RESEARCH PAPERS

NETWORK INSTITUTIONAL THEORY

Research Paper no. 2/00

Social Capital and Systemic Competitiveness

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Introduction

International competitiveness is an academically strongly contested issue. Some regard it as a “dangerous obsession” (Krugman, 1996), others consider it a useful analytical concept, whereas yet another group takes it serious as an important political slogan (see the overview in Rapkin and Strand, 1995). Social capital is a concept which is being criticized for being too elastic; the term is seen as inadequate to explain the range of empirical situations demanded of it; it is seen to confuse sources with effects; it justifies contradictory policies; and understates negative effects (Woolcock, 1997, 159). This paper combines these two controversial concepts in an effort, which many would perceive as courageous rather than wise – and some even perhaps meaningless.

The various determinants of competitiveness and their relationships are analyzed by means of the concept ‘systemic competitiveness’. Some of the determinants of ‘systemic competitiveness’ originate at the societal meta-level. This paper uses the concept ‘social capital’ in a attempt to develop more concrete and operational ideas about the role of such meta-level factors for international competitiveness. The increasing discussion and application of social capital reflects a general tendency to focus at the connection between economic performance and the invisible social 'glue' which facilitates coherence and coordination of economic behavior. Theories of innovation systems and business systems represent prominent attempts to explain different growth rates and different economic structures by reference to such 'glue' in its typically nationally specific, path-dependent forms. Social capital can be seen as a more general concept covering the same features. Trust is one element of social capital. Norms and networks are others.

The paper aims at a conceptual clarification of both concepts as well as a discussion of the role of social capital in relation to competitiveness and the issue of its accumulation. The paper begins with an outline of some aspects of the debate on international competitiveness. The development of new general concepts such as structural and systemic competitiveness in contemporary political discourse will be stressed. This is related to the debate on national or local sources of competitive advantage. Then, a general framework for understanding the determinants of systemic competitiveness and the strategic action needed to increase it is presented. The following sections attempt to develop the framework further by relating the issue of international competitiveness to the literature on social capital. It is concluded with certain modifications that the concept is useful in analyses of economic exchange and development. Most recent contributions stress the public good character of social capital. This paper makes a distinction between its individual, 'club' and public character. Often, the existence and building of social capital is seen as implicitly positive. This paper distinguishes between positive and negative effects of social capital. In the last section, it is discussed if and how social capital can be accumulated by design. Special focus will be given to the role of the state in this context as this is a controversial and much discussed issue. In its present brief form the paper is a preliminary review of the literature and a first attempt to clarify the terms of the debate and to point at problems to be analyzed in future research.

Changing discourses on competitiveness in the era of globalization: from structural to systemic competitiveness

Whereas earlier the term competitiveness attracted only moderate attention in the major discourses on economic policy this has changed in recent decades. International competitiveness has moved into center stage in the dominant discourses on welfare and growth in both the OECD and the developing countries. Contemporary changes in economic and social policies are facilitated or mediated through changing discourses on international competitiveness. These changing discourses are, in turn, related to discourses on the role of new technology and the knowledge-intensive nature of economic growth. The changing discourses on international competitiveness are reflected in a shift of focus from comparative to competitive advantage, or from relative production costs, corrected for differences in productivity, to structural aspects of the production process in a wider sense. A concept of "structural competitiveness" has gained prominence. OECD defines this as "a way of expressing the fact that .... competitiveness of firms .... will also stem from the strength and efficiency of a national economy's productive infrastructure, its technical infrastructure, and other factors determining the 'externalities' which firms build on, that is the economic, social, and institutional framework and phenomena which can substantially stimulate or hamper both the productive and competitive thrust of domestic firms" (Chesnais, 1986, 86-7).

While the applied concepts vary in different contexts, it is obvious that (at least) in the North Western European countries, the prevalent discourses of economic and social policies are increasingly seen in the context of promoting such structural features of competitiveness (see, in general, Jessop, Nielsen and Torfing, 1999; for United Kingdom, Department of Trade and Industry, 1998; and for Denmark, The OECD Jobs Strategy, 1996). This is obviously also the case in the documents on competitiveness of international organizations such as OECD and EU. Often competitiveness and cohesion are combined, both in national and international contexts, especially in the EU.

In recent years, another concept has gained prominence. The term 'systemic competitiveness' is used to describe the broader context and the interaction between the various elements influencing competitiveness, including social cohesion. For instance, in a OECD publication termed “The new paradigm of systemic competitiveness: toward more integrated policies in Latin America” (Bradford Jr., 1997), new analytical and policy perspectives are called for. What is seen as making a new perspective needed is the fact that the vast majority of developing economies have failed to find a path of dynamic economic growth, even in some cases where there has been a significant effort of structural adjustment. The reforms are not transformed into beneficial societal effects because of missing links in the overall functioning of the economic and social system. The new paradigm “is based on the insight that it is the interaction within the national economy of its component systems – the financial, production, innovation and governance systems – that provide the greatest leverage on future growth and employment” (Bradford Jr., 1997, 41). Among the elements and relationships emphasized in this approach are the importance of participatory forms of governance and efforts to strengthen social integration, which imply an increased potential for mobilizing consensus and common frames of meaning in the modernization process. Also, the importance of improving the capacity of the state for subtle and differentiated roles in relation to the private sector is stressed.

National and local sources of sustained competitive advantage

The discursive shifts concerning international competitiveness are related to the process of globalization. The intensified global economic interaction puts a premium on certain structural and systemic assets of nations or localities. Super-globalization theorists such as Ohmae (1990) and Kobrin (1995) argue that different localized (national, regional or local) capabilities lose their meaning on the ground that, in particular, the transactions of transnational corporations are changing the world economy in the direction of a level playing field. However, this is contradicted by the evidence of stability of regional and local differences and structural divergences between national economies. Both the large variations in productivity and the persistence of such variations between countries and localities with apparently similar levels of physical and human capital seem to indicate the existence of factors crucial to competitiveness embedded in such national or local contexts.

Many different concepts are used in attempts to explain the sources of this sustained competitiveness advantage. 'National innovation systems' (e.g. Lundvall, 1992) and 'business systems' (Whitley, 1993) are well-known concepts/theories/ research programs with elaborate conceptual schemes, which can be used for this purpose. Bartholomew (1995, 39) list several approaches in addition to ‘national innovation systems’ which emphasize the importance of nation-specific factors in shaping technological development: technological accumulation theory (e.g. Pavitt, 1987); evolutionary theory of the multinational corporation (e.g. Kogut, 1995); the resource-based view of strategy (e.g. Porter, 1990); country patterns of organization (e.g. Westney, 1993); strategic trade theory (e.g. Krugman, 1986); and comparative industrial policy research (e.g. Ergas, 1987). Other prominent contributions stress other sources of sustained national or localized competitive advantage: 'social capability' (Abramowitz, 1986) and 'social infrastructure' (Hall and Jones, 1998).

The evidence of stability and reproduction of national, path-dependent varieties of capitalism is in accordance with institutional and evolutionary economics (Hodgson, 1998).

Of course, the nation state is not the only relevant space for reproduction of space-specific bases of sustained competitiveness. The literature on ‘clusters‘ and ‘industrial districts’ provides evidence of the importance of regional factors producing competitive advantage. Interesting recent evidence is presented in

Maskell et al (1998) on the specialization pattern in the prosperous small and open Nordic economies. These countries prosper in spite of the seemingly disadvantageous co-existence of low-tech and high-cost. They manage to retain their competitiveness through the existence of localized capabilities, which are difficult to imitate for outsiders, and which are partly based on intense interaction between a limited number of actors within a regional or national industrial system (Maskell et al, 1998, 3).

