

GROWTH ASPIRATIONS AND SOCIAL CAPITAL: YOUNG FIRMS IN A POST-CONFLICT ENVIRONMENT

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Abstract

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Abstract

We explore the social determinants of growth aspirations of young firms' owners and managers in a post-conflict economy. We focus on social capital, which we treat as a multi-dimensional phenomenon, studying not only the effect of owners' and managers' personal networks on growth aspirations, but also other facets that facilitate cooperation such as trust in institutions and generalised trust in people. We posit that the generalised trust amplifies the beneficial effects of personal business networks, explaining how this conclusion diverges from earlier literature. We argue that in a post-conflict country, preservation of ethnic diversity is indicative of tolerance and low communication barriers and social capital appropriate for entrepreneurship. Our empirical counterpart and hypotheses testing rely on survey of young businesses in Bosnia and Herzegovina.

Introduction

In this paper we focus on the affects of various dimensions of social capital on growth aspirations of owners and managers of young businesses in a post-conflict country – Bosnia and Herzegovina (BiH). We treat social capital as a multi-dimensional phenomenon. We not only study the effect of owners' and managers' personal networks on growth aspirations, but also of other facets of social relations that facilitate cooperation such as trust in institutions and people. In addition, we argue that in a post-conflict, multi-ethnic country, such as BiH, the presence of ethnic diversity is an indicator of local social capital that influences growth aspirations. Moreover, we emphasise the need to look at effects that may produce either substitution or complementarities between the various

dimensions of social capital. Our research focuses on young businesses, which we see as the core of entrepreneurship (Parker, 2009), relating the latter to launching, owning, managing and taking on the risk of running a business (Greve and Salaff, 2003). Nevertheless, meaningful effects on economic growth are only produced by new ventures run by entrepreneurs who aspire to expand their businesses by employing more people (Estrin et al., 2012), consequently we focus on growth aspirations.

We recognize two gaps in the literature. First, with the exception of Kwon and Arenius (2010) and Estrin et al. (2012), the social determinants of growth aspirations are not yet attracting the attention they deserve (e.g. Autio and Acs, 2010; Levie and Autio, 2011). This reflects a broader gap in the entrepreneurship literature, as the influence of social and cultural factors on enterprise development remains under investigated (Thornton et al., 2011). Yet negative social and cultural influences may eradicate high growth aspirations entrepreneurship (Van Stel and Storey, 2004) and thus affect entrepreneurial performance. However, our understanding of the underlying mechanism is still limited. Seen within a wider context, the focus on social capital follows Granovetter's (1985) call to avoid both "oversocialized" and "undersocialized" theories: the former put stress entirely on macro-level social structures (e.g. Marxist-type social class analysis), while the latter model considers individuals as atomized, abstracting from any social features (Estrin et al., 2012).

The second gap in the literature relates to the fact that high aspirations entrepreneurship is typically either investigated in the context of developed economies or in cross-national studies (e.g. Autio and Acs, 2010; Levie and Autio, 2011; Estrin et al., 2012). Yet, recently there have been agenda-setting calls coming from both entrepreneurship scholars (McMullen, 2011) and development scholars (Naudé, 2011) to focus more directly on the links between entrepreneurship and development. Noting that development is often hampered by continuing social, ethnic and political conflicts, we focus on the links between entrepreneurship and social, including ethnic, dimensions, in a post-conflict

context. A situation that is representative of environments in many developing, middle income and transition economies, which have been torn apart by internal and external conflicts. It is in such cases that the social capital may be both most fragile and most needed. We examine the case of a country (BiH) that is now successfully emerging from a recent conflict (1992-1995), and our analysis offers lessons about the role of social capital that may be applicable to other similar environments. Our research aims to contribute to filling these gaps by both theorising and examining empirically how owners' and managers' social capital and their position within ethnically defined social structures affect business aspirations.

The paper is organized as follows. In the introductory section, we briefly discuss the context: the ethnically complex post-conflict environment and current state of entrepreneurship in BiH. Next, we introduce the research framework and hypotheses. Subsequently, we discuss the data and model specification respectively, before reporting the key empirical findings. Finally, we offer brief conclusions.

Context: Entrepreneurship in Bosnia and Herzegovina

BiH is a middle-income European country, but like many others that have been transiting from a command to a market economy, it has relatively low levels of entrepreneurship (Autio, 2011). There are low numbers of micro, small and medium enterprises (Estrin and Mickiewicz, 2011a) and below average levels of nascent entrepreneurship and new business ownership (Kelly et al., 2010).

An investigation of the role of trust, networks and ethnic diversity in relation to business development is particularly interesting in the context of BiH, because of its ethnic and institutional structure. Three major ethnic groups make up the population of BiH: Bosniaks, Serbs and Croats (these ethnicities largely correspond to Muslim, Orthodox and Catholic religious traditions respectively). The war in the 1990s caused large population

movements outside and within BiH, leaving the population concentrated in, now, more ethnically homogenous territories. Yet, importantly, there remain ethnic minorities within areas dominated by Bosniak, Serb or Croat majority populations, and some more ethnically mixed areas survived. Cultural differences are smaller than in other divided societies as the three groups speak virtually the same language, share similar traditions, and ways of thinking, which could facilitate post-conflict reintegration. However, ethnic divisions have largely been institutionalised by the constitution (Bieber, 2006) as the Dayton Peace Accord (1995) created an extremely complex settlement. Each of the three main ethnic groups has substantial autonomy and control over their own ethno-territorial units which predominate over the state level institutions (Bieber, 2010)¹. Consequently, and rather uniquely, for each ethnic group there is some part of BiH where it remains an ethnic minority and some part of the country where it is the ethnic majority. Although there are no official indicators², there is some casual evidence that the ethnic diversity seems to be present more in these regions which were less affected by ethnic cleansing activities, and therefore preserved more social linkages dating to the pre-war period. All this makes BiH a relevant context for studying the impact of social capital and ethnic diversity on entrepreneurial aspirations. BiH's economy has been growing at an average of around 5% per year, excluding the period of global economic downturn 2009-2011, and the country has been able to sustain peace and achieve a certain level of economic recovery. Accordingly, there are opportunities for young businesses to grow. These positive economic developments suggest that insights from BiH may provide more general lessons, applicable in other post-conflict areas.

¹The linkage of ethnicity and territorial affiliation in the constitution actually excludes many citizens from the political process as some posts are only open to candidates of a certain ethnicity from a particular entity (Bieber, 2010).

²There has been no census in BiH since 1991.

