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**Embeddedness of Social and Economic Relations
in Systemic Transformation.
Long-Term Evidence From the Post-Communist Transition in Poland,
1988–2003****

Abstract: This paper intervenes in the Granovetter-Polanyi debate by reassessing the level of embeddedness of social and economic relations under conditions of systemic transition. Using panel data collected in Poland, this analysis examines this relationship for three distinct periods of transition: initial (1988–1993), advanced (1993–1998), and post-transitional (1998–2003). This paper shows that during transition from communism to capitalism economic relations tended to disembed from social relations, but this relationship remained significant; friendship ties were conducive to an individual upward mobility, economic well-being and entrepreneurial activity. In contrast to Polanyi's argument, however, entrepreneurship—the most marketable area of individual advancement—is found to exhibit the highest degree of social-economic embeddedness. These results do not directly support either Polanyi's or Granovetter's arguments, however they do accord with a neo-Polanyian argument, as advanced in this paper.

Keywords: Friendship ties; social networks; status attainment; entrepreneurship; (dis)embeddedness of economic relations in social relations

Introduction

The role of social capital in modeling various individual status attainment processes is significant. Social capital intervenes in the process of formation of essential assets by influencing an individual's well-being, chances for achieving various social and occupational positions, and propensity for social mobility (Witt 2004; Erickson 2001; Burt 1992; Wegener 1992; Marsden & Hurlber 1988; Lin 1982). "Social resources are thus viewed as important factors intervening between origin and destination socioeconomic positions" (Marsden & Hurlber 1988, p. 1039). This analysis, by focusing on how interpersonal relations become translated into larger-scale processes including status attainment or social mobility processes, intends to provide an insight into the link between micro and macro structures. Specifically, the paper asks the following

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questions. How does the process in which interpersonal networks get converted into larger societal processes look like? What is the effect of instability of socio-economic conditions on this process? Does systemic transformation affect the process of individual status attainment? If so, which dimensions are affected the most and which of them the least? And finally, is the strength of this effect time-dependent?

Although the literature devoted to analysis of the relationship between social networks and personal outcomes provides some answers to these questions, the debate has been limited to societies that operate under well-established and stable economic and political conditions (Granovetter 1973; Lockwood 1958; Erickson 2001; Burt 1992; Wegener 1992; Lin 1982; Marsden & Hurlber 1988). The literature pays some attention to the role of social capital in forming individual socio-economic outcomes under more unstable conditions, including cases of systemic transition. Although uncertainty is widely accepted precondition for the salience of social capital as a factor in individual outcomes empirical evidence is rather limited, primarily based on qualitative case studies rather than quantitative data. (Stark 1996). Accordingly, it has been noted that:

such positivist analyses fail to observe the socio-historical consequences of embeddedness and networks in the context of the post-socialist transition to capitalism... Sociological theories of embeddedness and networks tend to take the nature of social actors as given and unproblematic. Neither perspective closely examines the role of social actors, particularly collective actors, in the transition from socialism to capitalism in Eastern Europe (Eyal, et al. 2003: 17–18).

The systemic transformation of Eastern Europe initiated in the early 1990s, thus, provides a unique perspective from which to analyze the impact of social networks on individual socio-economic outcomes under unstable conditions resulting from radical change. “In a very real sense, the countries of Eastern and Central Europe served as the laboratory of global capitalism in the 1990s” (Eyal, et al. 2003: 5). By analyzing the process of conversion of social capital into personal advantage, this paper intends to connect an old system with a new one.

The point of departure for the argument is Eyal, Szelenyi and Townsley’s fourth thesis of the post-communism transformation: that “converting devalued forms of capital into new, more valued forms is the preferred way individuals cope with changes in social structure” (Eyal, et al. 1998, p. 7). The paper, thus, dynamically analyzes the effects of social capital on various dimensions of individuals’ socio-economic advancement in periods of systemic transition. Here the transition to post-communism is understood as “a shift from socialist rank order to capitalist class stratification,” and a social change is viewed as “a process of trajectory adjustments” (Eyal, et al. 1998: 8–9; Szelenyi and Hanley 2001). In addition, the analysis intends to provide an insight into how the market situation in Eastern Europe was socially constructed.

This study therefore asks whether Granovetter’s argument, which implies that social networks have significant impact on individual socio-economic outcomes, holds only for societies under stable market conditions, or also for societies that experience some level of instability introduced through the process of transition to capitalism. It also poses an opposite question, namely whether Polanyi’s argument of increasing disembodiedness due to the shift to capitalism holds also for societies undergoing

the post-communist transformation. Finally, this paper offers a neo-Polanyian theory of disembeddedness of social relations and economic reality during the systemic transition.

Empirically this paper analyzes panel data called POLPAN collected in Poland in the period 1988–2003¹. The data refers to three phases of the post-communist transformation: an initial phase (1988–1993), an advanced phase (1993–1998), and the post-communist period (1998–2003), what allows examining how the dynamic of the transformation process influences the link between social networks and individual socio-economic outcomes. This analysis distinguishes two types of weak ties—advantageous and disadvantageous. Assuming that weak ties allow for broader access to information (Granovetter 1983), this research examines the impact of these ties on various dimensions of occupational advancement during the transition to capitalism. Before turning to the empirical analysis, I will first review the literature on the impact of social networks on personal socio-economic outcomes.

Theoretical Review

(Dis)Embeddedness: Polanyi-Granovetter Debate

Network analysis of markets, “whose explanatory factors include connectivity, the strength and frequency of interactions, the development of personal relationships, and the transmission of information” (Birner & Ege: 763), occupies a prominent place in both economics and sociology. Economists have recently devoted substantial attention to the impact of social networks structures on trade outcomes, social networks and formation of prices in international markets, and the impact of networks on wages (Rauch and Casella 2001; Dutta and Jackson 2003; Calvó-Armengol 2004). Within sociology scholars focused on the effects of social networks on individual’s well-being, chances for upward occupational mobility, and trust (Marsden & Hurlber 1988; Burt 1992; Wegener 1992; Erickson 2001; Witt 2004; Cook, et al. 2004). In both fields, however, Polanyi and Granovetter remain the two most prominent scholars, contributing two competing theories on the relationship between social ties and economic reality. The debate between Polanyi and Granovetter on embeddedness of economic relations in personal ones provides the theoretical basis for this analysis.

