

“Thought Paper”: The Role of Social Capital in Frontier Capital Markets**#8: “Conclusions and a New Start”****Jana Shakarian and Daniel Evans**

In previous papers we presented our research that analyzed the role individual social capital might play in economic development. Our data on three different frontier markets illustrates the current challenges both in terms of data collection process as well as analyzing the collected data. Researchers of social capital access have to deal with multiple sources of spherical aberration in the data collection process. It is not only the aforementioned difficulties of measuring social capital alone that influence data collection process, data, and results. The changing cultural environment in cross-cultural studies bears on the analysis as well as the instruments of any research. Cultural differences in the definition not only of the ties, but also of the items themselves as the terms used can encounter alienation from the original through translations and through use in the specific cultural setting (Van der Gaag & Snijders 2004:33). Finally, the artificiality of the interview situation itself can cause aberrations the real representation of the data. The interview situation is extracted from everyday life and misses real-life incentives, but expects spontaneous answers to thought-provoking questions that are unlikely to have been previously considered by the respondents. All these phenomena are thought to lead to an underestimation of available social resources (Van der Gaag & Snijders 2004:27, Lin 2001:43).

In addition to external factors that appear to be normal to the interviewee, but not necessarily to the researcher involved, a range of behavioral and psychological patterns influence the respondents' answers-possibly universally. More or less conscious forms of selective perception lead to over- and underestimation of available social capital. Studies on the phenomenon of social desirability in its different aspects have shown that the interviewee more or less consciously follows an agenda of self-presentation: the

interest to appear autonomous and the tendency to avoid an impression of being “too” dependent on others (Van der Gaag & Snijders 2004:27). Further, respondents tend to forget about social contacts they interact with only infrequently (ibid.) or that occupy more distant position in the network.

This is counteracted by the tendency of interviewees to emphasize closer, more often, more regular (long-term bias) or more recent interactions with other social contacts (Marsden 2005:21f). But even temporally and spatially close partners tend to be forgotten sources of social capital (Van der Gaag & Snijders 2004:27). Another example for a possible source of overestimation is the urge of respondents to show how well-versed in the works and ways of society they are (Van der Gaag & Snijders 2004:27) and an “ego bias” (Marsden 2005:21) leads many respondents to ascribe themselves more network central locations than is observed in the overall structure established from the reports of all participants (ibid.).

Objectives of a Future Study

In our future research on social capital’s impact on economic development, we aim to address the access and use of social resources by the individual, as well as the influence of the surrounding social structure on access to these social resources. An individual acts within a social network whose structure, and the individual’s relative position therein, affects the supply and provision of social resources. Access to social capital thus depends on a number of a social network’s structural positions (or social roles of ego and alter) such as gender, marital status, education level, occupation and others. It is these roles that Lin et al. (2001) suspect to be responsible for differences in social capital return. Unequal economic returns resulting from differences in social capital access might depend on acquired characteristics of an individual’s position and these might also differ from region to region. For example, in many societies differences in the access to social resources are yielded on the base of gender. Different types of

social capital maybe - to a different degree depending on society- contingent on age or race, class or religion.

Still other circumstances that create variances in the depth and width of accessible social capital are migration and geographical location (Palloni et al. 2001, Espinosa & Massey 1997, Portes 1999 and others) or occupational status among many other factors. With a myriad of environmental factors next to biographical and demographic characteristics, the process of how an individual mobilizes and utilizes the social resources within his realm has been subject of multiple research projects (see Lin 1982b, Marsden & Hurlbert 1988, DeGraaf & Flap 1988, Flap & DeGraaf 1988, Erickson 1996 and others). The results demonstrate that, for the regions visited in particular, gender and occupational status influence the returns of social capital.

Thus, measuring access to social capital in a way that will allow us to break down the collected data along the lines of gender and occupational status will delineate the interception of social structure and individual action (see Lin et al. 2001: 63). These two elemental factors of individual economic development will be complemented with geographical sensitivity in that we keep our tool flexible enough to account for local particularities (such as allowing for characteristics of the local economy and local perceptions of social prestige and so on). This might open up the opportunity for policymakers and project leaders to not only identify sources of social capital within the network, but to also provide the possibility of addressing specific actors therein in order to utilize social capital to further economic development.

An abundance of findings of network scholars (such as Kempe, Kleinberg, Tardos 2003, Goyal & Joshi 2004, Galeotti & Goyal 2007, Goyal, Bonchi, Lakshmanan 2010, Bentley, Ormerod, Batty 2011, and Bakshy, Hofman, Mason, Watts 2011 among many others) determining the influence or information spreading within a social network could support the latter approach. Practitioners could be enabled to identify and address the “right people” in a network in order to structure, place, or distribute social resources

most effectively, but at minimized costs. In the next section we will review two models and consider their applicability to our objectives.

Resource Generator Revisited

Aside from the small number of respondents and other shortcomings of the data collection as described in Thought Paper #5 (see the Publications Page at <http://www.netscience.usma.edu>), we think that for our purpose the Resource Generator alone might also not be the optimal tool. Designed to overcome the shortcomings of name (loss of weak ties) and position generator (loss of specific information about social resources available in the network) the Resource Generator questions whether the interviewee knows anyone who could give access to each of a list of social items.