Theoretical Framework

Growth Aspirations

Entrepreneurs first need to aspire to grow their business before growth can occur. Accordingly, our study is located within a recent strand in the entrepreneurship literature focusing on the individual and contextual determinants of growth aspirations (Bowen and De Clerq, 2008; Autio and Acs, 2010; Levie and Autio, 2011; Estrin et al., 2012). Empirical findings confirm the positive relationship between business aspirations and subsequent performance (Kolvereid and Bullvag, 1996; Baum et al., 1998; Baum et al., 2001; Wiklund and Shepherd, 2003; Delmar and Wiklund, 2008; Aidis et al., 2008). This is important, as high-growth new enterprises are drivers of economic performance (Wong et al., 2005; Henrekson and Johansson, 2010). Highlighting growth aspirations is further justified by the proximity of this dimension to the theoretical construct of pro-activeness, which is seen as key component of the entrepreneurial orientation (Covin and Lumpkin, 2011). We emphasise the role which different dimensions of social capital play in shaping entrepreneurial aspirations; the issue we turn to next.

Social Capital

Social capital is a keenly debated concept, referring to ties between people (Nooteboom, 2007). At its core is the idea that goodwill stemming from social relations is a resource for facilitating action (Adler and Kwon, 2002), and that social linkages formed in one social sphere may be appropriable and used in another sphere. “Appropriability legitimates a conceptual strategy of bringing under the one notion /.../ informal organisation, trust, culture, social support, social exchange, social resources, embeddedness, relational contracts, social networks and inter-firm networks” (Adler and Kwon, 2002: 18).

A key division in the social capital literature is based on the level of analysis (Halpern, 2005). For some authors social capital is a macro-level phenomenon in the sense of

characteristics shared nationwide (Putnam, 2000), whereas others understand social capital as specific to the micro-level and belonging to individuals (Bourdieu, 1986; Sobel, 2002). This division also has influenced two major conceptualisations of social capital: one focusing on societal relations and the other on personal relations.

The societal relations stream defines social capital as widely shared, cooperative social norms such as trust and reciprocity (Fukuyama, 1995; Putnam, 2000; Rothstein and Stolle, 2008). Applying a macro perspective of social capital to entrepreneurship, Stephan and Uhlaner (2010) find that strong cooperative norms in the environment predict differences in entrepreneurship rates across nations. This is further confirmed with respect to entrepreneurial attitudes by Kwon and Arenius (2010), who also argue that in low trust national environments, the importance for entrepreneurship of local ties increases. The lack of generalized trust in a society causes greater reliance on “particularized trust” built between close relatives and friends (Rothstein, 2003: 59). These considerations are important for post-conflict environments, where generalised trust is likely to be damaged.

In turn, the personal relations stream focuses on the micro structural element of social relations such as the properties of social networks (Bourdieu 1986; Burt 2000). Consistent with this, social capital at the micro-level is based on groups and networks that the individuals can use to secure benefits (Sobel, 2002).

Both personal relations and societal relations are important pillars of social capital: business appropriable social capital depends not only on the network structure of an individual's social relations but also on the general norms that enable people to act collectively (Woolcock and Narayan, 2000) such as generalized and institutional trust. Thus, in analysing the relationship between social capital and aspirations we examine multiple dimensions of social capital (see Figure 1). Firstly, we examine facets of social capital relating to societal relations. We argue that societal relations affect micro-level outcomes such as business aspirations and we analyse the impact of ethnic diversity,

institutional trust and generalised trust on growth aspirations. Then we turn to personal relations, analysing the impact of network size and network composition on growth aspirations. We discuss all these dimensions and the interdependencies between them next.

<Figure 1>

Preservation of Ethnic Diversity as an Indicator of Social Capital

According to the existing literature, ethnic diversity may have both positive and negative effects on economic outcomes. On the one hand, seen from the macro perspective, ethnic conflicts and prejudices often lead to poor economic choices, policies and outcomes. Hence, where ethnic diversity is associated with fragmentation and conflict, it is likely to impact negatively on economic performance (Easterly and Levine, 2001). Putnam (2007) also argues that in the short run an increase in ethnic diversity is associated with less social capital and solidarity, although in the long run this effect might be different.

On the other hand, a diverse ethnic mix may bring various abilities, different experiences and ways of thinking, as well as a variety of cultures and traditions, which may lead businesses towards innovation, creativity and better economic performance (Alesina and La Ferrara, 2005; Florida, 2004, 2005). In addition, more diverse regions are expected to attract and retain creative people, lowering entry barriers, making diverse ideas available and facilitating new firm formation (Lee et al., 2004). Such conditions are conducive both to a larger and more diversified pool ‘of underexploited knowledge useful for commercialisation of new ideas’ (Marino et al., 2012), and to low communication barriers that make access to this knowledge and its utilisation relatively easy, creating an environment for entrepreneurial dynamism. Consequently, ethnic diversity is put forward as a potential source of competitive advantage (Smallbone et al., 2010). We argue that diversity in the social environment is advantageous to entrepreneurial aspirations, which is

consistent both with the view that ethnic diversity contributes to better economic performance in a country (Alesina and La Ferrara, 2005), and with the argument that diversity affects entrepreneurial entry positively (Lee et al., 2004; Marino et al., 2012; Audretsch et al., 2010; Smallbone et al., 2010).

In this paper we link ethnic diversity to social capital by analysing owner and manager perceptions of ethnic diversity in their local neighbourhood. In particular, we argue that how an individual perceives ethnic diversity is an indicator of their potential for greater integration into the local community. In BiH, relations between the ethnic groups vary immensely not just between regions but also at the individual level. Thus, how an individual situates themselves in their ethnic environment is an important facet of social capital. It is likely that those individuals situating themselves as working in a more ethnically diverse area are also taking advantage of the preservation of long rooted ethnic diversity, which may be indicative of the relatively stronger local climate of tolerance and “rich” social capital. For example, in the Tuzla region in BiH strong societal links were built in the past based on an occupational identity of mining. These strong links acted as a break, slowing down the eruption of ethnic hatred, which in turn preserved diversity in social tissue and pre-war social capital. The richness of these social links makes scaling up entrepreneurial projects feasible and therefore affects entrepreneurial aspirations positively. Furthermore, situating themselves as working in a more ethnically diverse area in the neighbourhood implies that the individual has a more diverse “infrastructure” available for exchange of ideas, experiences and cooperation; hence, we expect this to be positively related to owners’ and managers’ aspirations to grow their businesses. In contrast, individuals situating themselves as belonging to an ethnic majority or minority neighbourhood suggests a more fragmented social environment and it is likely that there will be negative relationship with the entrepreneur’s growth ambitions. Hence, we state the following:

Hypothesis 1: Entrepreneurs in an ethnically diverse neighbourhood have higher growth aspirations.