The various strands of the literature on national and local competitive advantages stress different institutional factors as sources of such advantages. In a certain sense, the national or localized economic interaction is seen in its cultural context in all contributions. However, the ‘cultural context’ which encompasses all the man-made aspects of the environment can be seen as consisting of both institutional and ideational aspects (Bartholomew, 1995, 43). The institutional aspects of culture include the systemic and structural components of social organization, such as educational and political systems, whereas the ideational aspects comprise the underlying values, attitudes and cognitive categories shared by a group of people. According to Bartholomew, the national innovation systems literature, as well as the other contributions stressing national-specific factors in shaping technological development, focuses exclusively on the institutional elements of socio-cultural systems and their relationship to technological trajectories. Even if this is not entirely correct (see Johnson, 1992), one can agree that “the integration of knowledge about deep-rooted ideational elements of society which are isomorphic to prevailing institutional arrangements would add what we believe to be a much needed anchor to the argument on the societal embeddedness and continuing diversity of national technological capabilities” (Bartholomew, 1995, 46).

Some contributions do include the role of the ideational aspects of culture, such as values, norms and shared mental modes. For instance, the literature of 'business systems' integrates the cognitive and normative role of institutions. Maskell et al (1998) identifies 'shared trust' (rather than 'built trust', see later) as the crucial source of the economically beneficial learning-by-interacting, which explains how competitiveness is sustained in the Nordic countries in spite of specialization in low-tech and high-cost production. Lodge and Vogel (1987) analyze the ideational aspects in the most direct and comprehensive way. They conclude that ideology is an effective tool for understanding differences in national competitiveness. Ideology is defined as "the collection of ideas that a community uses to make values explicit in some relevant contexts" (Lodge and Vogel, 1987, 2). Data on nine countries confirm the hypothesis that a "nation is successful when its ideology is coherent and adaptable, enabling it to define and attain its goals, and when there is the least distance between the prevailing ideology and the actual practice of the country's institutions" (ibid.).

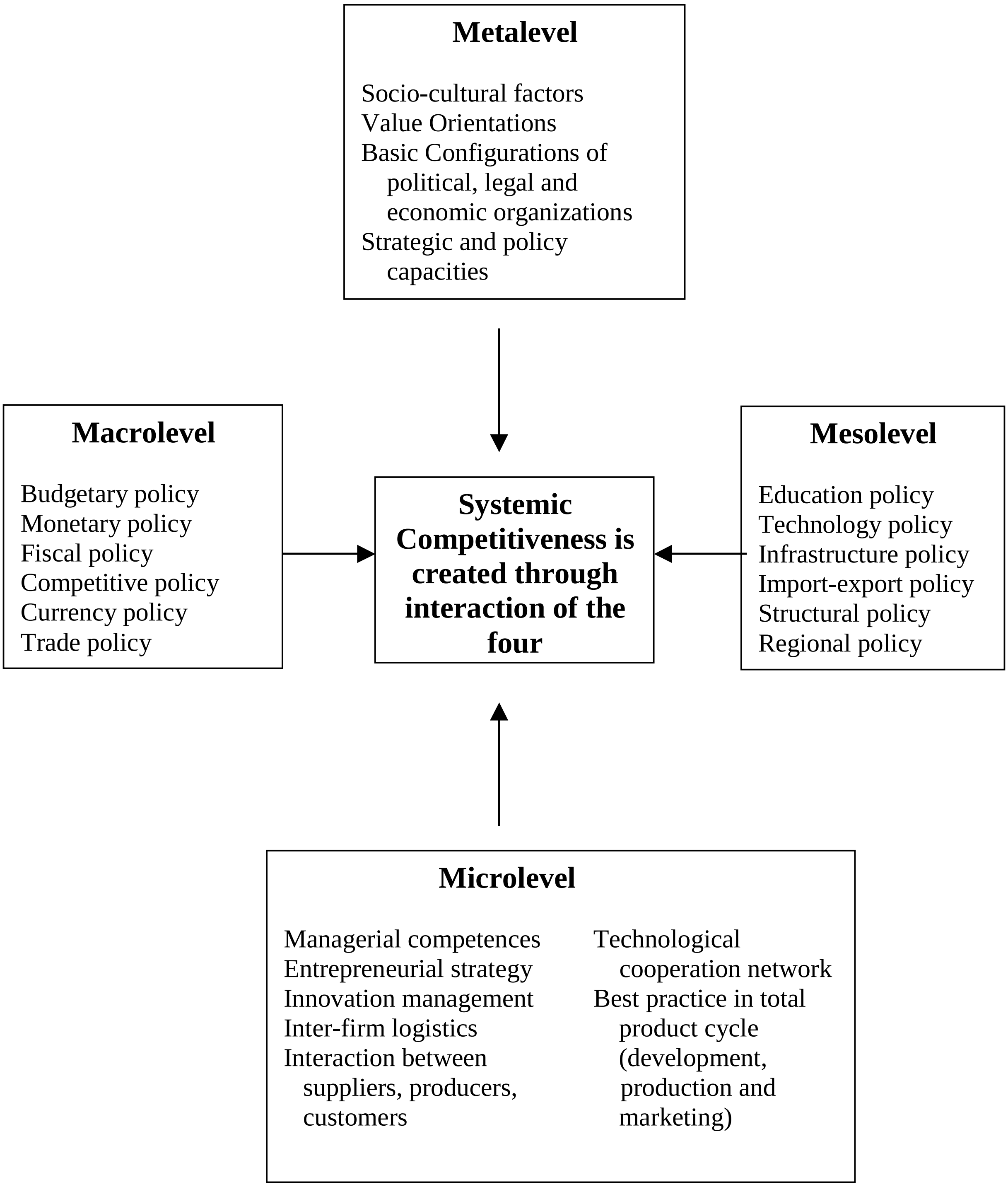
Systemic competitiveness: the general framework

The contemporary political and theoretical discourses attach increasing importance at the phenomenon of international competitiveness as well as multiply its perceived sources. The traditional focus on factor costs and demand as sources of competitiveness and on market shares as indicators of performance is supplemented with various structural as well as systemic features. Among those are not only such structural features which are discussed in the context of industrial and technology policy but also factors of a broader societal character: social integration, mobilization of consensus, trust, ideology, state capacities, etc. Furthermore, all these features are not seen in isolation but in the context of systemic interaction.

Messner (1995) has developed an integrative approach, which combines the various determinants of what he calls ‘systemic competitiveness’ (see figure 1). Competitiveness is seen as a result of the interaction of factors at the micro-, meso-, macro- and metalevels of society. The neoclassical approach emphasizes the factors at the microlevel and also attach some importance to the macrolevel, Evolutionary economists, on the other hand, have often stressed the importance of innovation and technology and the structural aspects of competitiveness which makes them focus mostly on factors at the mesolevel. However, the focus on learning processes has prompted some evolutionary economists also to include sources of competitiveness at the metalevel. Institutional economists as well as economic sociologists have traditionally shown more attention to the metalevel although in rather general and vague forms.

