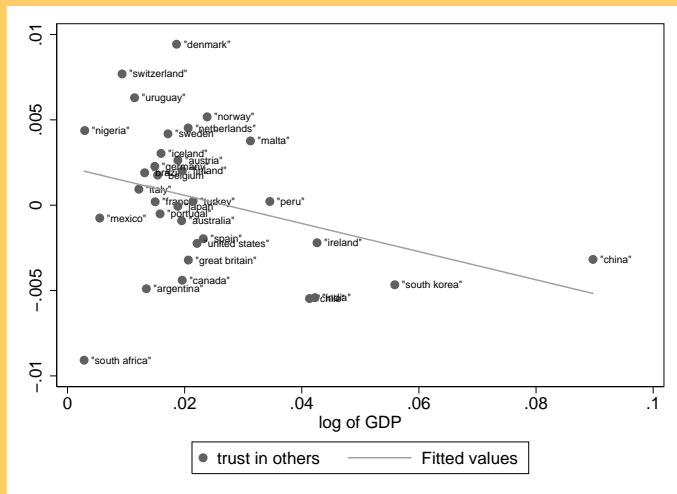
at least 15 years

A possible interpretation

Conclusion



# SC and GDP over at least 10 years



Economic growth  
and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

Figure: Correlations between time trends of trust in others and of the logarithm of GDP per capita.

# SC and GDP over at least 10 years

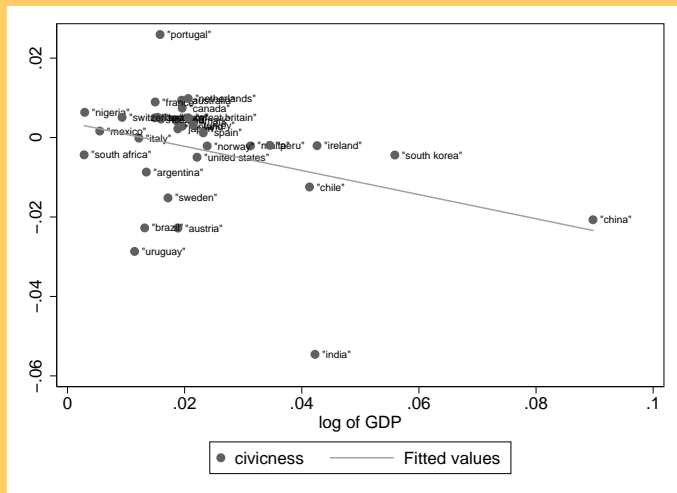


Figure: Correlations between time trends of the index of civiness and of the logarithm of GDP per capita.

Economic growth and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible interpretation

Conclusion

Introduction

Data

Results

**at least 10 years**

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

## Does the choice of the time-span matter?

**Table:** Correlations among long term trends of SC proxies and log of GDP per capita for periods of at least two years (standardized variables).

	group membership	trust in others	index of civiness
log of GDP	-0.260** (-2.06)	-0.180 (-0.72)	-0.289* (-1.85)
Constant	0.202 (1.22)	-0.0502 (-0.24)	-0.270* (-1.72)
Observations	43	50	49

*t* statistics in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$

# SC and GDP over at least 15 years

**Table:** Correlations among long term trends of SC proxies and log of GDP per capita for a time span longer than 15 years.

	group membership	trust in others	index of civiness
log of GDP	-0.243* (-1.91)	-0.242* (-1.86)	-0.346** (-2.60)
Constant	0.390** (2.79)	-0.0358 (-0.23)	0.0321 (0.19)
Observations	30	30	30

*t* statistics in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$

# A possible interpretation

## Economic growth and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

**A possible  
interpretation**

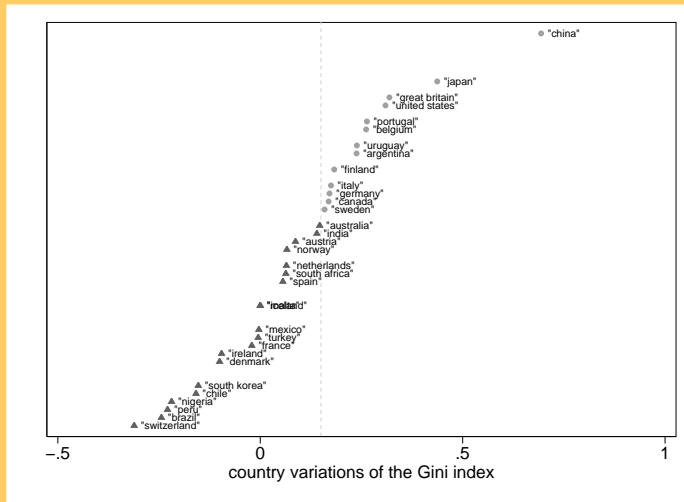
Conclusion

time series Vs. cross-country: a paradox

Hypothesis: social capital matters to trigger economic growth, but the latter erodes social capital when income inequality increases.

# two groups of countries

Figure: List of countries by time trends of their Gini index. Data are from the Standardized World Income Inequality Database (SWIID).