Trust

We next focus on trust as a dimension of social capital (Kwon and Arenius, 2010; Westlund and Adam, 2010). Trust indicates the presence of cooperative norms in society that enable the use of social relations to access resources (Paldam, 2000). It is seen as crucial component in the institutional structure of a market economy facilitating transactions (Arrow, 1974). Following this argument, trust has been put forward as an important factor for economic development (Fukuyama, 1995; Zak and Knack, 2001). However, not all trust is considered equally beneficial. A key distinction in the literature is made between ‘particularised trust’ (Rothstein, 2003) and ‘extended’ trust (Raiser, 1999). Particularised trust is trust in known individuals such as family members and friends (Rothstein, 2003). It is based on knowledge of the individual or the fact that they belong to a particular group e.g. same ethnicity. Extended trust, in contrast, is more abstract, enabling transactions to take place with only limited information about the counterpart's specific attributes (Raiser, 1999).

There are two main forms of extended trust: institutional trust (trust in institutions) and generalised trust (trust in unknown individuals). Institutional trust is trust in the functioning of the institutional framework including formal rules, norms, organizations and enforcement mechanisms (World Bank, 2002). It is theorised to enable transactions outside the circle of known individuals as institutions can provide formal mechanisms which give security that a transaction will take place as promised (Zucker, 1986). In turn, generalised trust is trust in unknown individuals (Rothstein and Stolle, 2008) and as such is a reflection

of general social norms and trust that an individual holds in the behaviour of individuals in society in general.

Raiser (1999) and Fukuyama (1995) argue that ‘extended trust’ is crucial to the development of a modern market economy. Extended trust, unlike particularised trust, enables individuals to engage in transactions beyond closed circles of family or well-known business contacts, and such links are necessary for the complex division of labour that defines modern market economies. Extended trust offers enhanced cooperation and access to new opportunities (Rus and Iglič, 2005). In contrast, low trust environments are thought to hinder entrepreneurship in particular, because they restrict enterprise entry, firm growth, competition, and encourage the pursuit of business based on process-based trust through personal networks, which increases transaction costs (Hohmann and Welter, 2002).

Transition economies are frequently characterised as low trust societies, due to their communist legacy (Fukuyama, 1995; Raiser, 1999; Estrin and Mickiewicz, 2011a). Trust in BiH has been further undermined by the recent war (UNDP, 2009). However, Welter and Smallbone (2006) point out that this dichotomisation of societies into high and low trust is too simplistic, because trust also varies within regions and sectors. This implies that these cooperative norms can be diversified and localised, consistent with Granovetter’s (1985) perspective. Thus, extended trust may also vary across individuals due to their individual characteristics and experiences. In particular, in developing and/or transition economies, the institutional context is not uniform. Some entrepreneurs may be more affected by weak institutions (like insecure property rights) than others (De Soto, 2001). Hence, it makes sense to analyse the effects of trust at the individual level (e.g., Raiser et al., 2007). Accordingly, we hypothesise that the extended trust an individual expresses in relation to institutions (institutional trust) and to people (generalised trust) affects entrepreneurial aspirations. Combining the discussion above, we posit:

Hypothesis 2: The greater entrepreneurs' (a) generalised trust and (b) trust in institutions, the higher their growth aspirations.

Business networks as social capital

The network analysis approach to entrepreneurship emphasises that entrepreneurs are embedded in personal networks, which influence their actions (Hansen, 1995; Jack et al., 2010). Networks provide resources to entrepreneurs (Jack, 2010); relying on them may be a useful strategy to overcome obstacles such as accessing finance, finding appropriately qualified human resources, and dealing with institutional and regulatory obstacles such as customs regulations or obtaining commercial licences. It is the latter aspect that suggests why there might be greater orientation of entrepreneurs towards business networks as a substituting strategy in environments characterised by weak institutions and weak trust (Estrin et al., 2012), as in BiH.

Networks are theorised to provide information for entrepreneurs, such as contacts for new customers, or new business opportunities. More generally, personal networks enable entrepreneurs to obtain different types of resources that either would not otherwise be available to them, or would be more expensive to obtain via the market (Greve and Salaff, 2003; Hoang and Antoncic, 2003; Witt, 2004). Larger and more diverse networks have been found in empirical research to impact positively on business success, although the evidence is not fully consistent (Jenssen and Greve, 2002; Witt, 2004; Witt et al., 2008). Building on these insights we argue that both network size and network composition affects business aspirations.

First, larger networks might be supportive in creating more ambitious business plans through the provision of information and resources (Witt, 2004). This motivates our third hypothesis:

Hypothesis 3: The larger entrepreneurs' business networks, the higher their growth aspirations.

Second, entrepreneurs utilize networks that are not only heterogeneous in size but also that differ in type in order to obtain a variety information and resources (Raiser et al., 2007; Jack et al., 2010; Watson, 2011; Zang, 2011). Thus, the quality of networks should be considered (Zang, 2011); i.e. exploring the composition of networks (Jack et al., 2010). A central debate in the literature on network structure concerns whether strong (typically defined as family based) or weak ties bring more benefits to individuals (Granovetter, 1973; Krackhardt, 1992; Greve and Salaff, 2003; Wang and Altinay, 2012). However, we posit that to understand the impact of network structure, we need further to distinguish between acquaintances and friends (e.g. Krackhardt and Stern, 1988; Greve and Salaff 2003). We posit that this distinction matters for entrepreneurs' aspirations. While more valuable knowledge may indeed be found when reaching out beyond the family circle, the extent to which it can be effectively acquired relies on the attitudes of outside contacts and the degree of trust between the individuals in the network. Obtaining valuable knowledge and resources from weak ties may be particularly difficult in the post-conflict environment, where the social tissue has been damaged, the level of trust is low, and people are unwilling to share knowledge with strangers or mere acquaintances. We expect that such environments may have characteristics akin to cultures, in which public space acquires the characteristics of private space, i.e. "diffuse" cultures (Trompenaars, 1994). Moreover, public space remains limited. In such environments, to be able to benefit from business contacts, strong personal links need to be built on top of these. Accordingly, we hypothesise:

Hypothesis 4: Growth aspirations are enhanced by a larger proportion of ties that are external to family yet strong (friends based).

Interactions between the networks & trust

It is suggested that networks are used as a substitute when there is little trust in institutions (Hohmann and Welter, 2002; Welter and Smallbone, 2006; Efendic et al., 2011; Estrin et al., 2012; Welter 2012). Informal institutions (including networks) are used to compensate for the failure of formal institutions (Helmke and Levitsky, 2004; Anderson, 2008). Personal networks are especially important in co-ordinating activities where the costs of writing and enforcing contracts are high, and where formal institutions are ineffective (Helmke and Levitsky, 2004). This is likely in the case of a country rebuilding its institutions after a period of warfare. These arguments in the literature relate to cross-level effects of substitution between high generalised trust at the environmental level and network effects at the individual level. However, we argue, that when both phenomena are considered at the individual level, a complementary effect is likely instead.