On the one hand, Polanyi (1944) believes that capitalism is a social and historical anomaly because the emergence of markets initiates the process of disembedding economic arrangements from social relations. Under market rules economic relations define social relations such that interpersonal relationships become gradually replaced by free and unlimited access to information about market players and market

¹ The data comes from the panel study designed by the Research Team on Comparative Social Inequality chaired by Kazimierz M. Słomczyński, Institute of Philosophy and Sociology of the Polish Academy of Science. The study was supported at various stages by the Polish Academy of Sciences, the (Polish) Scientific Research Committee, the United States Information Agency, and the (U.S.) National Council for Eurasian and East European Research.

transactions. As a consequence, interpersonal relations based on reciprocity, redistribution and communal obligations become less frequent than relations based on impersonal market rules.

Granovetter, in contrast, argues that in a market economy economic relations remain significantly “embedded” in personal relations and social networks, and that “‘embeddedness’ in earlier societies is not substantially greater than the level found in modern markets” (Granovetter 1985, p. 482). Granovetter argued that the level of embeddedness has changed less significantly with the “modernization” process than substantivist and developmental theories have assumed. He fails, however, to offer a historically specific theory specifying under which circumstances embeddedness occurs, and what level of the phenomenon one could expect to observe. This analysis targets that question and asks whether the embeddedness of social and economic relations is a constant, or whether it is liable to change with macro-scale socio-economic shifts.

From Polanyi’s point of view, one might argue that any shift towards a more market-oriented economy should imply a move towards economic relations that are less “embedded” in personal ties. The shift from a centrally coordinated economy towards free market institutions thus should provide evidence for that argument by showing an increased disembeddedness. However, as suggested by Granovetter, the opposite may also be true: due to the emergence of markets the association between economy and society does not diminish (Granovetter 1973; Shumpeter 1975). Thus according to his view, regardless of such economic changes as the emergence of a market economy, social networks should have a significant impact on personal economic outcomes.

Following Lockwood’s (1958) inquiry about the link between macro-policy and micro-practice, this analysis asks a simple question: what happens to the embeddedness of social ties in economic relations during the transition from socialism to a market economy? Does it remain relatively constant as suggested by Granovetter, or decrease over time as suggested by Polanyi? In other words, is the link between macro-policy and micro-practice is diminished or strengthened due to institutional changes such as the transition from communism to capitalism? Do micro-practices tend to adapt to the new system—an emerging market regime in the case of Eastern Europe? If so, does adaptation occur with resources taken from the past redistributive system of state socialism, or with novel resources that became available in the new system?

This paper advances the Granovetter–Polanyi dispute on the embeddedness of social and economic relations under market economies, by proposing a neo-Polanyian argument for disembeddedness during transition. This new thesis suggests that although disembedding of social and economic relations increases during periods of systemic transition, the relationship between social and economic realities remains significant. Thus, according to this argument, the impact of friendship ties on individual socio-economic outcomes should vary across distinct phases of post-communist transitions, rather than remaining constant.²

² See Table I for more details.

Social Capital: (Dis)Advantageous Friendship Ties

Working with a Bourdieuan (1993) understanding of social capital, as resources and assets available for mobilization and conversion, this analysis assumes that using social capital is a continuous and trans-systemic process, and therefore that individuals tend to continue using assets from the old regime during the process of systemic transformation (Bourdieu 1993; Kolankiewicz 1996). The question, however, is whether an individual's success during the period of transformation (as measured by his/her attainment of a higher socio-economic position) is in any way dependent on social capital accumulated in the past regime. If it is, the mechanisms facilitating that conversion of social capital accumulated in the old system into personal gains in the new, also require explanation.

Not only macro-systemic factors influence an individual's ability to convert social capital into personal advantages on various occupational dimensions; individuals themselves influence their social networks. Any debate over the embeddedness of economic relations in personal ones therefore also concerns the issue of how individuals generate social capital based on friendship ties. On this matter scholars have posed the question of whether social networks are an outcome of individuals' rational sampling and estimation (Coleman 1988, 1990), or of "irrational" commitments (Secord & Backmann 1964). Whether individuals tend to invest in social ties that are most advantageous in terms of prospective individual benefits, or whether they equally invest in friendship ties that are disadvantageous, is therefore a critical question.

This paper follows the assumption of rational choice theory, which suggests that individuals tend to accumulate social capital "rationally," meaning that, in estimating the value of potential friends, people aim to maximize the utility of future social networks (Coleman 1988, 1990). According to this perspective, market relations are built up on the basis of individual calculation and the instrumental use of friends in order to maximize gains (Silver 1990). As such, individual occupational careers and individual status attainment processes are seen as consequences of building social networks and acquiring new friends who can potentially be used on the labor market (Coleman 1988, 1990). Accordingly, "we can treat networking like any other social skill that can be learned, involving making contacts, building relationships, and activating linkages" (Dubini & Aldrich 1991: 306–307).

The value of friends, and therefore of social networks, can vary according to friends' differential skills and knowledge: "the acquisition of implicit knowledge and experience by means of personal contacts is another element that is introduced with the communication structure" (Birner & Ege 1999: 762). The skills of friends are potential resources for attaining higher socio-economic positions (Lin 1982). "Persons with access to better social resources will obtain better outcomes in instrumental action" (Marsden & Hulbert 1988: 1039). Thus, an individual's chances of improving his or her socio-economic position depend, at least partly, on the skills of his or her friends. The more marketable or rare they are, the better the chances that individual has for increasing their overall position.

Highly educated and highly skilled friends can influence an individual's well-being in many ways. Firstly, they may provide "valuable" and trustworthy information, which can in turn lead to the acquisition of new skills. Secondly, friends are sources of motivation, rewards and punishment, which can positively affect the development of new skills (Granovetter 2005). Thirdly, employers tend to hire friends of current employees since it is perceived to bring lower risk. Having "more valuable" friends can translate into better jobs and individual well-being (Erickson 2001; Burt 1992). "Advantageous" social capital can, therefore, be viewed as a significant determinant of various status attainment processes. This paper, examines the impact of "advantageous" friendship ties in the process of transition to capitalism. However, it also asks whether "disadvantageous" social capital have any impact on individual socio-economic performance in transitional societies.