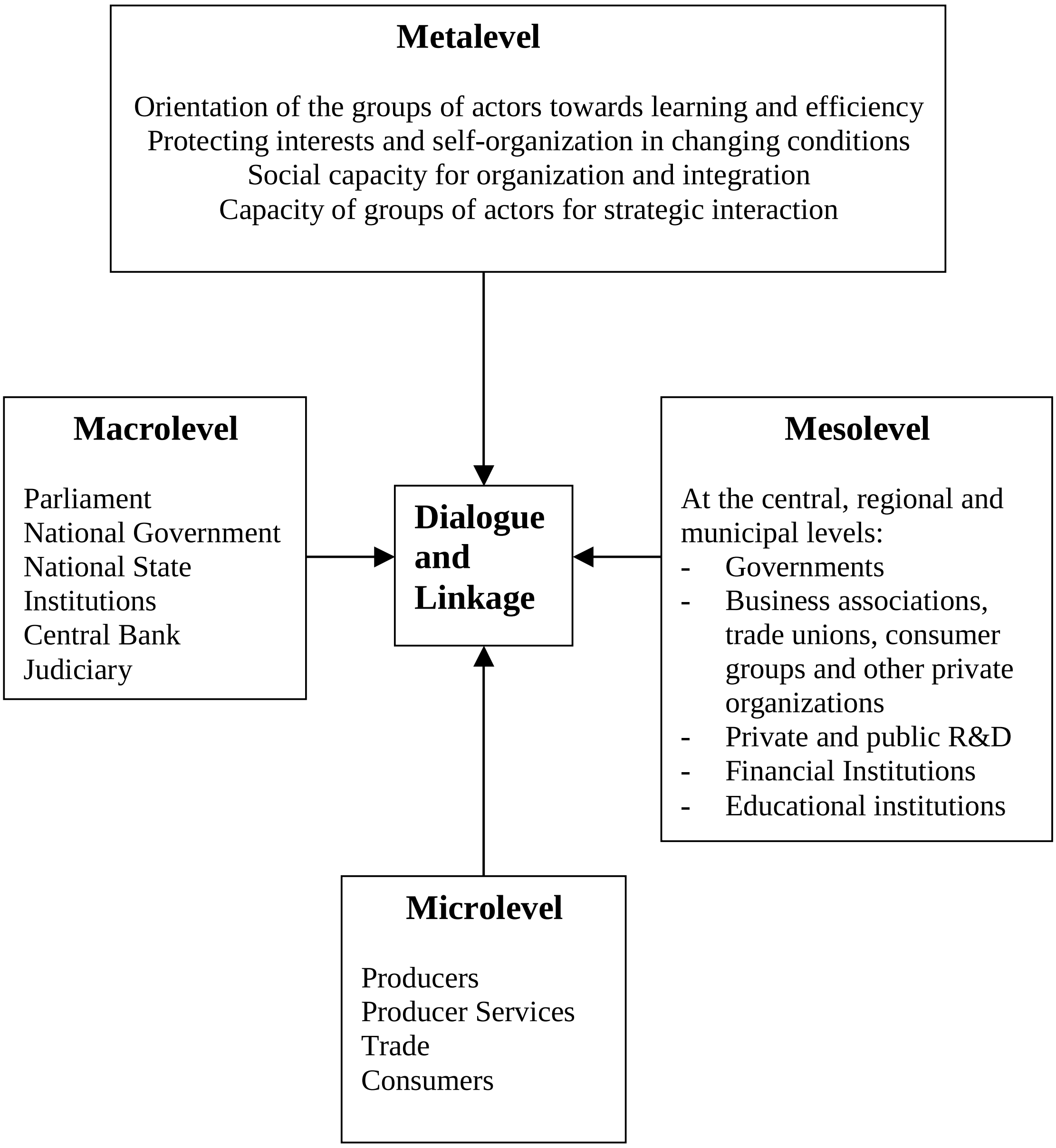
The original part of the approach of Messner is the addition of factors at the meta-level in the context of systemic competitiveness and the stress on interaction of factors at different levels. Messner considers the meta-societal capacity for (re)structuring as crucial for the optimization of the competitive potential at the three other levels (Messner, 1997, 33). This, in turn, is seen as dependent on the orientation of groups of actors towards learning and efficiency, the capacities of groups for strategic interaction, the capacity for organization and integration inherent in the economic and social system, and the framework for self-organization and protection of interests. Interaction between the four levels is seen to require dialogue and linkages between the actors at the different levels (see table 2). Messner outlines the basic features of the network society which is seen as the appropriate response to the need for dialogue, linkages of actions, interactive learning and capacity for (self-)organization.

Figure 1: Factors determining systemic competitiveness



Source: Messner (1997), 15

Figure 2: Determinants of systemic competitiveness: Strategic capacity of the groups of actors



Source: Messner (1997), 36

Messners's approach provides a general framework that is helpful in directing attention to the multitude of determinants of competitiveness and importance of the interaction of these elements. However, even if it provides new insight in the importance of factors at the societal metalevel and the importance of such elements in interaction with factors at other levels, it is still rather vague and non-operational in its outline of these factors as well as of the strategic capacities of actors in relation to these factors. The following sections attempt to develop this part of the framework by relating the issue of international competitiveness to the literature on social capital. First, however, some sections of conceptual clarification follow. It must be stressed that the remaining part of the paper focuses solely on the role of the factors at the metalevel for systemic competitiveness. The rationale for doing so is not that these factors are the most important. It may well be that they are of lesser importance than factors at the other level. However, it is based on the conviction that these factors have some importance and that they have until now been largely ignored in discourses of competitiveness as well as in policies for improving competitiveness.

Social capital: recent applications

Social capital is an economic asset that emanates from participation in social relations. Neoclassical economics assumes autonomous, atomistic agents interacting in anonymous market relations. Contrary to this undersocialized view of the individual, the concept of social capital presupposes a culturally and socially embedded individual (Granovetter, 1985). Participation in personal networks is assumed to have positive externalities because continuing social relations establish mutual trust and a potential for further cooperation.

The concept of social capital is increasingly used by economists, political scientists and sociologists in analyzing individual and collective effects of interaction. Today, the term "social capital" can be found in several articles on a variety of topics. Recent contributions can be classified in two groups. On the one hand, there are reviews of the literature (e.g. Portes, 1998; Woolcock, 1997; Dasgupta, 2000) and contributions of a more general, theoretical kind (e.g. Coleman, 1987, 1988; 1990; Chirinko, 1990; Schiff, 1992; Burt, 1992, 1993; Robison and Harrison, 1995; DiIulio, 1996). On the other hand, there are applications of the concept in empirical studies covering, for instance, regional development (e.g. Putnam, 1993 Leonardi, 1995), stratification (e.g. Loury, 1977; 1981; Valenzuela, 1994), corporate structure (Fukuyama, 1993, 1995), innovation (e.g. Lundvall, 1999), competitiveness (e.g. Maskell et al, 1998; Maskell, 1999) and the impact of social capital for developing countries (e.g. Evans, 1996; Fox, 1996; Woolcock, 1998; Dasgupta and Serageldin, 2000) as well as for the post-communist transforming economies (e.g. Petr, 1996; Burawoy, 1996).

Dasgupta and Serageldin (2000) is a new central contribution that includes overviews and theoretical discussion as well as case studies and statistical analysis of social capital in Third World contexts. The concept has become particularly popular in the context of development theory, practice and policy and the efforts are strongly promoted by the World Bank (see the website: http://www.worldbank.org/poverty/scapital/index.htm).

Whereas some sociologists and a few economists used the concept much earlier it was the political scientist, Robert Putnam, who popularized the concept of social capital through his influential book on differences between northern and southern Italy (Putnam, 1993) and his later application of the concept to the USA (Putnam, 1995 and 2000). Putnam defines social capital as " ... features of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated action" (Putnam, 1993, 167). Spontaneous, voluntary cooperation is seen as easier in a community that has inherited a substantial stock of social capital, in the form of social trust, norms of reciprocity and networks of civic engagement. The industrial success story of northern Italy is interpreted as a result of the inherited stock of social capital. The backwardness of southern Italy is explained by lack of social capital.