When seen at an individual level, trust amplifies the importance of networks effects: i.e. “particularized trust” (Rothstein, 2003) is enhanced by generalised trust, especially in environments seriously damaged by a conflict. In a post-conflict environment, higher generalised trust not only motivates the construction of networks but also, importantly, it increases both the motivation and ability of an individual to acquire resources and information through these networks. Thus, there is a need to consider effects of networks interacting with generalised trust. This line of argument leads us to form:

Hypothesis 5: Generalised trust and network size interact by having a complementary effect on growth aspirations.

Data and Descriptive Statistics

In this research we use data on young businesses obtained through a cross-sectional survey implemented in the period June-August 2011. The data was gathered from the owners or managers³ from six different regions covering the two entities constituting the state of BiH – the Republic of Srpska and the Federation of Bosnia and Herzegovina. The survey was administered directly through face-to-face meetings by a professional agency based in Sarajevo. The companies included in the database started their business in the period July 2005-December 2008. We chose to survey firms formed between 2005 and 2008 to ensure a more homogenised sample because the business environment for start-ups changed dramatically when the economic crisis hit BiH in 2009. By ending the sample period in 2008, we avoid mixing together pre-crisis young companies with those started during the crisis. In addition, to achieve more homogeneity, the sample does not include small firms coming from agriculture, forestry, fishing, or craft-workshops. The sample was stratified based on six economic regions, with an average of 40 companies surveyed in each region. In addition, the multi-ethnic division of BiH between three nationalities is represented in this sample, as all three dominant nationalities (Bosniaks, Serbs and Croats) are majority in two out of these six regions. 734 companies were initially identified for the survey on the basis of public records. The final number of surveyed companies was 244. Our response rate was 33%. Out of the 490 firms that did not take part in the survey roughly 15% did not exist at the time of the survey, 10% were not at the listed address, and the remaining 75% did not respond for different reasons.

Since we are using survey data, we first checked for missing values as they may produce biased estimates, distort statistical assumptions, and lead to erroneous conclusions (Horton and Lispitz, 2001; Acock, 2005). Our sample has few missing observations and no

³Apart from managing directors and owners, other persons interviewed include deputy directors, deputy managers and similar key management positions in the company who were strictly delegated either by the owner or manager of the company.

observations are missing for the dependent variable. The models 1 and 5 are estimated with 227 observations. However, the variables for network composition contain more missing values, so models 2 to 4 are estimated with 166 observations.

The list of variables used for our econometric analysis is presented in **Table 1**, accompanied by descriptive statistics.

<Table 1>

The dependent variable *Employment aspirations* is a continuous variable capturing the expected change in the number of employees in five years time in comparison to the firm's current situation; this design is based on Estrin et al. (2012). Following these authors we focus on percentage change in employment instead of expected level in five years time, as the percentage change better captures the relative magnitude of aspirations. More specifically, the dependent variable is created as the difference between the firm's employment aspirations in five years time and its current number of employees, divided by the current number of employees. We verified that the distribution of dependent variable was left skewed with twelve observations identified as severe outliers (outside the outer fence, using interquartile range). These outliers had unrealistic values in the range of 400% - 4980%. We have followed model diagnostics and excluded these observations from the dependent variable (following Autio and Acs, 2010; Estrin et al., 2012).

We measure the respondent's perception of the ethnic composition in the neighbourhood where they work by the variable *Area ethnically diverse*. We constructed this variable to take:

- a value of 1 when the respondent perceives either (a) the area is ethnically diverse, or (b) the area contains a balance of two or three major ethnic groups;

- a value of 0 when the respondent perceives their ethnicity to either be (c) in the majority or (d) minority in their work neighbourhood.

Our conceptualisation that a perception of belonging to an ethnically diverse neighbourhood rather than being in a majority or minority indicates less polarised ethnic relationships seems to be supported by our data. For example, Mostar is a city where different ethnic groups (Croats and Bosniaks) live rather isolated from one another (in the Western and Eastern part respectively). In our sample we have a reasonable balance between the two ethnicities. However, perceptions of the ethnic composition of their neighbourhood fall almost unanimously into the ethnic majority category. In contrast, in areas such as Tuzla, where there is also a mix of ethnicities, this mix is associated with individuals perceiving themselves to live in an ethnically diverse area rather than to be in the majority or minority (see Figure 2).

<Figure 2>

Our measure for *Generalised trust* is based on the World Values Survey question ‘Generally speaking, would you say most people can be trusted or that you need to be very careful in dealing with people?’. The response is dichotomous with 0 representing the answer ‘need to be very careful’ in dealing with people, and 1 representing the response ‘most people can be trusted’. From our sample, only 8.2% of respondents indicated that they possess generalised trust, certainly reflecting both the post-conflict and post-Communist legacy (Estrin and Mickiewicz, 2011a).

Institutional trust is a scale formed from the respondents’ answers to the questions on their confidence in key institutions in BiH (state, entity and cantonal governments, municipal authorities, tax administrations, the Office of the High Representative, courts). These answers were measured on a scale of 1 (no confidence at all) to 5 (a great deal of

confidence). Cronbach's alpha (0.86) and factor analysis indicate that these items can be combined to form a scale⁴. Accordingly, these individual scores were added together and divided by six to form a scale ranging from 1 to 5.

In gathering data on networks, we take an ego-centric approach, obtaining data from our respondents' on their personal networks. As an individual's personal network covers all facets of their lives, personal as well as business, and obtaining data on a person's whole network is time consuming and costly, we only look at a subset of an entrepreneur's network – their discussion network, following Greve and Salaff (2003). This is composed of the 'people that entrepreneurs turn to when they discuss aspects of establishing and running a business' (Greve and Salaff, 2003: 3).

To establish network size, we asked our respondents to approximate the number of people from outside their firm with whom they discussed aspects of running their business to get new information, advice or check their own ideas, in the last six months. Network size ranges from 0 to 300 but with 90% of the sample falling in the range 1 to 30. On close inspection, the size of the network does not have a continuous distribution above the value of eight. There are a few high peaks in distribution, starting with ten; these were clearly taken by the respondents as approximations. Accordingly, we categorised the variables, using cut-off points that partition the empirical distribution into four roughly equal parts. This lead to size of discussion networks categories at 0-3, 4-9, 10, and above 10.

As well as the quantity of ties (size of network), we also include a measure of strength (composition) of ties in the respondents network. As it is difficult to obtain this information for all members of the respondents' discussion network we only ask for detail on the strength of the individual tie for the 5 members of the respondents' discussion network. In examining the role of kin relations in entrepreneurship, Greve and Salaff

⁴ Factor analysis indicated that all items load onto a single factor: the eigenvalue for the first factor is 3.08 and falls to 0.18 for the second factor. All factor loadings on the first factor are above 0.7 except for confidence in the office of the high representative which has a factor loading of 0.59.