Some Evidence from Transitional Societies

Past research shows that under market economies the impact of social networks on various individual status attainment processes is significant. Most often, good networks allow for good jobs, and "advantageous" friends allow for improving economic well-being and gaining higher positions in the social structure (Wegener 1992; Lin 1982; Marsden & Hurlber 1988; Erickson 2001; Burt 1992). This analysis asks what happens to the relationship between social capital and personal socio-economic outcomes if social conditions become unstable due to systemic transition? To what extent do social networks, in the form of weak ties, affect individual's economic well-being or mobility during such a transformation?

Eastern Europe's transformation led to significant social changes; it replaced the state socialist system based on redistribution with a new system based on market rules. State socialism was full of deficiencies and was lacking conventional capital. Under the old system, social networks were, if not the only available capital, at least the most powerful form. "Under socialism, property was fully socialized, and even in the most liberal reform communist counties, private ownership was marginal" (Eyal, et al. 1998: 4). As such, social networks under socialism were important assets in the absence of conventional forms of capital. Some argue, therefore, that systemic transformation in Eastern Europe did not separate social ties from economic activities; after the collapse of the communist regime, individual wealth and material benefits were more "embedded" in social capital than they were in the previous regime (Kolankiewicz 1996; Angelusz & Tardos 1991, 2001). In contrast, the new system brought in various forms of capital (Kolankiewicz 1996, Szelenyi and King 2004).

In the period of systemic transition, especially early on where formal rules were unstable and the level of uncertainty and risk quite high, maximization of capital was limited to accumulation of social capital in the form of social networks. Social networks established in the past system were the only readily available resources when the transition began, and individuals were therefore unlikely to abandon them. "At the same time social capital bestrides the two economic orders, by involving assets

taken from a previous economic order and, through conversion, introducing them into the stock of current individual, and group assets” (Kolankiewicz 1996: 429). Proving the significance of social capital during the transformation in Poland and Slovakia, Buerkle and Guseva (2002) have shown that education was translated into significant improvement in individual economic well-being, not only because it was a source of human capital, but because it was also a significant source of social capital.

The end of a centrally coordinated economy triggered some instability in social relations. “Moving from a social system in which the dominant mode of interaction is closed groups or networks to more open networks, such as those required to support the transition to a market economy and democratic institutions, is likely to be difficult” (Cook, et al. 2004: 191). Reforms brought inflation, production declines, high unemployment, reductions in economic well-being for significant segments of society, and increased social inequality (Szelényi & Kostello 1996, Szelényi & Glass 2003).³ Although transitional costs were relatively evenly distributed across the population, reforms tended to generate a highly uneven distribution of benefits over time, favoring particular groups (Hellman 1998). Many individuals lost their jobs, experiencing decreased economic well-being and downward mobility. For others, in contrast, transformation brought new opportunities that were convertible into individual benefits through upward mobility: self-employment with higher incomes, and significant improvement in economic well-being. Among transitional “winners” were professionals, managers, experts and entrepreneurs.

Under socialism in Eastern Europe the state controlled almost all resources, and private property was absent. However, the “grey sector” in the socialist system, which was a response to drastic deficits during transition, absorbed transitional shock and produced business growth—a related type of social capital (Szelényi 1988; Kolankiewicz 1996). The market transition’s initial phase required the establishment of small and middle-sized businesses (Balcerowicz, et al. 1998), thus individuals with entrepreneurial skills were in high demand and acquiring them often led to economic success. In this case such activity must occur under especially unpredictable conditions. If under stable conditions the success of a new venture significantly depended on an entrepreneur’s ability to establish a network of supportive friends (Steier 2000; Witt 2004), then one could argue that networks would be especially important for entrepreneurial activity in the case of transition towards a market economy.

Even under normal conditions, hidden opportunities for linking new products or services to untapped markets may be available, if only entrepreneurs could obtain information about where they lie. Mobilizing resources to pursue opportunities requires entrepreneurial contacts, knowledge, and confidence... Entrepreneurship is thus inherently a networking activity (Dubini & Aldrich 1991, p. 305).

In this paper, I assume that during the post-communist transformation individuals tend to adapt to the new regime by using social capital accumulated in the previous one, and that they do so by converting that capital into benefits at the individual level. This research therefore considers the three most sensitive dimensions of individual advancement during the transition process to be: mobility to the position of the

³ In accordance with the J-curve theory of costs and benefits of reforms (Hellman 1998).

“winners” (i.e. the winners in the transition), improvement of socio-economic status, and entrepreneurship. In this analysis I focus on weak personal ties, because they provide access to broader information, and analyze the impact of their two types: advantageous and disadvantageous. The empirical focus is on Poland as a paradigmatic example of the post-communist transition.

Firstly, I ask about the extent to which an individual’s chances of moving towards privileged socio-economic positions during the systemic transition depended upon social capital and the type of friends one had in the past regime. Secondly, I pose the same question with regard to individuals’ chances to improve their socio-economic well-being. Thirdly, I analyze the degree to which establishing a private business in a new system was dependent upon having entrepreneurial friends. Studying social determinants of individual socio-economic outcomes may provide a better understanding of such larger macro-economic processes as the emergence of capitalism.

The Case of Poland: Research Questions and Hypotheses

Firstly, this analysis asks whether individuals with relatively high socio-economic positions are more likely to form friendships with individuals of equivalent rank. Secondly, assuming that weak ties allow for broader access to information (Granovetter 1983) this analysis focuses on their two types “advantageous” and “disadvantageous.” For these purposes “advantageous” friendship ties are defined as those with individuals occupying high positions in the social structure (Burt 1992; Marsden & Hurlber 1988), while “disadvantageous” as those with individuals occupying low positions in the social structure or with no friends at all. Next, this analysis asks whether, under conditions of radical change, weak friendship ties influence individuals’ occupational advancement in the following ways: (1) through improving an individual’s economic well-being, (2) by fostering an individual’s upward mobility, and (3) by enhancing individual entrepreneurship.⁴ And further, it asks, which among the three types of individual socio-economic advancement is influenced by friendship ties most.

In this analysis, in accordance with Polanyi’s argument, entrepreneurship—the most marketable area of individual advancement—should exhibit the highest degree of disembeddedness of social relations from economic ones. On the other hand, assuming that entrepreneurial skills (even if they existed in residual form due to the informal economy) were limited at the beginning of the transition, the effects of entrepreneurial social capital on individuals’ status attainment processes should be significant, and would support Granovetter’s argument for the embeddedness of social relations in economic ones.

⁴ It is important to note that receiving additional education or gaining new skills may also result from having advantageous friendships. Need for achievement may be a psychological outcome of referring oneself to “advantageous” friends, or simply of following the directions of friends.