By means of the image of the lonely bowler, Putnam (1995 and 2000) presented a simple diagnosis of America´s problems as caused by declining social capital. This and the corresponding solution gained widespread appeal in the American political establishment. The idea even inspired a passage in Clinton´s State of the Union Address in 1995, and Putnam had conversation with the President on the issue. It can be interpreted as part of an overall communitarian ideology. Social capital can be seen as the 'Laffer curve' of the 1990s. Both ideas present simple diagnoses and ready solutions to what was/is perceived as the central problems of the day. However, as was the case with the Laffer curve, also the idea of social capital as presented by Putnam can be criticized for being both too simplistic and even plain wrong. Portes has revealed the logical flaws of Putnam´s argument. The argument is tautological. Social capital is seen simultaneously as a cause and an effect. It is seen as leading to various positive outcomes, and at the same time these outcomes are seen as a proof of the existence of social capital (Portes, 1998, 19-21).

Social capital: Is it a useful concept?

Portes (1998) is skeptical towards the stretching of the concept from an individual property to a feature of regions and countries. "The journey was fast, explaining major social outcomes by relablling them with a novel term and then employing the same term to formulate sweeping policy prescriptions" (ibid, 21). One might share the skepticism towards conceptual innovations, which represent mere relabeling, ignorance of limitations and easy explanations and solutions. It is difficult to disagree with Portes when he concludes, that "it seems preferable to approach these manifold processes as social facts to be studied in all their complexity, rather than as examples of a value. A more dispassionate stance will allow analysts to consider all the facets of the event in question and prevent turning the ensuing literature into an unmitigated celebration of community. Communitarian advocacy is a legitimate political stance; it is not social science" (Portes, 1998, 21-22).

However, this does not imply that the concept as such is meaningless when used cautiously and ripped from its fashionable, celebratory overtones. Portes, himself, apparently considers it useful as a micro level concept and he mentions with approval the recent contribution by Woolcock (1998) to apply the concept of social capital to the analysis of national and community development in Third World countries. The conceptual umbrella may be ambiguous, and the unqualified application of the concept may be both politically naive and academically fruitless but the concept may also direct research into more promising areas when qualified and supplemented in appropriate ways.

The concept may also be criticized for subsuming under the label of 'capital' a wide field of phenomena in a way that distorts and trivializes social understanding, as well for an inappropriate attachment of civic and social virtues to a concept, which in its original meaning is associated with qualities such as exploitation and alienation.

Whereas it has become widely accepted that the concept of capital can be used to cover individual knowledge and skills in the form of human capital, it is still controversial whether the phenomena covered by the concept social capital can meaningfully be understood as capital. Capital is usually identified with tangible, durable and alienable objects, such as buildings and machines whose value can be measured and one may argue that it is misleading to use this concept to describe phenomena of a totally different character (Arrow, 1999; Solow, 1999). Indeed, there are important differences between physical and social capital. (a) social capital does not wear out with use, but rather with disuse; (b) social capital is not easy to observe and measure; (c) social capital is hard to construct through external interventions, and (d) national and regional governmental institutions strongly affect the level and type of social capital available to individuals to pursue long-term developmental efforts (Ostrom, 1999). Sometimes, capital is equated with money, which is unfortunate, because money is rather the means, by which some forms of physical, human and social capital may be obtained. It can be argued that all forms of human-made capital (physical, human and social capital) share some common characteristics and that this makes it meaningful also to talk about social capital: they are created by spending time and effort in order to build assets today that increases income in the future. “People form capital when they withhold resources from present consumption and use them instead to augment future consumption for (production) possibilities” (Bates, 1990, 153). Often, human and social capital are created as a by-product of other activities rather than purposely but the character of building assets equals the purposely created physical capital, anyway.

Even so, there are good reasons to be skeptical towards the rather uncritical adoption of the new concept. The concept is often used “as a peg on which to hang all those ‘informal’ engagements we like, care for, and approve of” (Dasgupta, 2000, 326). Putnam’s identification of social capital with trust, norms and networks collapses elements (beliefs, behavioral patterns and interpersonal relations) which are incommensurable and accordingly have to be studied separately even if they are certainly related and overlapping. Dasgupta recognizes the heuristic appeal of the concept and believes that the concept is probably here to stay but he argues (similar to the argument of Portes above) “that rather than interpreting cooperating engagements in terms of the social capital they are thought to employ, we would be better employed continuing to study institutions ... understand their character, and identify measures that could improve them and their mix. Aggregate concepts can help us focus on matters of importance, but they can also prove to be a distraction” (Dasgupta, 2000, 327).

Even if I tend to agree with Dasgupta regarding the danger of using aggregate concepts which do not really add anything and also regarding what has the best academic prospects in the long run, I believe that at present the concept social capital is indeed functioning as a valuable addition to the economists tool box that shifts the focus to matters of extreme importance and prior neglect. In addition, its strong heuristic appeal may initiate the development of new data and new theoretical models. This is why I proceed in the following to relate to the concept even if confess that I believe that the concept is too aggregate to make meaningful a sentence like the following: “the rate of return on social capital has fallen from 10 percent a year to 6 percent a year since 1975” (Solow, 1999, 7)

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Social capital: origin, sources and effects

Let me first elaborate a bit on the content of the concept. The word 'capital' indicates that we are dealing with an asset which when used have economically beneficial effects. The word 'social' indicates that the asset springs from social relations. Social capital makes possible the achievement of ends that would otherwise not be attainable, or the achievement of ends at costs lower than in its absence. Social capital explains why cooperative behavior emerges more often than predicted by game theory. The phenomenon of social capital has most of the attributes of ‘capital’ but not all. The yields of the asset can be appropriated by individuals and/or communities. However, only a part of social capital consists of assets that can be appropriated, and stocks of capital cannot be traded on the open market. In addition, social capital has no opportunity costs. Finally, it is an open question whether accumulation of social capital can take place by design (investment) or is rather the indirect and often unintentional result of activities with other purposes.

The idea of social capital originates from Adam Smith, if not even earlier authors (Woolcock, 1998). The concept itself was first used in 1920, and an economist, Glen Loury, coined the concept in an article from 1977 that criticized the neoclassical approach to racial income inequality and its policy implications for ignoring the importance of the social context of the individuals (their 'social capital') which contradicted the assumption of a level playing field for competition based on skills (Loury, 1977; 1981). However, it was the sociologists Bourdieu (1985) and Coleman (1987; 1988; 1990) who developed the first systematic analysis of social capital. Bourdieu defined the concept as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition" (Bourdieu, 1985, 248). He treated the concept instrumentally, focusing on the benefits for individuals of participating in such networks and their investment strategies to construct sociability for this purpose. Coleman contributed a systematic, if partly confusing and even sometimes tautological (Portes, 1998, 5-6), analysis of the various dimensions, sources and effects of the social capital.

Likewise, many recent contributions are also characterized by an unclear separation of sources and effects of social capital. Portes (1998) presents a convincing analytical structure, which avoids such logical circularity. He distinguishes between consummatory and instrumental motivations as sources of social capital. The consummatory motivations represent the traditional sociological conception of human action that is sometimes criticized for being oversocialized. Two such sources of motivations are identified: feeling of obligation as a result of internalized norms through general socialization; and 'bounded solidarity' which refers to the altruistic dispositions of individuals in similar situations (rank and file members of military units, members of religious communities, and (earlier?) the industrial proletariat). The instrumental motivations are closer to the undersocialized view of human action in modern economics. Two types of instrumental motivations are identified. First, the accumulation of obligations from others according to the norm of reciprocity. The second type is termed ‘enforcable trust’ which refers to a situation where individuals are motivated to act in accordance with community norms because of the power of the community which punishes defectors in form of decreased status, honour or approval. The consummatory motivations originate from Durkheim (‘internalized norms’) and Marx (‘bounded solidarity’) respectively, whereas the instrumental motivations originate from Simmel (‘norms of reciprocity’) and Weber (‘enforceable trust’) (Woolcock, 1998).