(2003) argue that restricting the survey to five ties should be adequate. We consider two alternative categorisations of ties.

First, we define the tie to be strong if the network contact is indicated to be a member of family or a close friend and to be weak if the contact is classified as an acquaintance by the respondent. We create two measures of strength of ties. Following Greve and Salaff's (2003) measure for kin in network, we create the variable *% of external ties in network*. This is formed from counting the number of acquaintances named in the five most important ties in network and dividing this by five.

Our second measure for strength of ties is an adaptation of the E-I index (*EI index*) developed by Krackhardt and Stern (1988). The E-I index measures the dominance of external ties over internal ties.

$$E - I \text{ index} = \frac{EL - IL}{EL + IL} \quad (1)$$

Here EL represents the number of external links (weak ties), i.e. the number of acquaintances, and IL represents the number of internal links (strong ties), i.e. close friends and family. Possible scores range from -1.0 which indicates that all links are strong ties to +1.0 which indicates that all links are weak ties.

Under the first approach, consistent with our argument leading to Hypothesis 4, we explicitly distinguish between share of ties with family (*Family/Total ties*), with close friends (*Friends/Total ties*), and with acquaintances (*Acquaintances/Total ties*). For each of these categories we calculate the percentage of ties. We next take the share of acquaintances as our benchmark omitted category.

The remaining variables are controls. They include respondent's characteristics: owner-manager status (*Owner-manager*), gender (*Male*), age (*Age*) and respondent's years of

business experience (*Business experience*). We also control for firm's characteristics: change in sales in the last year (*Change in sales*), current number of employees as a proxy for the firm's size (*No. of employees*), business association membership (*Business association*), location (in which of the 6 sample areas the firm is located), and sector (6 sectors reported in Table 1).

Model Specification

The benchmark specification which should capture the factors affecting business aspirations of BiH's young businesses has the following form (corresponding to Model 1 below):

Employment aspirations_i

$$\begin{aligned}
 &= \hat{\beta}_0 + \hat{\beta}_1 \text{Area ethnically diverse}_i + \hat{\beta}_2 \text{Institutional trust}_i \\
 &+ \hat{\beta}_3 \text{Generalised trust}_i + \hat{\beta}_4 \text{Network size}_i + \hat{\beta}_5 (\text{Controls})_i + \mathbf{X}\boldsymbol{\beta} \\
 &+ \hat{\varepsilon}_i
 \end{aligned}$$

Indices 'i' represent companies 1-227, $\hat{\beta}_0$ is the constant term, $\hat{\beta}_{1-5}$ are coefficients of variables to be estimated, $\mathbf{X}\boldsymbol{\beta}$ represents the matrix of sectoral and regional fixed effects and the corresponding coefficients, while the error term is denoted with $\hat{\varepsilon}$. *Area ethnically diverse*, *Generalised trust* and *Institutional trust* are all expected to come with positive sign, consistent with Hypotheses 1 and 2. Given that the smallest network size is our omitted category, we expect categories of *Network size* included in the model to have positive sign, consistent with Hypotheses 3. To test our Hypothesis 4, we introduce two categories of ties (Model 4): family (*Family/Total ties*) and friends (*Friends/Total ties*), taking acquaintances as a third omitted category. We also explore

alternative measures based on further aggregating stronger ties into one category: here the strength of business ties is represented by variables *EI index* (Model 2) and *External/Total ties* (Model 3). Finally, to test Hypothesis 5, we include an interaction term: *Generalised trust x Network size* (Model 5).

We declare expected effects for our controls below. We conjecture that the variable *Change in sales* will have a positive sign, since those companies which recorded a higher positive change in sale in the past should have stronger business aspirations for the future. By using it, we also approximate for the effect of past performance. In terms of size of companies (*No. of employees*), we would expect larger size to have negative effect on the level of aspirations. We expect male gender (*Male*) to have positive effect on aspirations (Estrin and Mickiewicz, 2011b). We do not have a clear prediction on the effect of age of the respondent (*Age*) on growth aspirations, as the results in the literature are mixed (Parker, 2009). In addition, we control for the centrality of the status of respondents in the company - if they are both owners and managers (*Owner-manager*). We expect positive sign of the coefficient for this variable. A conventional view might be that more experience could be associated with higher aspirations (*Business experience*) indicating a positive sign. We expect that membership in business associations could correlate positively with higher business aspirations (*Business associations*). In addition, the model controls for different business sectors and geographic regions. Finally, we could not extract any additional robust information by controlling for education of respondents, since those variables are statistically insignificant and/or proved to be incompatible with model diagnostics. Hence, these influences are not included in the final model.

Results

The base specification is estimated by OLS cross-section methodology in Stata 12 and reported in Table 2.

<Table 2>

Like in any econometric model, the validity of the obtained results depends on statistical diagnostics. The Ramsey RESET test could not reject (p-values are in the range from 0.14 to 0.40) the null hypotheses that these model have statistically proper functional forms (for all models). We report robust standard errors, hence, there should not be a problem with heteroskedasticity. There is also no multicollinearity in our specifications (the variance inflation factor ranges between 2.52 and 3.92). In addition, the F-test of joint significance suggests that the independent variables jointly are not equal to zero at the highest level (in each model the obtained p-value is equal to 0.000). Hence, we can conclude the reported models have acceptable statistical diagnostics. In taking both dependent and independent variables from a cross-sectional survey, endogeneity is always a matter of concern. In our study, network size and growth aspirations may be considered particularly problematic as they may be simultaneously defined – individuals with higher growth aspirations may decide to grow their networks in order to meet their aspirations as well as network size having an effect on growth aspirations. However, our variables are constructed so that growth aspirations are forward-looking (we ask about employment growth aspirations for the next five years) and network size is backward-looking (we ask about the networks in last six months). Furthermore, networks are built and develop slowly overtime, particularly in a low-trust environment and the current network size includes the whole history of network of any particular person. Thus we believe that simultaneity between network size and aspirations is not a serious problem for our study.

Now, we move on to the presentation of results reported in Table 2. Two of our key variables of interest (*Area ethnically diverse* and *Institutional trust*), capturing ethnic and institutional environment respectively, are statistically significant in all reported models.

Accordingly, ethnically diverse areas are characterized by systematically greater business aspirations in comparison to more homogenous areas, clearly supporting Hypothesis 1. To verify if our results are indeed related to diversity and not enforced by categorisation and by combining the answers' categories, we also applied alternative specifications (unreported but available on request) where we distinguish between majority and minority perceptions using separate *Ethnic majority* and *Ethnic minority* variables. However, according to the Wald test the difference between the coefficients for *Ethnic majority* and *Ethnic minority* is statistically insignificant. Consequently, we use *Area ethnically diverse* in our final models.