Hypothesis 1: Socio-economic Status

The first hypothesis is that advantageous friendship ties tend to influence individual socio-economic status positively over time. In order to test this hypothesis, I take into account four time points and measure the strength of this effect for the periods 1988–1993, 1988–1998 and 1988–2003. The prediction is that individuals with advantageous friendship ties established in 1988 are more likely to improve their economic well-being (as measured by the Socio-Economic Index (SEI)) later in time than those who did not have advantageous friendship ties. In contrast, individuals whose friendship ties are disadvantageous are more likely to have lower positions on the SEI compared to those with advantageous personal ties.

Hypothesis 2: Mobility to Top Positions

Secondly, assuming that managers, experts, and “private businesses” belong to the category of transitional “winners,”⁵ it is hypothesized that those individuals who had advantageous friendship ties in 1988 are more likely to have improved their social position during the course of the transition. It is further predicted that the impact of advantageous friendship ties on upward mobility diminishes over time, and should therefore be strongest for 1993, and consequently stronger in 1998 than in 2003.

Hypothesis 3: Becoming an Entrepreneur

Thirdly, since entrepreneurial skills were in demand at the beginning of the transformation, it is hypothesized that social capital in the form of entrepreneurial friends was of high value during the process. It is also hypothesized that having an entrepreneur among friends increases the likelihood of becoming an entrepreneur. Therefore, if an individual was acquainted with at least one entrepreneur in 1993, he or she is more likely to become an entrepreneur in the new system. Following this line of argument, entrepreneurs from the past regime who were acquainted with other entrepreneurs are more likely to sustain their business endeavors compared to those with no entrepreneurs among their friends.

Data and Analysis

In order to test the preceding hypotheses, this analysis uses the data set called POL-PAN, which includes three waves of a panel study conducted in Poland in 1987–1988, 1993, 1998, and 2003. For all four waves, this data set includes a random sample of men and women aged 21–65. Those individuals were interviewed at the end of 1987 and the beginning of 1988, and re-interviewed in 1993, 1998, and 2003. The interview

⁵ This assignment is based on such indicators as income (the highest income per capita among all occupational categories), money at one’s disposal (highest rates among all occupational categories), skills that meet emerging market demands (managerial, expert and entrepreneurial skills), and the risk of becoming unemployed (the lowest among all occupational categories).

Table I

Predicted Impact of Friendship Ties on Individual Socio-Economic Outcomes in Different Phases of the Post-Communist Transition. Neo-Polanyian Approach versus Granovetter Thesis

	Phases of post-communist transition*	Data time points	Neo-Polanyian thesis	Granovetter's thesis
Socio-economic rank	Initial	1988 and 1993	++	+++
	Advanced	1988 and 1998	+	+++
	Post-transitional	1988 and 2003	0	+++
Occupancy of 'winners' positions	Initial	1988 and 1993	+	+++
	Advanced	1988 and 1998	0	+++
	Post-transitional	1988 and 2003	0	+++
Entrepreneurship	Advanced	1993 and 1998	+	+++
	Post-transitional	1993 and 2003	0	+++

“+++” strong impact; “++” and “+” moderate impact; “0” no impact

* It is assumed that under socialism the effect of friendship ties on individual socio-economic outcomes was strong (“+++”).

questionnaire used in the 1987–1988 studies (called the 1988 study here) includes a set of questions on social ties, friendships, and work situation. The 1993 study includes information on respondents' friends and their occupational career. In both 2003 and 1998 the data include a representative sample of those who were interviewed in 1988 and 1993 and an additional cohort of individuals aged 21–30 (N = 2,278).

For these data I use OLS regression to examine changes in the socio-economic status (measured using the SEI), and logistic regression to examine the association between advantageous occupational positions and friendship ties. I also use logistic regression⁶ to examine the relationship between entrepreneurial acquaintanceship and entrepreneurial activity. Dependent variables represent three distinct occupational types.

Dependent Variables

1. Socio Economic Index; SEI 2003, SEI 1998, SEI 1993

This variable reflects respondents' socio-economic well-being.⁷ It is measured at four points in time: 2003, 1998, 1993 and 1988. In the empirical analysis, SEI'03, SEI'98 and SEI'93 are controlled by a variable that reflects an individual's socio-economic

⁶ Logistic regression is used for prediction of the probability of occurrence of an event by fitting data to a logistic curve. It is a generalized linear model used for binomial regression.

⁷ The Socio-Economic Index (SEI) is a multiple indicator based on the educational and occupational attainment. Educational level is measured by years of schooling and type of education. Occupational status is defined by three scales: skill requirements, complexity of work, and socioeconomic rewards. For more detail see Słomczynski (1986).

rank in 1988 (SEI'88). This allows for measuring the difference between individual socio-economic rankings in 1988 and 1993, 1988 and 1998, and 1988 and 2003.⁸

2. Being in the “Winner” Category in 2003, 1998 and 1993

Value 1 of this dichotomous variable represents those belonging in categories of managers, experts, or “private business-owners.” Those three categories denote individuals with the highest income per capita among all occupational categories, highest rates of money at one’s disposal among all occupational categories, skills that meet emerging market demands, and the lowest risk of becoming unemployed among all occupational categories.⁹

3. Being an Entrepreneur in 1998 and 2003 (yes = 1, no = 0).

Value 1 of this dichotomous variable represents those belonging in a category of an entrepreneur in 1998 and/or 2003.¹⁰

Independent Variables

Two mutually exclusive independent variables, *advantageous* and *disadvantageous friendship ties* represent two types of weak ties established by respondents in 1988.¹¹

1. Advantageous Friendship Ties in 1988

This variable reflects the ratio of advantageous friendships within an individual network (where advantageous is operationalized as friends in non-manual careers) to the number of all friends. The variable is constructed on the basis of the following questionnaire items: “How many friends of yours have university degree” (referring to the total number of advantageous friends¹²), and “How many friends do you have?” (referring to the total number of all friends). This is a dichotomous variable where a 1 indicates that a respondent has a proportion of non-manual friends higher than 80%, and a 0 represents a proportion of non-manual friends lower than 80%.

⁸ For more information on the Socio-Economic Index see Slomczynski and Kacprowicz (1979) regarding occupational scale, and Slomczynski (1986) regarding multiple indicator measurement.