Economic growth  
and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

**A possible  
interpretation**

Conclusion



# A possible interpretation

Some preliminary evidence suggests that:

Economic growth  
and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

**A possible  
interpretation**

Conclusion



# A possible interpretation

Some preliminary evidence suggests that:

Economic growth  
and social capital

Introduction

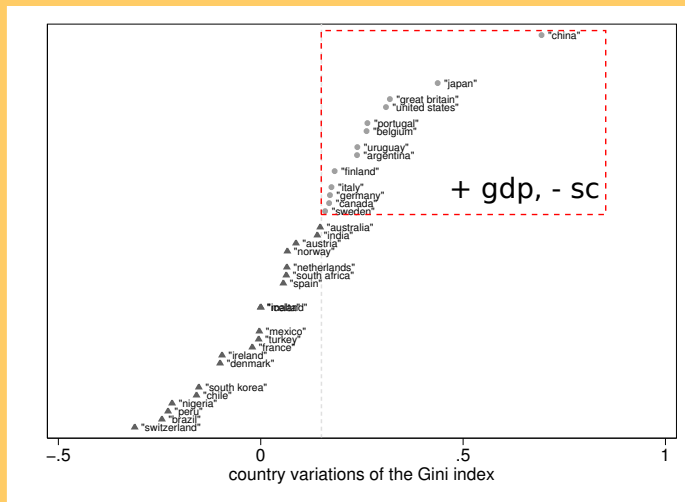
Data

Results

at least 10 years  
at least 2 years  
at least 15 years

**A possible  
interpretation**

Conclusion



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Some preliminary evidence suggests that:

Economic growth  
and social capital

Introduction

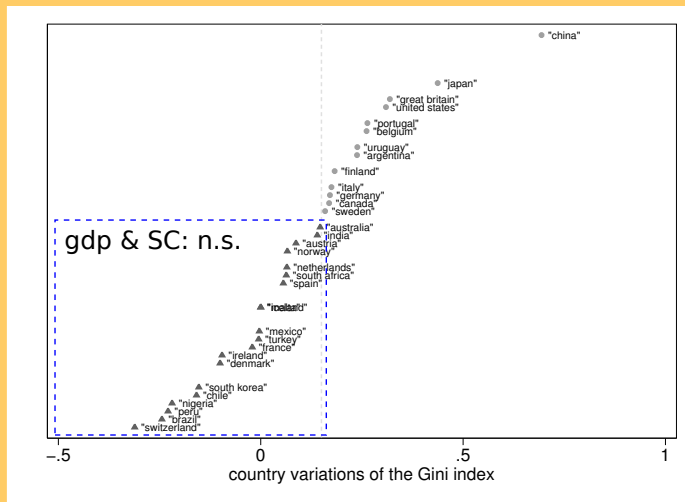
Data

Results

at least 10 years  
at least 2 years  
at least 15 years

**A possible  
interpretation**

Conclusion



# Does more SC go with economic growth?

Across countries:

- a larger endowment of SC goes with a higher GDP. In some cases a U-shaped relationship is found;
- even if the early stages of economic development are associated with lower levels of SC, the growth process itself will solve the problem;

# Does SC go with economic growth over time?

Economic growth  
and social capital

Introduction

Data

Results

at least 10 years

at least 2 years

at least 15 years

A possible  
interpretation

Conclusion

Hence, will raising GDP increase SC?

Over time, economic growth is negatively correlated with trends of SC (at least in countries with increasing economic inequalities).

This evidence is compatible with the hypothesis that SC is important to trigger economic growth. However, SC is eroded when economic growth turns into increasing economic inequality.

Thanks for your kind attention!

Any comments or suggestions are  
welcome

The availability of internationally comparable time series on social capital variables is the main limiting aspect.

- **WVS/EVS data**
- collected in 6 waves between 1981 and 2009;
- all available countries with at least 10 years (this constraint will be removed);
- no transition economies (Roth, 2009; evidence from data);
- 33 countries;
- 186,000 observations.

Respondents were asked to mention whether they belonged or were performing unpaid voluntary work for any of the following groups or associations:

social welfare service for elderly;  
religious organization;  
education, arts, music or cultural activities;  
labour unions;  
political parties;  
local political actions;  
human rights;  
conservation, the environment, ecology;  
other groups.

animal rights;  
professional associations;  
youth work;  
sports or recreation;  
women's group;  
peace movement;  
organization concerned with health;  
consumer groups;

variable	mean	sd	min	max	obs	missing
group membership	0.599	0.490	0	1	199437	0.0706
trust in others	0.342	0.474	0	1	205105	0.0442
index of civiness	0.0632	0.942	-4.900	0.768	184050	0.142
ln of GDP per capita	9.176	1.221	5.763	10.65	210462	0.0192
Gini index	35.19	10.75	20.13	65.47	186626	0.130

**Table:** Descriptive statistics and missing values for the pooled data-set of countries with at least 10 years long time-spans.



variable	wave 1	wave 2	wave 3	wave 4	wave 5	wave 6	total
group membership	0	0.157	0.0341	0.119	0.00192	0.0467	199437
trust in others	0.0613	0.0688	0.0378	0.0291	0.0340	0.0316	205105
index of civicness	0.0576	0.0970	0.166	0.320	0.0987	0.0326	184050
ln of GDP per capita	0.0116	0.00659	0.0233	0.0220	0.0342	0.0187	210462
Gini index	0.0634	0.0303	0	0.0654	0.301	0.415	186626

**Table:** Percentage of data missingness across waves for the pooled data-set of countries with at least 10 years long time-spans.