In addition, more *Institutional trust* correlates positively with business aspirations in every model reported, supporting Hypotheses 2b. Thus those individuals that perceive that they live in a more ethnically diverse community and have greater confidence in formal institutions report higher business aspirations. In contrast, we find no evidence supporting Hypothesis 2a - the degree of generalised trust is not statistically significant in any of the models. This may in part be due to the lack of variability in our measure of generalised trust which is only a dichotomous variable. The lack of significance of generalised trust contrasts with the robust effect of institutional trust.

We find that a large network size is weakly significant and positively associated with higher aspirations in Model 1 but not significant when other network variables are added, thus only providing limited support for Hypothesis 3. To investigate the relationship between the composition of networks we first apply the *EI index* variable (Model 2) and next *External/Total* ties variable (Model 3), defining – as discussed above – the strength of the network ties in terms of external weak ties *versus* internal strong ties. We find a statistically significant effect, suggesting that the proportion of strong ties rather than weak ties is positively related to business aspirations. Next in Model 4, we include network composition variables which distinguishes between family-based strong ties (*Family/Total*

ties), friends-based strong ties (*Friends/Total ties*) and weak ties (*External/Total ties*). Contrary to the conventional view, yet consistent with the Hypothesis 4, it is the proportion of friends-based strong ties that has a significant and positive relationship to business aspirations, but not weak ties.

Although we do not identify a statistically significant independent direct effect of trust on business aspirations, the interaction between generalised trust and network size is significant and positive for networks with 4-9 or 10 ties compared to networks with 3 or less ties. This suggests that generalised trust acts as a moderator for the effect of size on business aspirations, in line with Hypothesis 5. The magnitude of these interactive effects is further illustrated with Figure 3, which shows stronger positive effects of larger size of networks (more than 4) on aspirations for those with more trust.

<Figure 3>

Discussion and Conclusions

We deal with the influence of multiple dimensions of social capital on entrepreneurial growth aspirations. We consider ethnic diversity, institutional and generalised trust, business network composition and size, and the interactive effects between generalised trust and network size. We focus on the post-conflict context - an environment where social capital is fragile yet where it also matters greatly. While this study is based on one country, we believe that our framework is applicable to other post-conflict environments that suffered from ethnic hatred and violence and are in a process of reconstruction.

We argue that in the post-conflict context, local ethnic diversity is an important indicator of social capital. Our results suggest that growth aspirations of young businesses are stronger in areas with more ethnic variation. Again, the results are important when seen in the context of the cross-country economic literature, as the latter suggests that ethnic

fractionalisation may be associated with negative economic outcomes. This conclusion may be correct to the extent the fractionalisation is associated with likelihood of internal conflicts. However, what we emphasise is that the results obtained at one level of analysis are not mechanically applicable to another level of analysis. Accordingly, at the local level, where greater ethnic diversity was safeguarded, it is associated with stronger business aspirations. We interpret our results as indicating that in the post-conflict context, where ethnic diversity was preserved, it may be thanks to relatively more tolerant and cooperative local environment, hence, greater social capital, and this is the underlying culture which is conducive to entrepreneurial dynamism.

Next, findings on the institutional trust indicate that more confidence in institutions is generally associated with stronger business aspirations. More importantly, aspects of social capital that have been attributed to the nationwide level (Fukuyama, 1995) may also have more local character, and this applies in particular to societies emerging from internal conflicts. In particular, trust may differ highly amongst individuals. Thus, we argue that a micro perspective on formal institutions is important, as in a post-conflict context, an individual experience of formal institutions may vary. Accordingly, the importance of our results is in that we demonstrated a significant variance in individual experience of institutions, and better experience is associated with more entrepreneurial dynamism. Thus, from the policy perspective, our findings suggest that much can be achieved by emulating already existing best local practice.

While the strength of business ties in the literature is recognized as a potential determinant of business aspirations, the empirical results are ambiguous (Greve and Salaff, 2003). We offer a suggestion where the ambiguity may be coming from. While networks based on strong ties provide young businesses with limited amount of new knowledge, network based on external weak ties may potentially offer more valuable resources, yet, in a weak trust environment, these will not be utilised effectively, unless the external ties

become considerably strengthened. This is captured by the difference between acquaintances and friends. In the latter case, trust, resulting from transforming external ties into stronger ones, enables managers of young businesses to access more valuable knowledge.

The result we just discussed is parallel to the one we obtained on the amplifying influence of trust on network size. In particular, while business networks may substitute for deficiencies in the nationwide environment of trust, the logic of these interactive effects changes at the individual level. The individuals who find reasons to trust people in general are able to obtain more benefits from their business networks, so synergy not substitution follows. Thus, once we accept that trust has both a macro environmental effect but is also affiliated with local and individual variations, and so is also expressed at the personal level, some of the standard conclusions in the literature may change. Generalised trust and size of networks become complements not substitutes at the individual level.

Our findings highlight the importance of different social dimensions for policies aimed at supporting young business development and have particular resonance for post-conflict areas. In this context, we identify a moderating effect of trust, which amplifies positively the effects of business networks on aspirations of owners-managers of young businesses. The entrepreneurs' trust in institutions as well as stronger social ties beyond the family circle are both associated with higher business growth aspirations. Equally importantly, ethnic diversity is an opportunity not a threat: in the regions where ethnic diversity is preserved, business aspirations are stronger.

References

- Acock AC (2005) Working with missing values. *Journal of Marriage and Family* 67(4): 1012-1028.
- Adler P and Kwon S (2002) Social capital: prospects for a new concept. *Academy of Management Review* 27(1): 17-40.
- Aidis R, Estrin S and Mickiewicz T (2008) Institutions and entrepreneurship development in Russia: A comparative perspective. *Journal of Business Venturing* 23(6): 656-672.