The effects of social capital (which is defined as the "ability to secure benefits through membership in networks and other social structures") are divided into positive and negative consequences. The four negative consequences will be described in a later section. The three positive consequences comprise norm observance (social control), parental and kin support, and network-mediated benefits beyond family and kinship. Only the third type is relevant in this context. Recent contributions have documented a multitude of such benefits. According to Portes, in the sociological literature the most common application of this form of social capital is in the field of stratification. Granovetter (1974) and Burt (1992) both stress 'the strength of weak ties', that is social relations outside families and close-knit small communities, in mediating economic exchange such as finding jobs. Opposite, Lin et al (1981) stress the strength of strong ties, which seems to have strong explanatory power in the analysis of ethnic segregation of occupations and branches. Others have analyzed the importance of networks for educational and occupational performance (e.g. Stanton-Salazar and Dornbusch, 1995). In economics, it is typically in the field of inter- and intra-firm relations that the concept, or, more often, the idea of social capital has been used.

Elements of social capital: trust, networks and norms

Trust is an essential component of social capital. Virtually every market transaction requires an element of trust (Arrow, 1972, 357). More trust is required when the transaction is conducted over a period of time and the more complex the transaction is. Opportunism is the reverse side of trust. 'Contracting', 'monitoring' and third-party enforcement are formal measures by which opportunism, or distrust, can be counteracted. However, in many cases 'contracting' and 'monitoring' are either too costly or impossible, and third-party enforcement is difficult. In such cases, trust promotes cooperation. The greater the level of trust in a community, the greater is the level of cooperation.

Neoclassical economists treat trust within the paradigm of maximizing behavior in two different ways. One way, identified mostly with the work of Gary Becker, equates trust with altruism and treats it as another taste in the preference ordering subject to maximization. Another, more widespread argument explains trust as the cooperative outcome of repeated games. The neoclassical view has been criticized for ignoring the fact that trust must be treated in connection with the integrity of the self. "People like to maintain a good self-image. Such self-image cannot be reduced to the ordinary tastes for products and to pecuniary calculations" (Khalil, 1994, 344-345). The subordination of trust under the paradigm of constrained maximization also does not seem to offer good explanations of the process of transforming personal trust into social trust. The contribution of Putnam (1993) inspired by Coleman and others can be helpful in this respect.

In small, close-knit societies trust is personal. You trust a specific person based on a close familiarity with the individual. In larger, more complex settings, a more widespread and anonymous, or social form of trust is required. Social trust can be seen to arise from two related sources: norms of generalized reciprocity and networks of civic engagement. Norms of reciprocity are generalized when the exchange at any given time is unbalanced but involves a mutual expectation that the other person will repay you some time in the future. Communities in which norms of generalized reciprocity are strong can more efficiently restrain opportunism and resolve problems of collective action. The actions guided by generalized reciprocity can be seen as short-term altruistic and long-term self-interested. An effective norm of generalized reciprocity is likely to be associated with dense networks of social exchange. Reciprocity and networks are mutually reinforcing. The prevalence of a norm of generalized reciprocity makes networking more likely, and repeated exchanges in networks tend to promote the development of such a norm.

The building of reciprocal trust and networks may be economic advantageous investments. However, the building of trust through network formation must be distinguished from the situation where members of a community benefit from the existing stock of social capital in the collective form of generalized norms and institutions. The two situations imply quite different prospects concerning adaptation to changes and the risk of 'lock-in'. "When building trust, firms have to invest in the specific relationship, establishing tight limitation on the flexibility of its future actions. Not so with social capital where the absence of relation-specific sunk costs make it uncomplicated to relate to new firms if external or internal circumstances make it propitious, as long as any decision to discontinue old partnerships is carried out in a proper manner and in accordance with the community´s belief of good behavior. The risk of becoming a victim of a ‘lock-in’ is thus larger for firms relying on built trust in network-arrangements only, than for firms able to attain and utilize social capital through membership of a community" (Maskell, 1999, 4). The methodological individualism of mainstream economists implies a tendency to ignore, if not the effects, then certainly the processes and the requirements of formation of such collective forms of social capital.

Any society is characterized by the existence of networks of communication and exchange. They can be formal and informal, and horizontal or vertical. Horizontal networks bring together agents of equivalent status and power, whereas vertical networks link agents in asymmetric relations of hierarchy and dependence. Networks of civic engagement, such as neighborhood associations, sports clubs and cooperatives, represent intense horizontal interaction. The denser such networks in a community, the more likely it is that its citizens will cooperate for mutual benefit even in cases when cooperation is not rational from a game theoretic viewpoint. Networks of civic engagement have this powerful side-effect for a variety of reasons: they increase the potential costs of defectors; they foster robust norms of reciprocity; they facilitate communication and improve the flow of information about the trustworthiness of individuals; and they embody past success of collaboration, which can serve as a culturally-defined template for further collaboration (North, 1990, 37). Countries or regions with strong networks of civic engagement provide a historical repertoire of forms of collaboration that, having shown their worth in the past, are available to citizens for addressing new problems of collective action.

This interpretation is contrary to the widespread view that because the rationale of interest groups (no matter whether they are horizontal or vertical) is 'rent-seeking', then more and stronger interest groups means less growth (Olson, 1982). The evidence collected by Putnam (1993) as well as by several other authors (e.g. Fukuyama, 1995; Amin and Thomas, 1996; Maskell et al, 1998) seems to confirm the alternative idea that social capital, embodied in civic networks, may have beneficial effects on the performance of the polity and the economy.

Social capital: individual and collective forms

Social capital is often explicitly or implicitly seen as a public good. It is seen as an attribute of the social structure in which the person is embedded, Accordingly, it cannot be the private property of any of the persons who benefit from it (Putnam, 1993, 170). Others maintain that social capital has both an individual and a collective meaning (Portes, 1998; Lange von-Kulessa, 1997). On the one hand, it has private resource character if the positive externalities of embedded interaction can be internalized by the individual agents engaged in specific recurrent exchanges. Social capital takes the form of a collective good if repeated interactions between multiple agents and collective learning processes lead to common rules of behavior, traditions and norms. Also an intermediate form of social capital as 'club goods' can be identified.

The above summary of the analysis of the various sources and effects of social capital by Portes concentrated on the collective forms of social capital. The analyses of Bourdieu and Coleman focus on the role of social capital at the individual level and Portes believes that "the greatest theoretical promise lies at (that) level" (Portes, 1998, 21)." However, one can agree with the statement that "there is nothing intrinsically wrong with redefining it as a structural property of large aggregates. This conceptual departure requires, however, more care and theoretical refinement than that displayed so far" (Portes, 1998, 21).

Coleman identifies three forms of social capital: information channels; obligations and expectations; and social norms and effective sanctions (Coleman, 1988, 101 ff.). The third form is clearly a collective good whereas the first two forms have private good character even if the second form often also involves externalities that benefit the wider community.

The possibility of exchanging information through the channels of existing social relations is one very important form of private good. Agents can use their personal networks as a knowledge source. "Information is important in providing a basis for action. But acquisition of knowledge is costly ... One means by which information can be acquired is to use social relations that are maintained for other purposes" (Coleman, 1990, 310).

Social capital also takes the form of obligations and expectations, that is, the existence of a norm of reciprocity. The existence of such obligations and expectations facilitate exchange of services: if one helps the neighbor to build a house without being paid for the service, the neighbor is expected to have an obligation to reciprocate the help. The extent of the obligations someone holds determines the value of this person´s social capital. This is not a private good in its usual form because the obligation can only be internalized by the private agent if the help is reprocicated. The rights to transfer the good is thus restricted. In a formal sense, ongoing social relations can be categorized as incomplete contracts in which the parties' obligations are not fully specified (Lange-von Kulessa, 1997, 7). The incomplete character of social relations implies a restriction of property rights in social capital. However, this does not necessarily means that social capital is a pure public good as Coleman and Putnam tend to characterize it. When social relations are organized as closed systems to avoid the participation of outsiders and to restrict all benefits for members, one might call this a 'club good' rather than a collective good. Intermediate forms such as 'club goods' are not pure private goods either but they definitely diverge from the public good character of Coleman´s third form of social capital: 'social norms and effective sanctions'. The utility of the good can be internalized by the members of the network only, unlike the beneficial effects of social norms which are available to everyone.

