

Social Capital and Regional  
Development:  
Which Types of Social Capital  
Influence What?

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# Overview

- Theory: The multidimensional concept of social capital – levels, sectors, types, functions...
- Operationalizing and measuring social capital
- Results from ongoing research in Sweden
- Some tentative conclusions/hypotheses on the question: Which types of SC are really relevant for urban/regional development?

# Social Capital...

- A prehistory, Bourdieu, Coleman, *Putnam*
- "Actors' norms, values, attitudes and the links and networks that these are distributed in"
- Putnam (1993): "...that facilitate coordination and cooperation for mutual benefit" – social capital is always good?
- Trust? A norm or value or something of its own?

# *Where* is the social capital?

- Putnam – a total focus on the civil/civic society. This view has dominated research
- What should we then call norms/values and networks in the rest of society???
- SC exist among all types of actors in all sectors and levels of society
- So, there is SC in the business sector, government, civil sector, and in subsectors, e.g. academia

# Types of social capital

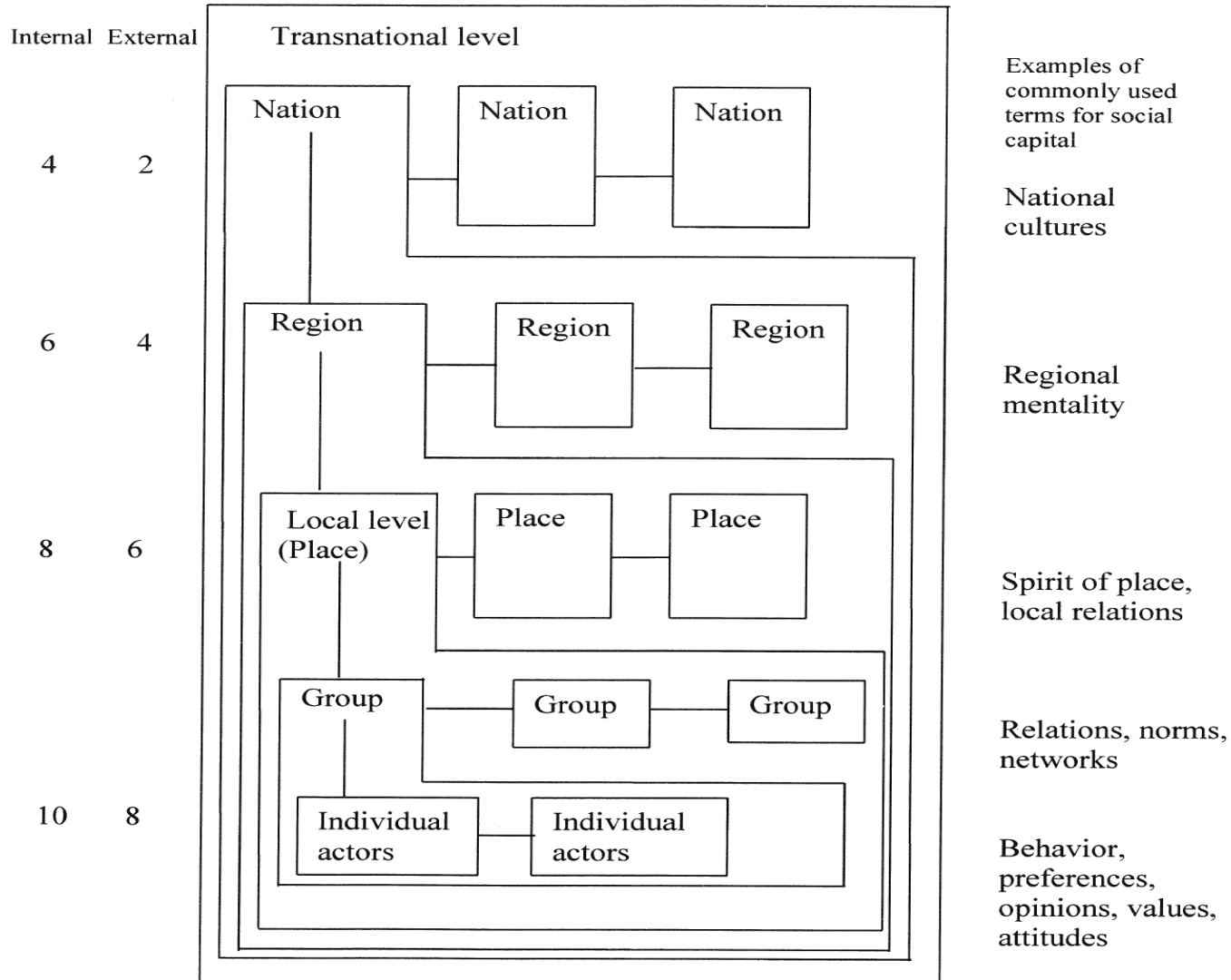
- Structural (networks), relational (individual links) and cognitive (norms/values) SC
- Bonding (internal), bridging (external) and linking (level-crossing) SC (Bonding-Bridging dichotomy problematic in practice)
- Sectorial SC: SC of civil society, business sector, government, third sector, and subsectors