- Alesina A and La Ferrara E (2005) Ethnic diversity and economic performance. *Journal of Economic Literature* 43(3): 762-800.
- Andersson DE (2008) *Property Rights, Consumption and the Market Process – New Horizons in Institutional and Evolutionary Economics*. Cheltenham and Northampton: Edward Elgar.
- Arrow KJ (1974) *The Limits of Organization*. New York: Norton.
- Audretsch D, Dohse D and Niebuhr A (2010) Cultural diversity and entrepreneurship: a regional analysis for Germany. *The Annals of Regional Science* 45(1): 55-85.
- Autio E and Acs Z (2010) Intellectual property protection and the formation of entrepreneurial growth aspirations. *Strategic Entrepreneurship Journal* 4(3): 234–251.
- Autio E (2011) High aspiration entrepreneurship. In: Minniti M (edt) *Dynamics of Entrepreneurship*. Oxford: Oxford University Press, pp. 251-276.
- Baum JR, Locke EA and Kirkpatrick SA (1998) A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology* 83(1): 43–54.
- Baum JR, Locke EA and Smith KJ (2001) A multidimensional model of venture growth. *Academy of Management Journal* 44(2): 292-303.
- Bieber F (2006) *Post-war Bosnia: Ethnicity, Inequality & Public Sector Governance*. Basingstoke: Palgrave Macmillan.
- Bieber F (2010) Bosnia and Herzegovina since 1990. In: Ramet SP (ed) *Central and Southeast European Politics Since 1989*. Cambridge: Cambridge University Press, pp. 311-328.
- Bourdieu P (1986) The forms of capital. In: Richardson J (ed) *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood, pp. 241-258.
- Bowen HP, De Clercq D (2008) Institutional context and allocation of entrepreneurial effort. *Journal of International Business Studies* 39(4): 747-767.
- Burt RS (2000) The network structure of social capital. *Research in Organisational Behaviour*, 22: 345-423.
- Covin JG and Lumpkin GT (2011) Entrepreneurial orientation theory and research: reflections on a needed construct. *Entrepreneurship Theory and Practice* 35(5): 855-872.
- De Soto H (2001) *The Mystery of Capital*. London: Black Swan.
- Delmar F and Wiklund J (2008) The effect of small business managers' growth motivation on firm growth: a longitudinal study. *Entrepreneurship Theory and Practice* 32(3): 437-457.
- Easterly W and Levine R (2001) Africa's growth tragedy: policies and ethnic divisions. *Quarterly Journal of Economics* 112: 1203-1250.
- Efendic A, Pugh G and Adnett N (2011) Confidence in formal institutions and reliance on informal institutions in Bosnia and Herzegovina: an empirical investigation using survey data. *Economics of Transition* 19(3): 531-540.
- Estrin S and Mickiewicz T (2011a) Entrepreneurship in transition economies: the role of institutions and generational change. In: Minniti M (ed) *Dynamics of Entrepreneurship*. Oxford: Oxford University Press, pp. 181-208.
- Estrin S and Mickiewicz T (2011b) Institutions and female entrepreneurship. *Small Business Economics* 37(4): 397–415.
- Estrin S, Korosteleva J and Mickiewicz T (2012) Which institutions encourage entrepreneurial growth aspirations? *Journal of Business Venturing*, doi:10.1016/j.jbusvent.2012.05.001.
- Florida R (2004) *The Rise of Creative Class*. New York: Basic Books.
- Florida R (2005) *Cities and the Creative Class*. London: Routledge.

- Fukuyama F (1995) *Trust: the Social Virtues and the Creation of Prosperity*. London: Penguin.
- Granovetter M (1973) The strength of weak ties. *American Journal of Sociology* 78(3): 1360-1380.
- Granovetter M (1985) Economic action and social structure: the problem of embeddedness. *The American Journal of Sociology* 91(3): 481-510.
- Greve A and Salaff JW (2003) Social networks and entrepreneurship. *Entrepreneurship Theory & Practice* 28(1): 1-22.
- Halpern D (2005) *Social Capital*. Cambridge: Polity.
- Hansen EL (1995) Entrepreneurial networks & new organizational growth. *Entrepreneurship Theory & Practice* 19(4): 7-19.
- Helmke G and Levitsky S (2003) Informal institutions and comparative politics: a research agenda. Kellogg Institute for International Studies WP No. 307.
- Henrekson M and Johansson D (2010) Gazelles as job creators: a survey and interpretation of the evidence. *Small Business Economics* 35(2): 227-244.
- Hoang H and Antoncic B (2003) Network-based research in entrepreneurship: a critical review. *Journal of Business Venturing* 18(2): 165-187.
- Hohmann HH and Welter F (2002) Entrepreneurial strategies and trust: structure and evolution of entrepreneurial behavioural patterns. In: Hohmann H Hand Welter F (eds) *East and West European Environments - Concepts and Considerations*. Forschungsstelle Osteuropa, Arbeitspapiere und Materialien, 37, Bremen: Universitat Bremen, pp. 11-18.
- Horton NJ and Lipsitz SR (2001) Multiple imputation in practice: comparison of software packages for regression models with missing variables. *The American Statistician* 55 (August): 244-254.
- Jack SL (2010) Approaches to studying networks: implications and outcomes. *Journal of Business Venturing* 25(1): 120-137.
- Jack S, Moult S, Anderson AR and Dodd S (2010) An entrepreneurial network evolving: patterns of change. *International Small Business Journal* 28(4): 315-337.
- Jenssen JI and Greve A (2002) Does the degree of redundancy in social networks influence the success of business start-ups?. *International Journal of Entrepreneurial Behaviour* 8(5): 254-267.
- Kelley D, Bosma N, and Amorós J (2010) *Global Entrepreneurship Monitor Global Report 2010*. Babson College and Universidad del Desarrollo.
- Kolvereid L and Bullvag E (1996) Growth intentions and actual growth: the impact of entrepreneurial choice. *Journal of Enterprising Culture* 4(1): 1-17.
- Krackhardt D and Stern RN (1988) Informal networks and organizational crises: An experimental simulation. *Social Psychology Quarterly* 51(2): 123-140.
- Krackhardt D (1992). The strength of strong ties: The importance of philos in organizations. In Nohria N and Eccles RG (eds) *Networks and organizations: Structure, form, and action*, Boston, MA: Harvard Business School Press, pp. 216-239.
- Kwon SW and Arenius P (2010) Nations of entrepreneurs: a social capital perspective. *Journal of Business Venturing* 25(3): 315-330.
- Lee SY, Florida R and Acs Z (2004) Creativity and entrepreneurship: a regional analysis of new firm formation. *Regional Studies* 38(8): 879-891.
- Levie J and Autio E (2011) Regulatory burden, rule of law and entry of strategic entrepreneurs: an international panel study. *Journal of Management Studies* 48(6): 1467-6486.
- Marino M, Parrotta P and Pozzoli D (2012) Does labour diversity promote entrepreneurship?. *Economic Letters* 116(1): 15-19.