⁹ Recent studies show that managers, experts, and entrepreneurs denote a category of “winners” of the post-communist transformation (e.g. Domanski 2000; Slomczynski & Shabad 1997). For more information on variables pertaining to the “winner” category see also Wilk & Shabad 2002, and Slomczynski & Shabad 2000.

¹⁰ For more information on a variable pertaining to the entrepreneur category see Osborn & Slomczynski 1997.

¹¹ The literature on social capital and status attainment in the context of the Eastern Europe introduces the concept of “political capital” that refers to networks established based on former membership in the Communist Party. The data used for this analysis does not enable however to operationalize this concept.

¹² In 1988, under conditions where the job market was state-controlled, individuals with university degree (with an exception of entrepreneurs who established their own business) were assigned to, and performed non-manual jobs only.

2. Disadvantageous Friendship Ties in 1988¹³

This variable reflects a lack of non-manual friends in a respondent's network: if a respondent has no non-manual friends, including the lack of friends at all, then 1 is scored, otherwise 0.

3. Being Acquainted with Entrepreneurs in 1993

This is a dichotomous variable where 1 indicates acquaintanceships with entrepreneurs (i.e. at least one such acquaintanceship), and 0 indicates no acquaintanceships. I use the total number of friends in 1993 as a controlling variable.

For all empirical analyses, controlling variables include gender (male = 1), age (in years), and education (years of schooling).¹⁴ I use two dichotomous variables—advantageous and disadvantageous weak friendship ties, each of which is controlled for total number of friends—in examining the impact of friendship ties on respondent's socio-economic status and mobility to “winners” positions. The reference group for those two dichotomous variables includes individuals with a majority of manual friends, and those who declared not having friends at all.

Causality Problem

This analysis takes into account the causality problem that emerges in studies on social networks' impact on various socio-economic dimensions. “In most discussions of causation, all too little attention is given to distinguishing between the cause of a given effect and the effect of a given cause” (Holland 1988: 449–450). Since there is no statistical test for causality and it is not amenable to being “proved” (although techniques such as path analysis and structural equations modeling allow for a reasonable approximation of causal proof), the analysis proposed here is believed to resolve the problem of causality, in this instance, as well as possible.

Firstly, only the randomized experiment is believed to uncover causation.¹⁵ However, in the case of this analysis, which covers the fifteen-year period and two distinctive political and economic systems, performance of the randomized experiment at this point of time is not possible. Secondly, this analysis assumes that for non-experimental data causal direction can be determined if good information about time is available since causes must precede their effects in time. It follows that inferences about the direction and nature of causality will be stronger for longitudinal studies than for cross-sectional ones; this confidence increases with the number of time points taken into account (see Berk 2004: 9 for a further discussion). The longitudinal data used in this study was collected at four points in time, what allows for relatively strong

¹³ In all analyses in which I consider the effect of advantageous and disadvantageous friendship ties in 1988, I control for the total number of friends in that year.

¹⁴ In testing the impact of friendship ties on socio-economic advancement it might be crucial to control for the respondent's education or occupation. However, in case when dependent variables such as socio-economic status and “being in the ‘winner’ category” are highly correlated with respondent's both education and occupation, those variables should be excluded from analysis. In addition, the cross-tabs analysis shows that (see section “Social Closure? Distribution of Friends across Different Social Classes”)

¹⁵ However, some pointed out that “experiments... do not identify causes. Rather experiments measure the *effects* of given causes (i.e. the effects of experimental manipulations)” (Holland 1988: 449–450).

inferences about causality. Thirdly, although the point has been already questioned (Berk 2004: 9), the present research assumes that regression analysis as such can represent a casual model, provided that the variables in the equation are chosen carefully and according to an explicitly defined theory. The analysis proposed here is believed to follow strictly both methodological and theoretical constraints. And finally, although this paper considers only one type of explanatory variables (advantageous and disadvantageous friendship ties) in measuring the effects of social networks on an individual's socio-economic performance, it takes into account three different dimensions which the variables is thought to affect. This allows for a better understanding of the operation of causality and improves the validity of associated inferences.

Evidence from Poland

Social Closure? Distribution of Friends across Different Social Classes

Basic analysis with cross-tabulations shows that the number of friends one had in the late socialist period (1988) was not related to one's position in the social structure. There is no substantial variation in the average number of friends across different social classes; while for top social classes, such as self-employed persons, managers, and office workers, the average number of friends was more than 9 (the highest proportion), for farmers (the lowest class) the average was 8 friends.¹⁶ Other social classes—supervisors, skilled and unskilled manual workers, and non-working persons—averaged 7 friends.

Although there is no significant variation in the average number of friends across social classes in 1988, there is significant variation across social classes with regard to type of friends. Top social classes, including managers, supervisors, experts and employers—the “winners” of the transformation—represent those with the highest average number of “advantageous” friendships.¹⁷ In contrast, lower social classes such as unskilled workers and farmers were among those with the fewest non-manual friends. Self-employed persons, who averaged 4.6 friends, fall between the highest and lowest social classes in terms of number of friends.

The results show a relatively even distribution of number of friends across social classes. However, if one takes a look at friendship types, social class can be seen to play a significant role in the acquisition of friends with “better” capital; upper classes have, on average, a higher proportion of advantageous friendships than lower classes. This finding suggests that type of friends, and thus quality of social resources, is related to individual human capital as represented by a person's social class. It also suggests that a mechanism of social closure in social networks was operating during this period. These findings confirm Burt's (1983) results, which showed that high socio-economic status gives access to better social resources. The results of the present research also confirm a neo-Weberian view of social class as giving rise to status group formation.

¹⁶ This proportion is equal to the number of experts' friends, with experts representing the most privileged group during the transition process.

¹⁷ This paper defines advantageous friendship ties as those that include non-manual friends only.

Socio-economic Status

The analysis of 1998 and 1993 data demonstrates that the effect of friendship ties on individual socio-economic advancement is significant and goes in the expected direction (even when controlling for total number of friends) (see Tables 1A, 1B; Model A). Advantageous and disadvantageous friendship ties explain a relatively high proportion of the SEI variance (22%) when controlling for total number of friends. Having advantageous friendship ties in 1988 increased individuals' chances of moving upwardly in socio-economic rank by 1993. In contrast, disadvantageous friendship ties negatively influenced individuals' positions on the socio-economic scale.