# Positive or negative?

- Putnam (1993): SC entirely positive
- Putnam (2000): Might be a "dark side"
- Values/norms and the networks cannot always be "positive" – there are conflicting interest and there are "bad" actors!

# Social Capital at different levels

Schematic  
Degree of homogeneity



# Functions of social capital

- Economic: Reducing transaction costs, Creating good “working climate”, Facilitating reception, collecting and processing of information → innovation, Supporting entrepreneurship
- Social: Individuals’ social networks → “better life”
- Democratic: Creating/improving relations (trust) between citizens and government



# Cross-sectorial social capital?

- Theories on Innovation Systems (NIS, RIS, LIS), Triple Helix theory: cross-sectorial collaboration brings innovation (and growth)
- Can Social Capital contribute to innovation?
- But Social Capital is built up by networks of actors having something in common – how to build a network-crossing (sector-crossing) Social Capital?

# Why has social capital become increasingly important for innovation?

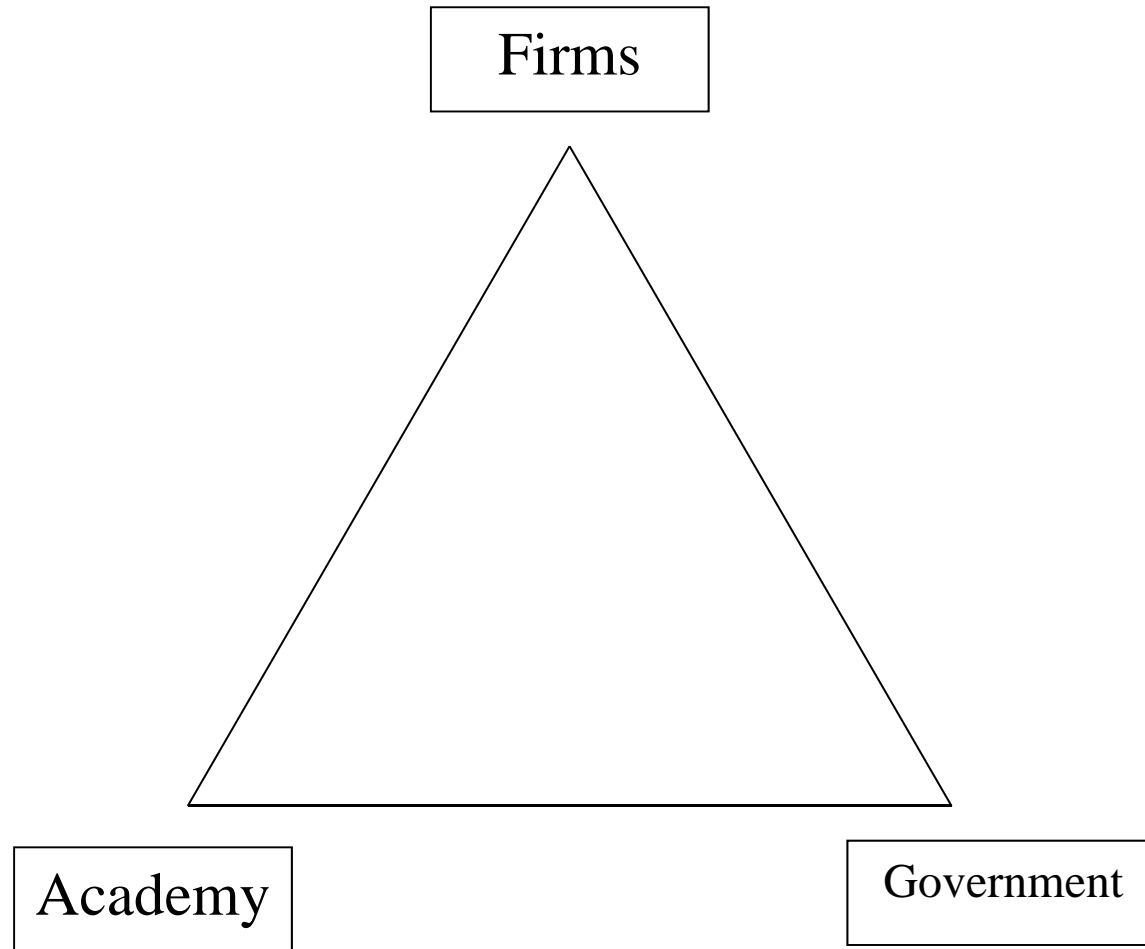
The emergence of the knowledge economy:

- From standardized to individually adapted products and activities
- From inflexible assembly lines to permanent change and innovation
- Increased demand on labor's knowledge and ability to *receive* and *transmit* knowledge/information and *transform* it to new knowledge

## Increased focus on knowledge acquisition, exchange and learning

- Social capital facilitates these processes:
- *Large, flexible networks* facilitate knowledge acquisition, exchange and production of new knowledge
- Common *norms & values*, (like trust & tolerance) make communication easier and faster, increase access to and amount of knowledge, and the speed of exchange → strengthened competitiveness

# Organizations of innovation policies



# Organizations' social capital

- Fundamentally different principles of exchange in different organization types:
  - ❑ Firms – market principle, profit
  - ❑ Government – redistribution of resources
  - ❑ Academy – reciprocity among peers
- Result: Social capital with very different networks and norms/values/attitudes

- On the one hand: The need of organizations in the three sectors to survive and develop creates an increasing number of internal and external links (This is what the innovation systems theories are saying)
- On the other: But then the sector-specific SC has to change and extend in order to facilitate exchange across sector borders

The traditional activity of the three types of organization, O, and the activities expected by modern innovation policies (o).

	<b>Type of organization</b>		
<b>Activity</b>	University	Government	Firm
Higher Education & Research	O	(o)	(o)
Public infrastructure and service	(o)	O	(o)
Product development and production for profit	(o)	(o)	O

# The different component parts of organizations' social capital

<p>Organization-<i>internal</i> social capital</p>	<p>The organization's <i>external</i> social capital</p>		
<p>Links/relations filled with attitudes, norms, traditions etc. that are expressed in the form of:</p> <ul style="list-style-type: none"> <li>- Internal "spirit"</li> <li>- Climate for cooperation</li> <li>- Methods for codifying knowledge, product development, conflict resolution, etc.</li> </ul>	<p>Activity-related</p>	<p>Spatial environment-related</p>	<p>Market-related</p>
	<p>Links/relations to suppliers, customers, clients, partners in cooperation and development</p>	<p>Links/relations to the local/regional environment, to organizations of the two other types, (non-activity-related links to) other organizations of the same type</p>	<p>General relations to the anonymous mass of (actual and potential) customers and clients, built through marketing, customer/client clubs &amp; programs, etc. and expressed in e.g. trademarks &amp; brands.</p>



Operationalizing and  
measuring social capital and  
an application on  
municipality level in Sweden

# Measures of social capital

## 1. Links and networks

- Micro level (firm level): individual actors' networks, contact frequency; measured by questionnaires, interviews or electronic registers
- Macro level (country, region): Number of associations, memberships, civic activities, election turnout, etc, mainly collected from official statistics (Other measures possible)