Unlike its two predecessor techniques, the Resource Generator does not enumerate specific social ties (Marsden 2005:21), which prevents the identification of influential nodes. The Resource Generator also only counts the strongest tie through which an item is accessed (Van der Gaag & Snijders 2004:31). This methodological flaw results in the lack of information on the possible depth of any given social resource and is prone to distort tie-availability data by counting possible outliers only. For example, assume there is only one family member and thirty friends providing a given social resource, the family member will be recorded and the friends will not. The main source of this social resource is lost.

The underlying thought of limiting the count of potential social support assumes that numerous social contacts providing one specific social resource are redundant. It could be argued that one person providing the social resource suffices and that the individual preferably turns to the strongest tie for support. Neither the former is true for all social resources, nor the latter for all possible situations and all individuals, rendering these assumptions an unsafe choice. They merely limit data load, but at a high cost.

Influential nodes could be addressed in policies and development programs. Hence, it would be beneficial to note a person's location in a social network, because it is the position of a node that is crucial for the spectrum of diverse social resources and their respective amount available (Erickson 2004:5). As Van der Gaag and Snijders suggest (2004:7, 33), the Resource Generator's list of items is not designed to explore culture-specific popular or important social capital and thus remains very static (Erickson 2004:5).

The popularity of the items selected for use in the Resource Generator has only rarely been tested (Van der Gaag & Snijders 2004:24) and most certainly has not been proven to hold up in cross-cultural research. The list of items of the Resource Generator is not only fixed, but also limited (Erickson 2004:5), which further disqualifies this instrument in cross-cultural research as this characteristic renders it less flexible to regional differences. The Position Generator in contrast addresses the possibility to record diverging sets of social resources inherent in the occupations and positions comparable across regions.

The Resource Generator is a useful tool in that it compiles a list of actual social resources which is compact enough to administer economically (Van der Gaag 2004:7). To accommodate for cultural differences the original list of items representing 'general' (ibid.) social capital should undergo a phase that is both experimental and testing. The resulting set of items should reflect social resources that are popular in the given economy and supportive of economic development. The former entails items that are considered more or less rare symbols of success, the latter ways and means of how to obtain them. The original item list must be general enough to accommodate these cultural specifics in order to still allow analytical comparisons among different ethnic economies. In order to keep it reasonably short and still address different relevant aspects, we decided to focus on items related to economic development. Of interest are social resources maintaining, fueling or hindering the socio-economic situation of the individual in a given setting. The former two categories loosely correspond with Lin's

instrumental and expressive actions (Lin 2001), while the latter is meant to account for the effects of social capital that damage the economic situation or hinder the economic improvement of the individual.

The Position Generator

The Position Generator as pioneered by Lin and colleagues entails a list of structural positions relevant in the region of interest such as authorities and occupations (Lin et al. 2001:63). The items of the list relating to occupations are selected according to the size of their population (popularity) (ibid.) or might be taken from a recent census, if available (Erickson 2004:5). One advantage of the latter is that the terms used in the census generally are colloquial and thus allow researchers to gather enough data as more people will know people in respective positions (ibid.). The census data can also help find comparable positions in communities of different cultures in order to enhance cross-cultural comparison (ibid.). The items on the list are ordered according to their position in the hierarchy of the respective society or the prestige locals assign to them. Interviewers ask respondents whether they know anyone in each of these positions and if so, in what relation. If the interviewee does not know anyone in a specific position directly, he or she might have indirect access, i.e. might know someone who knows someone who has access (Lin et al. 2001:63).

Thus, the Position Generator does document different strengths of ties and is able to rebuild ego's social network from the collected data. Lin and his colleagues then constructed measures to determine the range, heterogeneity, and upper "reachability" of the individual's accessible social resources (ibid.). The range of accessible positions may refer to the distance between the upper most and the lowest hierarchical position available to the individual (ibid.) or in a more egalitarian social network the mere sum of social resources. While the heterogeneity measure seeks to establish the spectrum of different social resources available to the individual (this measure is applicable in hierarchical as well as more homogenous structures). With the upper "reachability", Lin

et al. (2001:63ff) finally determine the highest position accessible to the individual – depending on the social environment in terms of prestige, status, rank or else.

All these measures are based on the results of earlier findings where rare and most valuable resources are found to reside with higher positions in a social hierarchy and a wide spectrum of accessible social resources was found to correlate with the individual's success and high number of social contacts and possibly influence within the social network (aside other of the individual's characteristics) (Erickson 2004:2). And lastly, besides being valuable by itself, earlier research found that a diverse network supports economic mobility (ibid.). Network variety thus was found to be greater for people with higher education levels, with better jobs, and those more engaged in voluntary work (ibid.). Among the consequences of network diversity, are better and higher level jobs due to the increased number of social contacts which can aid in job search, application and in being potentially contacts of interest to the new employer (ibid.). Having input from many social contacts is greatly beneficial for the individual's overall knowledge and is thought to promote tolerance and cultural diversity (ibid.).