Further analysis shows that adding an individual's SEI rank from 1988 to the model decreases the effect of friendship ties on individual socio-economic rank in 1998 and 1993, although the relationship between type of friends and individual advancement remains significant (see Tables 1A, 1B; Model B).¹⁸ This effect also tends to diminish over time making it weaker in 1998 than in 1993.

Those results, thus, confirm Hypothesis 1, which predicted that individuals with advantageous friendship ties in 1988 would improve their economic well-being later in time. Analysis confirms this effect for two periods: 1988–1993 and 1988–1998. However the impact of advantageous friendship ties in 1988 on individual socio-economic positioning in 2003 is statistically non-significant (see Table 1C). Those results again accord with Hypothesis 1 which also predicted that the impact of advantageous friendship ties on economic well-being would diminish over time. In contrast, having disadvantageous friendship ties in 1988 had a negative influence on respondents' SEI scores in 1993 and 1998. This negative impact tends to strengthen over time, but again is statistically non-significant for 2003.

In sum, the analysis shows that during the post-communist transition friendship ties in 1988 had a significant impact on an individual's socio-economic position.¹⁹ However this impact has weakened over time showing no significant relationship in the 2003 data.

Mobility to Top Positions

Further analyses demonstrate that advantageous friendship ties from 1988 significantly influenced individuals' chances of moving to "winners" positions (managers, experts, and businessmen) in both 1993 and 1998, while by 2003 this effect is no longer significant (see Tables 2A, 2B, 2C). Individuals whose friends in 1988 occupied privileged occupational positions are more than twice as likely to have moved to one of the winners' categories in a 5- or 10-year period as compared with those individuals who did not have friends at all, or whose friends fell into manual categories. In contrast, having disadvantageous friendship ties decreased individuals' chances of moving to the "winners" category by about 50%. Similar to the impact of friendship ties on SEI,

¹⁸ Change in economic well-being is taken as the difference between 1988 and 1993 SEI scores, and between 1988 and 1998.

¹⁹ An exception here is the non-significant effect of disadvantaged friendship ties on SEI in 2003.

the effect of friendships on individuals' likelihood of moving to winners' positions weakens over time: it is stronger for 1993 than for 1998, and non-significant in 2003.

These findings accord with Hypothesis 2, showing that having advantageous friendship ties in 1988 increased individuals' chances of improving their positions in the social structure in 1993 and 1998. Although this effect has weakened over time and no longer significant in 2003, the findings demonstrate that, in the process of post-communist transformation, the chance of moving into "winner" categories is significantly enhanced by having advantageous friendships.

Becoming an Entrepreneur

The empirical analyses of the impact of friendship ties on becoming an entrepreneur find confirmation for Hypothesis 3. According to the results presented in Table 3A, individuals acquainted with an entrepreneur in 1993 were more likely to become an entrepreneur by 1998 than those who did not have an entrepreneur among their friends. By having at least one entrepreneur in one's network in 1993, individuals increased their chances of being an entrepreneur in 1998 by more than 6 times. Those with an entrepreneur friend in 1993 are about 3.4 times more likely to be an entrepreneur in 1998 than those without such a friend. This effect remains significant, and runs in the expected direction, even when controlling for being an entrepreneur in 1993, education, age and gender (see Table 3A; Model B). The analysis thus shows that entrepreneurs who were acquainted with another entrepreneur in 1993 are more likely to have sustained their business over time when compared to all others.

However, the effect of having an entrepreneur among friends in 1993 on becoming an entrepreneur by 2003 is not statistically significant. These findings may suggest that although having a friend with entrepreneurial skills was a key asset in becoming an entrepreneur during the advanced phase of transformation, it became a non-significant characteristic in the post-transitional period (see Table 3B).

The question that arises in this context is why social networks are important for starting-up and maintaining entrepreneurial businesses under unstable socio-economic conditions. Even under stable capitalist conditions entrepreneurship involves more risk, unpredictability and turbulence than other market activities; "Mobilizing resources also involves asking others to raise money, labor, and effort for a venture with an uncertain future" (Dubini & Aldrich 1991: 306). Using social resources thus brings benefits such as higher predictability and trust. Under unstable socio-economic conditions, such as the systemic transition, it stands to reason that the risk of entrepreneurial activity is higher still, and therefore the impact of entrepreneurial friends in starting-up or maintaining a business should be particularly significant.

To summarize, this analysis confirms the hypothesis that individuals whose social networks included at least one entrepreneur in 1993 were more likely to become an entrepreneur in 1998 than those with no entrepreneur friends. Since becoming an entrepreneur can be viewed as an indicator of individual adjustment to new market conditions, this research shows that that having entrepreneurial friends promoted

adjustment in the advanced phase of the transition (i.e. in 1993–1998), but was neutral in effect for the post-transitional period.

Discussion

In partial concordance with Granovetter's claim, this research demonstrates that the impact of weak friendship ties across three dimensions of socio-economic advancement in a society undergoing transition from communism to capitalism is significant. However, by extending the Granovetter question to analyze the impact of two distinct types of friendship ties—advantageous and disadvantageous—this paper also shows that under conditions of radical socio-economic change, type of friendship matters significantly for individual socio-economic advancement. Put another way, the strength of the impact of weak ties varies according to different phases of the transition.

During the earlier phases of this process, advantageous friendship ties positively influenced individuals' socio-economic advancement along three dimensions: (1) they helped to improve individuals' socio-economic well-being (as measured by higher scores on the socio-economic scale); (2) they made it more likely that individuals would move to the category of transitional "winners;" and (3) they increased the chances of becoming an entrepreneur. This relationship is strong and significant for the period of 1988–1998, but was not observed in 2003. However, the effect of "advantageous" friendship ties on an individual's SEI ranking and propensity to move to one of the "winners" categories is substantially reduced for 1998; the indicator's statistical significance and explanatory power significantly decreased compared to 1993. These results, while not wholly supporting either Granovetter's or Polanyi's predictions, are nevertheless in accordance with the neo-Polanyian argument advanced here.

It might be argued that Polanyi's claims for the "disembedding" of social relations from economic ones does not hold strongly for the initial and advanced phase of the transition because the transition from communism to capitalism may have been subject to a different dynamic than the transition from feudalism to capitalism (with which Polanyi was chiefly concerned). But "although the institution of private property in feudal societies was far from identical to that of capitalism, in both systems property rights were sufficiently similar, and the transition to capitalism sufficiently lengthy, to allow the growth of a propertied capitalist class and a gradual 'blending' of the aristocracy with the bourgeoisie" (Eyal, et al. 1991: 4). This analysis provides evidence that the post-communist social change was a *de facto* "shift from socialist rank order to capitalist class stratification" in which individuals adjusted their trajectories and tended to improve their socio-economic positions using social capital accumulated in the past system.