# Measures of social capital

## 2. Norms and values

- Macro level: Predominant measure: Share of population having "trust in other people", measured by international (and some national) surveys (WVS, EVS, ESS, etc)
- Other measures: tolerance...
- Micro level: Individuals' trust in each other; firm leaders' attitudes to growth, competitors, colleagues, collaborators, employees, etc; *Local public opinion's attitudes...*

# Measures in a sectorial perspective

- Surveys on general norms/values (trust) and associational activity – mainly civil society SC
- Where find measures of SC in government and the business sector? And where find measures of cross-sectorial SC?
  - Data from surveys made for other purposes
  - Own surveys
  - Proxies from other data or statistics

# A study of social capital's impact on entrepreneurship in Sweden

- Analyzes the impact of entrepreneurial social capital (ESC) in 1999 and 2001 on startups per capita in the Swedish municipalities 2002-08.
- Performed for all startups and with startups divided in six industry groups/sectors.
- Conducted for all municipalities and with the municipalities divided in urban and rural ones

# Westlund & Adam (2010)

- Meta-analysis of 65 studies of social capital's impact on economic performance (mainly measured by GDP/GRP)
- Mixed, contradictory results
- Conclusion: Trust and associational activity in civil society are not good measures of the SC that influences *economic growth*
- Instead, measures of networks, relations, trust and values connected to the *business sphere* should be developed

# Same argument when studying startups?

- Not necessarily! Opinions in local, civil society affects entrepreneurship: “...the reaction of the social environment against one who wishes to do something new...” (Schumpeter)
- But, local entrepreneurial traditions – local values among firms and actors of other sectors, and these values’ expressions in action – are of course also having an impact

# What is (Local) Entrepreneurial Social Capital (ESC)?

- Social networks and values/norms *having an impact on entrepreneurship*
- ESC exist in varying degree in all societal sectors
- Examples:
  1. Local public opinion on e-ship
  2. Particular actors' opinions on e-ship
  3. Local entrepreneurial traditions
  4. Local business networks



# Data for examples 1 and 2

- *Svenskt Näringslivs* (Swedish Confederation of Enterprise) surveys on local business climate.  
Q: “How is the public’s attitude to entrepreneurship?” and other questions on local actors’ attitudes

**Table 1. Correlations between various measures of entrepreneurial social capital (ESC) 1999/2001 and startups 2002-08 in Sweden's 290 municipalities.**

		Startups/ capita	Loc. gov. officials' attitudes	Loc. politicians' attitudes	Publics' attitudes	Business' own initiatives
Local government officials' attitudes	Pearson Correlation	<b>.173**</b>				
	Sig. (2- tailed)	<b>.003</b>				
Local politicians' attitudes	Pearson Correlation	<b>.201**</b>	<b>.952**</b>			
	Sig. (2- tailed)	<b>.001</b>	<b>.000</b>			
Publics' attitudes	Pearson Correlation	<b>.451**</b>	<b>.734**</b>	<b>.763**</b>		
	Sig. (2- tailed)	<b>.000</b>	<b>.000</b>	<b>.000</b>		
Business' own initiatives	Pearson Correlation	<b>.125*</b>	<b>.621**</b>	<b>.637**</b>	<b>.638**</b>	
	Sig. (2- tailed)	<b>.034</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	
Overall judgment of local business climate	Pearson Correlation	<b>.224**</b>	<b>.928**</b>	<b>.937**</b>	<b>.828**</b>	<b>.743**</b>
	Sig. (2- tailed)	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## Maybe an important interpretation:

- Summarizing judgment on business climate very strongly correlated to politicians' and officials' attitudes – existing firms assess business climate firsthand by how they perceive local politics and government
- Potential entrepreneurs are primarily affected by *public opinion of the civil society* (Civil society ESC)

## Example 3, Entrepreneurial traditions

- The share of firms having < 50 employees of the total number of firms
- A more *business related* measure of ESC

# Data – dependent variable

Startups 2002-08 at municipality level, in total and divided in six branch groups:

1. manufacturing
2. construction
3. trade, hotels and restaurants
4. transportation and communications
5. financial and business services (excl. real estate service)
6. education, health and medical service, other public and personal service

Relative startup frequencies 2000-08 (national average=100) in total and divided in the six branch groups, in urban and rural municipalities