In general, social capital as a private good consists of the following elements: (a) the size of the personal network, (b) the 'value' of the information exchanged in the network; (c) the extent of outstanding obligations, and (d) the level of trustworthiness of the participants of the network. The stock of the private forms of social capital can be increased or decreased by variations in these four elements.

Recent contributions to the literature focus on the common good character of social capital in the form of formal and informal institutions. Among informal institutions (social or moral) norms are often stressed as crucial as they stabilize mutual cooperation, help to establish trust among individuals, and make costly third-party enforcement unnecessary. Individuals achieve their aims less costly in a society with such norms of civic engagement and mutual aid. Every individual can use this form of social capital without relying on certain specific relations, and it is impossible to exclude anyone from the yields of this capital. This makes it different from the individual and 'club' forms of social capital mentioned above. The institutional, or more broadly civic foundation of this capital has prompted some authors to describe it as 'institutional capital' (Ostrom, 1990, 190), or 'civic capital' (Linford and Yandle (1997, 42).

Norms and other informal institutions that guide individual behavior have a more abstract character than the private forms of social capital. 'Local' knowledge about a certain level of trust of a network is more concrete than confidence in reciprocity as a generally applied rule of behavior. It may also be more uncertain unless the given informal institution is strongly embedded and backed by highly effective social sanctions. Where this is not the case, individuals act on norms and other informal institutions anyway. Dependent on the dynamics of cooperative versus non-cooperative behavior of individuals in such situations, highly path-dependent patterns of interaction will develop.

Private forms of social capital resulting from concrete social relations and collective or civic forms are interrelated in various ways. Collective learning processes as a result of cumulated individual learning constitute an illustrative example. If a rule of behavior by some individuals is experienced as non-suitable and therefore substituted by another one this might motivate other individuals to do likewise. If a sufficient number of individuals change their rule of behavior or norms it becomes a collective learning process. If a critical mass of individuals adopts the new rule it will change into a public norm and gets a supra-individual meaning (Lange-von Kulessa, 1997, 9).

In a recent contribution, Woolcock (1998) has elaborated the concept of social capital in a way that makes it more usable in analyses of collective forms of social capital. He distinguishes four elements of social capital. There are two elements at the microlevel (individuals and groups): integration (internal cohesion) and linkage (openness to the outer world); and also two elements at the macrolevel (the role of the state): synergy (strong societal roots) and autonomy (organizational integrity). However, the stock of social capital is dependent not only on the strength of each element but also on a balance between the dual elements at both the micro- and the macrolevel. A densely networked but closed community will soon experience problems of low capability for adaptation and innovation. An open community with weak networks may develop advanced enclaves but also pockets of backwardness, inequalities and confrontational politics. Low synergy and/or low autonomy may result either in anarchy, corruption or inefficient state intervention. The effects of social capital on economic performance are maximized in case of simultaneous strong integration and strong linkage as well as simultaneous high synergy and high autonomy.

Needless to say, it is hard, if at all possible, to quantify the elements of private forms of social capital, and even harder to do so with the collective forms. The concept seems to be more suited to qualitative analysis, which may be a major reason why most mainstream university economists have strong reservations against the application of the concept contrary to its increasing popularity in international organizations such as the World Bank. Maskell (1999) argues that relevant dimensions of social capital may not be formally specifiable at all. Social capital accumulates in a path dependent manner related to differences in economic structure and the challenges and opportunities in each specific context. Any endeavor to rigorously decompose social capital into context-free basic elements that can be measured and compared across communities runs the risk of ignoring that specific features of social capital which might be valuable or even crucial in one context can be useless in another (Maskell, 1999, 11).

Social capital and other forms of capital

Social capital and other forms of capital are often complementary (Coleman, 1990; Burt, 1993; Lundvall, 1999). The mutually reinforcing relationship between trust and learning Lazaric and Lorenz, 1998) indicate a complementary relation between social capital and human capital. Social capital might also foster accumulation of physical and financial capital. It is also easy to imagine situations where a substitutive relationship prevails. Many situations in everyday life such as carrying huge objects home, pushing ones car to make it start in a cold winter morning when in a hurry are situations which can be solved by investment of financial capital. However, using social relations ('helping-thy neighbor') instead of buying a market service or commodity often saves a lot of money and time (Lange-von Kulessa, 4).

Lundvall (1999) argues that there is a strong connection between social capital and what he terms intellectual capital ("society´s fund of applied knowledge"). Social capital is seen as a key input to the process of formation of intellectual capital, especially to its tacit dimension. The capability of learning, in particular, tacit knowledge, is high in societies with generalized trust and where citizens are used to collaborate in civic organizations and open to interaction with wider communities. The opposite situation characterizes societies with a focus on narrow individual or family interests and where experts are unwilling to cooperate with experts of different background. Lundvall also identifies direct links from social capital to natural capital. For instance, mobilization of people towards conservation and further development of natural capital is facilitated by a high stock of social capital.

Benign and malign effects on economic performance

Contrary to what may seem to be the case from the argument above, social norms and institutions can have both negative and positive externalities. Some norms and institutions facilitate coordination and decrease transaction costs. Others do not. Some norms have restrictive effects. Coleman argues that all norms have facilitating as well as restrictive effects. "Effective norms in an area can reduce innovativeness in that area, can constrain not only deviant actions that harm others but also deviant actions that can benefit everyone" (Coleman, 1990, 311). As an illustration he mentions a norm, which induced a boy who is good at football to direct his energy into this activity and in effect away from other activities. It is ambiguous whether a specific norm or institution has net positive or net negative externalities. It depends on the historical circumstances and the concrete institutional context. Also the externalities can shift from negative to positive, and vice versa, over time. Therefore, it is necessary to specify the context carefully in order to use the concept in concrete analyses, and, not the least, in political advisory activity.

Portes (1998, 15-18) distinguishes four types of negative social capital, which may serve as a healthy antidote to the widespread one-sided celebration of the positive consequences of social capital. Social capital can be negative in four respects. First, the same strong ties that bring benefits to members of a group also enable it to bar others from access. Second, group or community closure might actually prevent business success because of the negative effects of strong group norms, which might force the successful members to share their income and wealth with free-riding less successful members to an excessive degree. Third, group participation also implies demands for conformity and restrictions of individual freedom, which often forces the young and the members with most resources and potential to defect. Fourth, sometimes group solidarity is based on a common experience of adversity and opposition to mainstream society. This might result in downward leveling norms that keep the members of a down-trodden group in place and force the more ambitious to escape. The reason is that individual success stories tend to undermine group cohesion as this is grounded on the assumption of the impossibility of such outcomes.

Some authors distinguish between horizontal and vertical networks and associate beneficial effects only with horizontal networks. Vertical networks are seen as unable to sustain social trust and cooperation. The following evidence appear convincing: the performance of countries with strong kinship ties and only little civic engagement seems to be inferior to the performance of countries where such networks encompassing broader segments of the population prevail (Fukuyama, 1993); the strength of hierarchical civic organizations such as the Catholic Church and the mafia hampers both economic efficiency and the performance of the polity (Putnam, 1993); and the failure to develop mechanisms to promote collective action in the post-communist countries can be seen as a consequences of the absence of horizontal networks in the communist period (Petr, 1996).