Aside from the ability to reconstruct the individual's relationships to his alters in each position in order to assess the strength of each tie and identify each person's position in the network (especially interesting are bridges and structural holes), the Position Generator is free of preconceived content in the form of desirable social resources (Lin et al. 2001:63ff). The tool thus is inherently flexible enough for cross-cultural research hinging on positions that in one form or the other are found in many societies. The usage of the Position Generator in research by Lin and others indeed yielded similar findings in different political economies (ibid.). Lastly, the Position Generator links the micro-level social capital research of individual access to social resources with the meso-level social structures ego acts in (ibid.).

The Tool

Aside from environmental factors such as forms of government, security of life, and business and related laws and rights, presence or absence of corruption (see Hjerrpe 1998:13), availability and condition of physical and information infrastructure, mechanisms of conflict resolution (Colletta & Cullen 2002), we contest that social capital impacts the economic situation of the individual. It is crucial to elaborate to which degree this is true in any given (ethnic) economy: are there cultural differences and if so, are they corresponding with certain environmental factors? Given the plethora of sources of inaccuracy in any given state of a survey as mentioned earlier, designing a tool that minimizes this noise is a tough challenge. For example, a problem with the method of asking for (potential) access to resources is the uncertainty with which the alter would actually be willing or able to provide the social resources ascribed to him by the interviewed subject.

No study has yet been conducted that asks respondents about specific social resources they could provide and to whom. The main reason for the lack of this approach is probably due to the greater effort in data collection needed to gain a respectable data collection. While interviewing about possible access to social capital, researchers receive additional information pointing to a multitude of social contacts. Asking one person whom he or she would provide a specific resource returns only a single row of data. Hence, the provision approach requires a much bigger sample population.

Equally rich in effort would be an approach that asks for social capital provided in the past. This approach would address questions regarding social contacts that researchers have found tend to be forgotten, like partners and more distant social contacts (Van der Gaag & Snijders 2004:27). Similarly helpful in throwing light on this aspect and less voluminous in effort, would be a study design that asks for social resources received in the past. However, possible limitations are psychological features

like emphasizing most recent interactions over past ones. As this approach would require accounts of real events, interviewees might also be hesitant to be truthful, be it due to social resource received or be it due to the person who provided the social resource. Where hypothetical access or provision of social capital leaves space for generous overestimation, accounts of actual access or provision may be clouded by tact- and face-saving measures.

The future design of our social capital research will necessitate the identification of driver nodes, as these would present points of influence and leverage for development-oriented actors in the field. Based on our experience and past research, we think that pairing the Resource Generator with the Position Generator might be a better tool. Both approaches share a set of valuable features: both are similarly structured instruments, economical to administer and of thorough internal validity (Van der Gaag & Snijders 2004:7). The Resource Generator by itself – as mentioned before – is not a good fundamental measure of the social capital in a network: it is a person's location in the network that is the crucial indicator of the resources the person has access to or can offer (Erickson 2004:5). And it is a person's profession and related characteristics that give them the possibility to supply specific resources. Occupations were found to correlate with the variety of potential resources in a given network (ibid.).

Van der Gaag and Snijders (2004:32) critique themselves and suggest adding two more response categories in order to clarify the definition of acquaintances and help cover the entire spectrum of social resources available to the individual: whether a social resource is only accessible through a professional or not accessible at all neither through network members nor through professionals. The Position Generator covers indirect links and an option for "professional access only" can be added without challenging the economy of the tool's administration. This addition would aid our study in obtaining information on possible venues available to the individual in pursuance of economic improvement as well as on basic environmental influence such as whether

obtaining a loan from a bank is generally difficult (which would render this item a rare resource).

Fitness for cross-cultural research is provided for by the Position Generator's utilization of prior research on individual social capital as aspect of economic development using the Position Generator, census data (see Erickson 2004:12), and research on local social and power structures (e.g. as done by Human Terrain Teams in Afghanistan). The chosen authority positions and occupations should cover a wide range of prestige in the given economy/ region in order to cover the majority of socio-economic strata and allow the assessment of their differences in providing social resources (Erickson 2004:5). The list of occupations should be fairly long, because the more professions and their respective resources that are covered, the better the information obtained (Erickson suggests around 30, *ibid.*). In order to allow effective comparisons between different regions and countries, the position generator should consist of a standard list of occupations suitable for most regions and countries and the possibility to add locally important occupations. One way to ensure comparability is to use more abstract terms of occupations, whose definitions entail locally used terms (e.g. "religious representatives/ leaders in faith/ clerics", who could locally be a priest, lama, rabbi, amir etc.). This technique plays in the generally for cross-cultural-comparison conducive goal to model Position Generators that are theoretically equivalent, but still receptive for local differences¹.

¹ Examples are Lin (1999b), Erickson (2004), Johnson's study of Ulaanbataar, Kakuko Miyata

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