	Urban	Rural
Total	127	87
Manufacturing	91	103
Construction	113	92
Trade, hotels and restaurants	110	94
Transportation and communications	121	93
Financial and business services	156	73
Education, health and other public and personal service	129	88

# Control variables

- Market's strength: Accessibility to purchasing power (Also a proxy for density in general and access to private & public service, infrastructure, public transportation)  
Measures *entrepreneurship by opportunity* +
- Human capital +
- Employment share of labor force. Measures *entrepreneurship by necessity* -

**Table 2. OLS-Model of variables' influence on startups, all municipalities and divided in urban and rural**

VARIABLES			
	ALL	METRO/CITIES	RURAL
Civil society ESC	101.6***	101.9**	94.91***
	(5.089)	(2.149)	(4.598)
In access. Purchasing power	19.03***	44.70***	4.189
	(3.055)	(3.006)	(0.579)
Share Univ. Educated	1344***	1234***	938.0***
	(9.081)	(4.946)	(4.084)
Business related ESC	5358***	4845***	4669***
	(9.249)	(3.477)	(7.299)
Employment share	-389.0***	-89.83	-408.6**
	(-2.598)	(-0.275)	(-2.348)
Constant	-5511***	-5830***	-4436***
	(-9.577)	(-4.661)	(-6.666)
Observations	287	92	195
R-squared	0.617	0.593	0.350
t-statistics in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			



# Examples of branch groups

- The two extrem cases:
- Manufacturing and Business services

# Manufacturing

VARIABLES	Manufacturing		
	ALL	Metro/city	Rural
Entrep. Social capital	5.516** (2.453)	-2.620 (4.337)	7.528** (3.022)
In access. Purchasing power	-1.367* (0.765)	-0.806 (1.360)	-0.594 (1.059)
Share Univ. Educated	-12.47 (18.20)	47.41** (22.82)	-76.39** (33.62)
Share small firms	376.4*** (71.20)	517.0*** (127.5)	357.6*** (93.65)
Employment share	-2.743 (18.40)	-0.269 (29.87)	-12.82 (25.47)
Constant	-321.2*** (70.73)	-453.2*** (114.4)	-312.4*** (97.40)
Observations	287	92	195
R-squared	0.133	0.219	0.137
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

# Business services

VARIABLES	ALL	Metro/city	Rural
Entrep. Social capital	45.03*** (9.283)	74.85*** (24.24)	29.31*** (7.531)
In access. Purchasing power	6.590** (2.897)	18.79** (7.602)	1.309 (2.639)
Share Univ. Educated	1,036*** (68.86)	1,066*** (127.5)	609.8*** (83.79)
Share small firms	1699*** (269.4)	1778** (712.3)	1221*** (233.4)
Employment share	-42.07 (69.62)	55.75 (166.9)	-34.82 (63.49)
Constant	-1953*** (267.6)	-2513*** (639.6)	-1278*** (242.8)
Observations	287	92	195
R-squared	0.731	0.726	0.372
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

# Summary of branch group analysis – all municipalities

- Striking differences between knowledge intense sectors and other sectors
- Civil society ESC (public opinion) significant for all sectors but construction
- Business related ESC (share of small firms) sig. for all sectors
- Other variables sig. for half the sectors

# Summary, urban and rural municipalities

- Civil ESC pos. sig. for all sectors in the rural group but only for two sectors in the city group – supports earlier results
- Business ESC (share of small firms) sig. for all sectors in rural group and four in the urban group
- Acc. to purchasing power mainly sig in urban areas
- Human capital sig for knowledge intense sectors in both groups

# Conclusions, Entrepreneurial social capital

- Both measured in the form of firms' perception of public opinion on entrepreneurship and in entrepreneurial traditions, *social capital has a significant impact*
- At least the former type of social capital can be influenced by policy

# Tentative conclusions – hypotheses for further research on local SC

- For *start-ups*, it is SC of the civil society and certain business-related SC (small business traditions) that is of importance
- For traditional "*in-firm*" *innovation* it is the internal SC of the firm that is important
- For *innovation systems*, it is cross-sectorial SC that is of importance
- For traditional *economic growth*, several SCs are important, foremost firms' internal and external (incl. intra-sectorial) social capitals