Interestingly, among the three dimensions of individual's socio-economic advancement, entrepreneurial success is affected most by friendship ties with entrepreneurs for the period 1993–1998. On the other hand, this effect may be driven by the fact that entrepreneurial social capital was scarce during the transition, heightening its value and hence its impact on individual socio-economic advancement. This interpretation

would accord with the Granovetter thesis. Furthermore, if friendship ties have the strongest impact on entrepreneurship—the most marketable dimension of occupational mobility—it could be argued that the process of marketization did not bring about significant disembeddedness of social and economic relations, contradicting the Polanyi thesis.

The present research suggests that the Granovetter–Polanyi debate might be dissolved using a temporal analysis, for societies undergoing systemic transition. Such an approach finds that in the initial and advanced phases of the transition towards capitalism there was a significant level of embeddedness of economic life in social relations, while in the post-transitional period this relationship can be seen to weaken. This analysis also suggests that the relationship between social networks and economic relations during the transition was not a constant; it tended to diminish over time, suggesting that a neo-Polanyian interpretation may be the most appropriate explanatory framework.

Conclusions

This research shows that, as with more stable socio-economic conditions, conditions of radical change also support the value of “good” friendships, which assist processes of individual advancement on various occupational dimensions. It also demonstrates that Granovetter’s argument for the embeddedness of social relations in economic realities can hold not only for societies under capitalist market rules, but also for societies undergoing the systemic transition from communism to capitalism. Yet neither does this paper contradict the Polanyi thesis because it demonstrates that the impact of social networks on economic outcomes decreases, and that economic relations *do* become disembedded from social reality in the post-transitional period, where rather stable capitalist settings apply.

The failure of these results to firmly support either view on the embeddedness of social and economic relations for societies undergoing radical change suggests a need for revision. However, these data are consonant with a *neo-Polanyian* argument for the continuing embeddedness of economic relations in social reality during systemic transitions, showing that although this relation diminishes, it remains significant through the entire process.

In addition to these findings, the present research opens up areas for further investigation. Firstly, one might argue that the lack of statistical significance in results obtained from 2003 data does not necessarily preclude the continuing embeddedness of economic relations in social reality in the present.²⁰ Such non-significance, along with a lack of consistency between correlation coefficients for 2003 and earlier time points,²¹ may suggest that the relationship between social networks and

²⁰ Such non-significance may stem from the fact that the number of panel cases decreased significantly over the period in question $N = 556$ (non-working respondents were excluded)

²¹ Correlation coefficients for 2003 tend to have opposite signs to their respective coefficients for earlier years.

individual economic advancement has not altogether disappeared, and that it has persisted in a different form. It may be for instance that, in the post-transitional period, it is no longer a combination of quality of social networks and total number of friends that affects individual socio-economic advancement but rather a density of ties among friends (Burt 2001). Finally, it could also be argued that, in addition to social capital, factors such as further training and/or respondents' social origins may significantly influence individual socio-economic outcomes. Though such questions underline the importance of further research, the present paper suggests that any serious advancement of the disembedding debate requires attention to the time- and process-dependent features of social and economic relations.

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Appendix

Table 1A

Regression of 1993 SEI on Advantageous and Disadvantageous Friendship Ties in 1988, Controlling for Number of Friends, and 1988 SEI

Independent variables	B	SE	Beta
Model A			
Advantageous Friendship Ties, 1988	177.301	16.231	.454***
Disadvantageous Friendship Ties, 1988	-44.247	1.420	-.137**
Number of Friends, 1988	-.492	.585	-.034
Constant	318.842	11.440	
Adjusted R ²	.267		
Model B			
Advantageous Friendship Ties, 1988	59.259	11.390	.115***
Disadvantageous Friendship Ties, 1988	-8.585	9.350	-.027
Number of Friends, 1988	-.281	.376	-.020
SEI, 1988	.732	.028	.741***
Constant	76.304	11.882	
Adjusted R ²	.695		
<i>Model B Adjusted R² – Model A Adjusted R² = .428</i>			

* p < .10

** p < 0.05

*** p < .01

Table 1B

**Regression of 1998 SEI on Advantageous and Disadvantageous Friendship Ties in 1988,
Controlling for Number of Friends, and 1988 SEI**

Independent variables	B	SE	Beta
Model A			
Advantageous Friendship Ties, 1988	12.456	2.210	.358***
Disadvantageous Friendship Ties, 1988	-7.132	2.272	-.213**
Number of Friends, 1988	.053	.112	.030
Constant	34.671	1.828	
Adjusted R ²	.224		
Model B			
Advantageous Friendship Ties, 1988	3.204	1.710	.092*
Disadvantageous Friendship Ties, 1988	-3.641	1.691	-.107**
Number of Friends, 1988	.010	.090	.005
SEI, 1988	.072	.005	.695***
Constant	9.843	2.132	
Adjusted R ²	.605		
<i>Model B Adjusted R² - Model A Adjusted R² = .381</i>			

* p < .10

** p < .05

*** p < .01

Table 1C

**Regression of 2003 SEI on Advantageous and Disadvantageous Friendship Ties in 1988,
Controlling for Number of Friends, and 1988 SEI.**

Independent variables	B	SE	Beta
Model A			
Advantageous Friendship Ties, 1988	4.477	4.836	.079
Disadvantageous Friendship Ties, 1988	5.912	3.577	.151
Number of Friends, 1988	.242	.160	.132
Constant	28.435	2.896	
Adjusted R ²	.006		
Model B			
Advantageous Friendship Ties, 1988	3.209	5.480	.057
Disadvantageous Friendship Ties, 1988	6.391	3.888	.160
Number of Friends, 1988	.279	.169	.151
SEI, 1988	.005	.013	.037
Constant	26.951	5.274	
Adjusted R ²	.000		
<i>Model B Adjusted R² - Model A Adjusted R² = -.006</i>			

* p < .10

** p < .05

*** p < .01

Table 2A

Logistic Regression of Being in the “Winner” Category in 1993 on Advantageous and Disadvantageous Friendship Ties in 1988, Controlling for Number of Friends, Age, Gender, and Initial Position