It is often assumed that, in general, the existence of strong states with widespread activities have detrimental, or at best neutral, effects on social capital and consequently on economic performance, because of the dominance of vertical networks in such societies. A large welfare state, in particular, is seen as detrimental to social capital as it is perceived to crowd out private activities, which add up to the formation of social capital. However, the experience of small states in Western Europe does not appear to confirm this hypothesis. Katzenstein (1995) explains the economic success of small Western European countries despite their relative lack of natural resources as a result of the combination of openness, consensual policies, and strongly embedded mechanisms for adaptation to external change combined with domestic compensation of losers (see also Nielsen, 1991; Nielsen and Pedersen, 1991; Lundvall, 1999; Maskell et al, 1998; and Maskell, 1999). The explanation may be reinterpreted by means of Woolcock (1998): those countries represent a balanced combination of strong internal cohesion and openness to the outer world as well a balance of synergy and autonomy at the macro level, or expressed otherwise, a high stock of collective social capital. The vertically organized networks of the state in these countries do seem to be compatible with sustained social trust and cooperation, and a multitude of strong horizontal networks obviously thrive alongside strong vertical networks that function well, not the least because of the countervailing effect of the strong horizontal networks. The conclusion of an analysis of data from nineteen OECD countries about group membership and indicators of social trust point in the same direction: "... these indicators of social capital are, if anything, positively correlated with the size of the state" (Putnam, 1995, 671).

Measurement and empirical studies

Social capital is far from homogeneous and it is probably impossible to measure social capital directly by means of standards such as prices. Accordingly, other indirect forms of measurement must be applied. Typically, two forms of indicators have been used in empirical studies of social capital. First, the prevalence of social trust and norms of reciprocity have been studied by means of surveys where individuals are asked questions as to whether they generally trust other people and so on. Second, data about membership and activity of formal associations and informal networks are used as indicators of the stock of social capital.

Putnam (2000) includes data of both types. In a forthcoming article he has developed 13 different measures of social capital, which are combined, via factor analysis, into a single social capital index (Putnam, 2001). Similarly, Narayan and Pritchett (1997) and Fukuyama (see Dasgupta, 2000, 397) have sought to aggregate measures of network participation. They measure a community’s social capital as the weighted sum of the sizes of its various social networks. Fukuyama suggests that the weight of a network is an aggregate of its various characteristics such as its internal cohesion and the way it relates to outsiders, and a network can have a negative weight (for example, mafia groups) and accordingly contribute negatively to the community's stock of social capital.

All this has mainly heuristic value and the aggregates data are mere suggestions. The estimation of accounting prices, similar to those used in measurements of physical capital and human capital, that are needed to build reliable aggregate measures of social capital poses insurmountable problems. "Social capital is in a different category from these (i.e. physical and human capital) because it has its greatest impact on the economy precisely in those areas of transaction in which markets are missing" (Dasgupta, 2000, 397-8). The may be seen as a pessimistic conclusion. However, the usefulness of the concept of social capital is not dependent on it being measured in aggregate terms. It is useful insofar as it draws our attention to such institutions serving economic life that may otherwise go unnoticed. Empirical studies of social capital and its perceived effects are helpful in this respect even they do not use reliable accounting prices and aggregate indexes.

The most well known study and also the most comprehensive one is probably Putnam's documentation of the decreasing social capital in the United States (Putnam, 1995, 2000). Putnam supplements evidence about organizational activity from general social surveys and data about political participation with membership records of diverse civic organizations, survey data on reciprocity, honesty and trust, surveys of time budgets of average Americans, and other data on informal social capital. Remarkably, all indicators of social capital show almost exactly the same trend. After a steady rising trend from the beginning of the 20th Century, the trend was reversed from around 1960 and the decreasing trend has continued ever since.

The decreasing trend may be assumed to be universal not the least because the explanation for the development presented by Putnam does not appear to be particularly American although some of the explanatory factors, such as the effect of electronic entertainment in privatizing leisure time, are probably more prevalent in the American contexts as elsewhere. Putnam estimates that the effect of television etc. accounts for about 25 percent of the decline of social capital (Putnam, 2000, 283-4). Pressures of time and money, including the special pressures of two-career families, on the one side, and suburbanization, commuting and sprawl, on the other, each account for about 10 percent each. Similar developments are predominant elsewhere in the industrialized world, and the effect of the generational change – the slow replacement of a civic generation with their less involved post-war children and grandchildren – which is the most important cause accounting for about half of the overall decline, is hardly a specific American phenomena either.

However, another study applying the same methodology as Putnam shows no equivalent erosion of social capital in Britain (Hall, 1999). There is apparently no decrease in average membership levels or support for charitable endeavors, and neither does data on informal sociability show any signs of decline of social capital in Britain. In addition, there is no equivalent to the generational effect, which is apparently highly important in the US. Only levels of social trust show a similar decline. According to Hall three factors may explain why aggregate levels of social capital have been maintained in Britain despite countervailing pressures similar to those in the US. These are educational policy, changes in class structure associated with post-industrialism, and government policy, especially of the sort associated with the delivery of social services which in Britain have involved the voluntary sector to an extent which is striking in comparative terms. In general, this shows that there are important national variations in the development of the stock of social capital, and that crucial causal variables are capable of affecting the level of social capital enjoyed by a nation or a region.

Various effects of social capital on economic performance have been documented in several studies. In recent years, many case studies have shown the important role of social capital for development (see, for example, Evans, 1995). Fukuyama argues that social capital has important economic effects but not as much on growth rates as on industrial structures – that is, the number and importance of large versus small corporations in a national economy and the ways in which they react (Fukuyama, 1995). He shows how large-scale corporations and inter-firm networks beyond family and kin structures flourish in high-trust societies whereas small-scale family firms and/or large centralized government dominate low-trust societies.

Other studies have analyzed the overall economic payoff of social capital. A pioneering work by Knack and Keefer was based on indicators of trust and civic norms from the World Values Survey for a sample of 29 market economies (Knack and Kiefer, 1997). The study shows that trust and civic norms have benign effects on economic growth and prosperity, and that trust and civic norms are stronger in nations with more equal incomes, with institutions that restrain predatory actions by chief executives, and with better educated and ethnically homogeneous populations. However, whereas trust and civic norms are associated with economic performance in this study, membership in formal organizations is not, contrary to what is presumed by Putnam (Putnam, 2000, chapter 319-25).

A more recent cross-national study supports these claims (La Porta et al, 2000). Using similar measures of trust as Knack and Keefer the study concludes that the effect of trust on several performance indicators – not only GDP per capita, GDP growth and inflation, but also efficiency of the judiciary, corruption, bureaucratic quality, tax compliance, quality and adequacy of infrastructure - is both statistically significant and quantitatively large. The study supports Fukuyama’s argument that trust facilitates all large-scale activities, not only ‘non-predatory’ governments but also large corporations, and business and professional associations.

Social capital, globalization and competitiveness

Hitherto, the paper has presented general arguments in relation to the economic role of social capital. Some of these arguments need specification and some of them are more important than others when applied to the current context of globalization, rapid technological change and widespread demands for increased flexibility (Nielsen, 1991). In general, the challenges to nation states, local governments, firms, interest associations and local communities caused by the current grand-scale restructuring of global capitalism increases the importance of social capital in spite of the trend to transform factors of production into ubiquities, to homogenize consumption patterns and to remove barriers to optimization strategies at a global level. (e.g. Fukuyama, 1995; Lundvall, 1999). The demand for restructuring, adaptation and flexibility is increasingly being discussed in relation to the need to secure social cohesion. From the perspective of "the learning economy" the accumulation, reproduction and protection of valuable social capital is given a major role (Lundvall, 1999).