Independent variables	B	SE	ExpB
Model A			
Advantageous Friendship Ties, 1988	1.717	.292	5.570***
Disadvantageous Friendship Ties, 1988	-.769	.380	.463**
Number of Friends, 1988	-.002	.013	.998
Age	-.021	.011	.979*
Gender	.380	.259	1.462
Constant	-1.683**	.555	
-2Log Likelihood	437.118		
Model Chi-Square	68.295***		
Cox & Snell R ²	.087		
Model B			
Advantageous Friendship Ties, 1988	1.332	.340	3.790***
Disadvantageous Friendship Ties, 1988	-.722	.420	.486*
Number of Friends, 1988	-.004	.016	.996
Age	-.033	.014	.967**
Gender	-.057	.306	.944
Being in the “Winners” Category, 1988	2.935	.305	18.825***
Constant	-1.668**	.660	
-2Log Likelihood	336.894		
Model Chi-Square	168.520***		
Cox & Snell R ²	.201		
<i>Model B Cox & Snell R² - Model A Cox & Snell R² = .114</i>			

* p < .10

** p < .05

*** p < .01

Table 2B

Logistic Regression of Being in the “Winners” Category in 1998 on Advantageous and Disadvantageous Friendship Ties in 1988, Controlling for Number of Friends, Age, Gender, and Initial Position

Independent variables	B	SE	ExpB
	Model A		
Advantageous Friendship Ties, 1988	.854	.279	2.348**
Disadvantageous Friendship Ties, 1988	-.656	.302	.519**
Number of Friends, 1988	-.016	.015	.984
Age	-.048	.011	.954***
Gender	.219	.232	1.245
Constant	.169	.510	1.184
<i>-2Log Likelihood</i>	517.928		
<i>Model Chi-Square</i>	44.830***		
<i>Cox & Snell R²</i>	.058		
	Model B		
Advantageous Friendship Ties, 1988	.394	.307	1.483
Disadvantageous Friendship Ties, 1988	-.630	.322	.533*
Number of Friends, 1988	-.020	.017	.980
Age	-.061	.013	.941***
Gender	-.048	.252	.953
Being in the “Winners” Category, 1988	2.214	.280	9.156***
Constant	.474	.567	
<i>-2Log Likelihood</i>	455.789		
<i>Model Chi-Square</i>	106.969***		
<i>Cox & Snell R²</i>	.133		
<i>Model B Cox & Snell R² - Model A Cox & Snell R² = .075</i>			

* p < .10

** p < .05

*** p < .01

Table 2C

Logistic Regression of Being in the “Winners” Category in 2003 on Advantageous and Disadvantageous Friendship Ties in 1988, Controlling for Number of Friends, Age, Gender, and Initial Position (non-working excluded)

Independent variables	B	SE	ExpB
Model A			
Advantageous Friendship Ties, 1988	.842	.430	2.320
Disadvantage Friendship Ties, 1988	.656	.544	1.927
Number of Friends, 1988	.024	.018	1.024
Age	.013	.015	1.014
Gender	.013	.363	
<i>Constant</i>	−2.339	.767	
<i>−2Log Likelihood</i>	185.092		
<i>Model Chi-Square</i>	6.018		
<i>Cox & Snell R²</i>	.035		
Model B			
Advantageous Friendship Ties, 1988	.844	.431	2.327*
Disadvantageous Friendship Ties, 1988	.642	.557	1.901
Number of Friends, 1988	.024	.018	1.024
Age	.013	.015	1.014
Gender	.039	.364	1.040
Being in the “Winners” Category, 1988	.057	.508	1.059
<i>Constant</i>	−2.351	.775	
<i>−2Log Likelihood</i>	185.080		
<i>Model Chi-Square</i>	6.030		
<i>Cox & Snell R²</i>	.035		
<i>Model B Cox & Snell R² − Model A Cox & Snell R² = .000</i>			

* p < .10

** p < .05

*** p < .01

Table 3A

Logistic Regression of Being Entrepreneur in 1998 on Being Acquainted with Entrepreneur in 1993, Age, Gender, and Education (non-working excluded)

Independent variables	B	SE	ExpB
	Model A		
Being Acquainted with Entrepreneur in 1993 (yes = 1)	1.816	.242	6.145***
Number of Friends, 1993	-.013	.006	.987**
<i>Constant</i>	-2.859	.225	
<i>-2Log Likelihood</i>	711.841		
<i>Model Chi-Square</i>	73.826		
<i>Cox & Snell R²</i>	.070		
	Model B		
Being Acquainted with Entrepreneur in 1993 (yes = 1)	1.228	.300	3.415**
Number of Friends, 1993	-.176	.095	.838**
Being Entrepreneur, 1993 (yes = 1)	3.505	.290	33.287***
Age	-.005	.015	.995
Gender	.282	.248	1.325
Education, 1988	.129	.049	1.138**
<i>Constant</i>	-4.368***	.837	
<i>-2Log Likelihood</i>	515.184		
<i>Model Chi-Square</i>	262.282		
<i>Cox & Snell R²</i>	.227		
<i>Model B Cox & Snell R² - Model A Cox & Snell R² = .157</i>			

* p < .10

** p < .05

*** p < .01

Table 3B

Logistic Regression of Being Entrepreneur in 2003 on Being Acquainted with Entrepreneur in 1993, Age, Gender, and Education (non-working excluded)

Independent variables	B	SE	ExpB
	Model A		
Being Acquainted with Entrepreneur in 1993 (yes = 1)	.200	.332	1.221
Number of Friends, 1993	.006	.006	1.006
<i>Constant</i>	.552		
<i>-2Log Likelihood</i>	210.815		
<i>Model Chi-Square</i>	1.446		
<i>Cox & Snell R²</i>	.009		
	Model B		
Being Acquainted with Entrepreneur in 1993 (yes = 1)	.330	.382	1.391
Number of Friends, 1993	.003	.007	1.003
Being Entrepreneur, 1993 (yes = 1)	.155	.660	1.167
Age	.021	.015	1.021
Gender	-.097	.341	.908
Education, 1988	-.011	.057	.989
<i>Constant</i>	-1.457	1.070	.233
<i>-2Log Likelihood</i>	208.336		
<i>Model Chi-Square</i>	3.924		
<i>Cox & Snell R²</i>	.025		
<i>Model B Cox & Snell R² - Model A Cox & Snell R² = .014</i>			

* p < .10

** p < .05

*** p < .01

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