In a recent paper, Maskell (1999) summarizes three ways in which the economic role of social capital increases as globalization proceeds. "Social capital enhances the division of labor when limited by the costs of co-ordination; enables inter-firm innovation when market fails, and remains a source of valuable heterogeneity between communities when former localized inputs are converted into ubiquities as borders become porous" (Maskell, 1997, 3).

First, social capital reduces transaction costs. The potential scale, scope and number of international interactions increase with the process of removal of barriers for international transactions and the development of new communication technologies. The extent of the market expands but the division of labor is not only limited by the size of the market but also by the rising costs of co-ordination. This means that the rents on social capital increase whenever barriers for trade and transport and communication costs decrease.

Second, it is well-known that innovation activities are characterized by market failure and that this is counteracted by long-term user-producer and other inter-firm relations secured by relation-specific sunk-costs ('built trust'). This secures the exchange of knowledge in forms which might be unbalanced in the short run but can be assumed to be balanced and mutually beneficial in the long run. However, market failure can be overcome "easier, faster and cheaper through membership of a community with a large stock of social capital where no prior firm-specific investments are needed to obtain the same flows" (Maskell, 1999, 11). The second situation is characterized by ‘shared trust’ rather than ‘built trust. Whereas built trust requires prior investment and implies the risk of lock-in, this is not the case with shared trust.

Third, as some of the hitherto localized sources of competitive advantages are becoming ubiquities, the importance of social capital as a potential source of competitive advantage increases. This is so partly because of the disappearance of other sources but also because it cannot be bought or acquired and is impossible to imitate, replicate or substitute. International competitiveness is increasingly becoming associated with the major inputs, which remain immobile: labour and social capital.

Accumulation of social capital by design?

Most forms of social capital are resources whose supply increases rather than decreases through use and which becomes depleted if not used. This is so for trust as well as for social norms and networks. Therefore, the process of creation and destruction of social capital is marked by virtuous and vicious circles. For instance, the more people display trust in their relationship, the greater their mutual confidence. On the other hand, distrust leads to behavior, which confirms the validity of distrust itself.

The forces creating virtuous and vicious circles of accumulation/depletion of social capital are typically seen as indirect and unintentional. Like all other public goods, collective forms of social capital tend to be undervalued and undersupplied by private agents (Putnam, 1993, 170). Unlike other forms of capital, social capital must often be produced as a by-product of other social activities. In the case of collective forms of social capital this appears to be even more so. In this respect, most would agree that norms and other informal institutions that diffuse by collective learning processes 'are the results of human action but not of human design' (Hayek, 1967, 96).

However, is social capital entirely the unintended consequence of interaction and ungovernable collective learning processes? Is the accumulation of social capital a process that is not susceptible to social engineering? Or, is it possible to build social capital by design and to prevent its depletion by deliberate intervention? Is social capital an investment good? Can individuals invest in social capital as a private resource? Is it at all possible for the state to invest in collective social capital? And how?

It is hardly controversial that it is possible to invest in social capital as a private resource. A lot of daily activities of business executives cannot be explained in other ways. The habit of gift giving is an important way of starting a relationship by signaling ones own interest in a common relation (Camerer, 1988; Carrier, 1995). The gift can take different forms: a commodity, a service, a piece of information, or an emotional present. The simple act of interacting, whatever its form, can also be a deliberate step in order to built a relationship. The consequent building of social capital is indirect and not guaranteed but not necessarily unintended.

It is more controversial to claim that collective social capital can be built by deliberate efforts by the state. Not only because collective forms of social capital are much more loosely connected to individual or group behavior than individual (and 'club') forms, but also because state activities are often perceived as being at best neutral (out-crowding equivalent private activities) and often having directly negative effects. The following section reviews some of the contemporary ideas on this issue and a few preliminary supplementary suggestions.

At an abstract level, it can be concluded that efforts to accumulate social capital by design should focus on enlarging each of the elements of the individual the collective forms of social capital as summarized above. The positive consequences must be strengthened and the negative consequences counteracted. It is dependent on the context whether specific forms are positive or negative and their importance. Accordingly, intervention must be informed by attention to the context-specific features and be sensitive to ongoing changes which might change the effect of the various measures and policies. In addition, policies should be aware of strengthening the capability for change and adaptation of structures. Finally, referring to Woolcock, it can be concluded that the stock of the different kinds of social capital must be accumulated in a balanced way.

At a more concrete level, many analyses and proposals have been made in relation to development of the Third World. For instance, in a summary of the main findings of a thematic issue of World Development on the possibility of state-society synergy in the Third World, Evans (1996) concludes such synergy is constructible, even in the more adverse circumstances typical of Third World countries. It is secured through combinations of complementarities with embeddedness in the state-society relation. Synergy is most easily fostered in societies with egalitarian social structures and robust, coherent state bureaucracies. The strategies of social capital investment must focus on joint state-society projects, measures to decrease inequality in opportunities and living standards, and efforts to improve accountability and professionalism as well as non-partisanship of bureaucracies. Knack and Kiefer (1997) reaches similar conclusions. The policy conclusions of their study stress the importance of measures to counteract wide inequalities of income, building and maintenance of a strong legal framework and a non-corrupt bureaucracy and strengthening education.

Lundvall presents a set of ideas inspired by the contribution of Woolcock (1998). He stresses the importance of investment in the education and training system. "On the one hand, it gives students general and specific skills and most importantly the capability to learn in their future active life. On the other hand, it also installs in people the basis for building social capital. It socializes students to become more or less open to an interaction with others" (Lundvall, 1999, 10). He also agues that measures to make the legal system and the public administration more impartial, more predictable and more transparent will increase social capital. A more innovative proposal concerns the strengthening of regional networks working together to preserve and create natural capital.

Other proposals concern strengthening of collective entities providing different elements of social capital, such as groups of civic engagement and churches. In this respect, the facilitating measures of the state are crucial, not the least financial support. A few illustrations from my own country follow. In Denmark, sports clubs and other voluntary organizations are autonomous but heavily subsidized by the state. Non-profit private schools are likewise autonomous but almost totally publicly financed. This is at least part of the reason for a thriving civil society.

The state can also stimulate both civic engagement and inter-firm relations by creating frameworks for interaction. In Denmark, the procedures for local planning gave an impetus to local community groups. Perhaps more interesting in this context is the network program initiated by the Danish Ministry of Industry in the late 1980s. The program was intended to compensate for the perceived deficiencies of having an industrial structure dominated by SMEs by means of measures which simulated the advantages of large firms in terms of financial, innovative and management capability. It offered support to firms willing to cooperate in these fields with the aim of creating forms of cooperation that would be sustained also after the end of the period of financial support. The program seems to have had that effect (Amin and Thomas, 1996).

Other studies seem to confirm that efforts to create frameworks for interaction might have powerful effects on the formation of social capital. A case study of the restructuring of the foundry industry in Pennsylvania provides a good example (Sabel, 1993). In this case the state government was capable of transforming the confrontational 'zero-sum game' relations between business and unions in this stagnant 'rust-belt' region into a cooperative 'plus-sum game' based on the development of shared ideas of the future prospects of the region, training opportunities, joint management of new research projects and industrial policy schemes.

The general lesson is that it is possible to transform (perceived) interests through the development of new ideas (shared conceptions of the future); and that ideas can change as a result of new forms of interaction (creating frameworks for cooperation on, at first, minor issues). In general terms: social capital can be created by deliberate measures to influence behavior through the line of causation from interaction through ideas and interests to performance. Sometimes the causation is less clear and even opposite (Campbell, 1997) but the data seems to vindicate the possibility of accumulation of social capital through such mechanisms guided by deep knowledge of the context-specific features.

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