- McMullen JS (2011) Delineating the domain of development entrepreneurship: a Market-based approach to facilitating inclusive economic growth. *Entrepreneurship Theory and Practice* 35(11): 185-193.
- Naudé W (2011) Entrepreneurship is not a binding constraint on growth and development in the poorest countries. *World Development* 39(1): 33-44.
- Nooteboom B (2007) Social capital, institutions and trust. *Review of Social Economy* LXV(1): 29-53.
- Paldam M (2000) Social capital: one or many? Definition and measurement. *Journal of Economic Surveys* 14(5): 629-653.
- Parker S (2009) *The Economics of Entrepreneurship*. Cambridge: Cambridge University Press.
- Putnam RD (2000) *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.
- Putnam RD (2007) E pluribus unum: Diversity and Community in the Twenty-first century. The 2006 Johan Skytte Prize Lecture. *Scandinavian Political Studies* 30(2): 137-74.
- Raiser M (1999) Trust in transition. *EBRD Working Paper No. 39*.
- Raiser M, Rousseau A, Steves F and Teksoz U (2007) Trust in transition: cross-country and firm evidence. *The Journal of Law, Economics & Organization* 24(2): 407-433.
- Rothstein B (2003) Social capital, economic growth and quality of government: the causal mechanism. *New Political Economy* 8(1): 49-71.
- Rothstein B and Stolle D (2008) The State and Social Capital: An Institutional Theory of Generalized Trust, *Comparative Politics* 40(4): 441-459
- Rus A and Iglič H (2005) Trust, governance and performance. The role of institutional and interpersonal trust in SME development. *International Sociology* 20(3): 371-391.
- Smallbone D, Kitching J and Athayde R (2010) Ethnic diversity, entrepreneurship and competitiveness in a global city. *International Small Business Journal* 28(2): 174-190.
- Sobel J (2002) Can we trust social capital? *Journal of Economic Literature* 40(1): 139-154.
- Stephan U and Uhlaner LM (2010) Performance based vs. socially supportive culture: a cross-national study of descriptive norms and entrepreneurship. *Journal of International Business Studies* 41(October/November): 1347-1364.
- Thorton, PH, Ribeiro-Soriano D and Urbano D (2011) Socio-cultural factors and entrepreneurial activity: an overview. *International Small Business Journal* 29(2): 105-118.
- Trompenaars F (1994) *Riding the Waves of Culture: Understanding Diversity in Global Business*. New York: Irvin.
- UNDP (2009) *The Ties That Bind – Social Capital in Bosnia and Herzegovina. The National Human Development Report*. Sarajevo: UNDP.
- Van Stel A and Storey D (2004) The link between firm births and job creation: is there an upsurge effect?. *Regional Studies* 38(8): 893-909.
- Wang CL and Altinay L (2010) Social embeddedness, entrepreneurial orientation and firm growth in ethnic minority small business in the UK. *International Small Business Journal* 30(1): 3-23.
- Watson J (2011) Networking: gender differences and the association with firm performance. *International Small Business Journal* 30(5): 536-558.
- Welter F and Smallbone D (2006) Exploring the role of trust in entrepreneurial activity. *Entrepreneurship Theory and Practice* 30(4): 465-475.
- Welter F (2012) All you need is trust? A critical review of the trust and entrepreneurship literature. *International Small Business Journal* 30(3): 193-212.
- Westlund H and Adam F (2010) Social capital and economic performance: a meta-analysis of 65 studies. *European Planning Studies* 18(6): 893-919.

- Wiklund J and Shepherd D (2003) Aspiring for and achieving growth: the moderating role of resources and opportunities. *Journal of Management Studies* 40(8): 1919-1941.
- Witt P (2004) Entrepreneurs' network and success of start-ups. *Entrepreneurship and Regional Development* 16(5): 391-412.
- Witt P, Schroeter A and Merz C. (2008) Entrepreneurial resource acquisition via persona networks: and empirical study of German start-ups. *The Service Industries Journal* 28(7): 953-971.
- Woolcock, M and Narayan, D (2000) Social capital: implications for development theory, research and policy. *The World Bank Research Observer* 15(2): 225-249.
- Wong PK, Ho YP and Autio E (2005) Entrepreneurship, innovation and economic growth: Evidence from GEM data. *Small Business Economics* 24(3): 335-350.
- World Bank (2002) *Building Institutions for Markets – World Development Report 2002*. New York, Oxford: Oxford University Press.
- Zak P and Knack S (2001) Trust and growth. *The Economic Journal* 111(470): 295-321.
- Zang J (2011) The problems of using social networks in entrepreneurial resource acquisition. *International Small Business Journal* 28(4): 338-361.
- Zucker LG (1986) The Production of trust: institutional sources of economic structure, 1840-1920. *Research in Organization Behaviour* 8: 53-111.

Figure 1

Theoretical framework

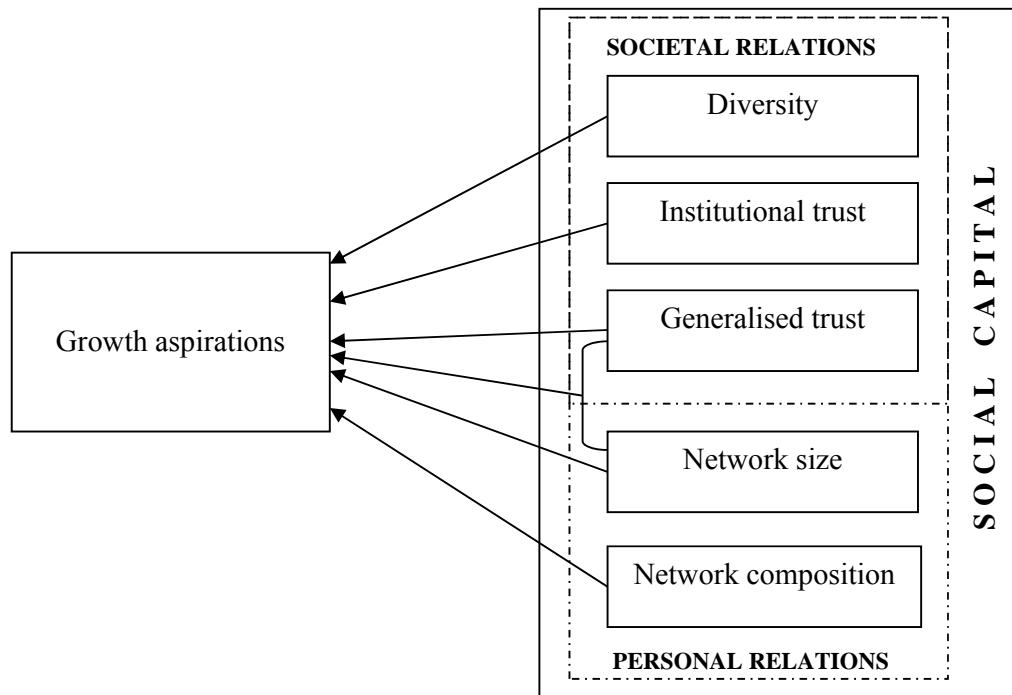
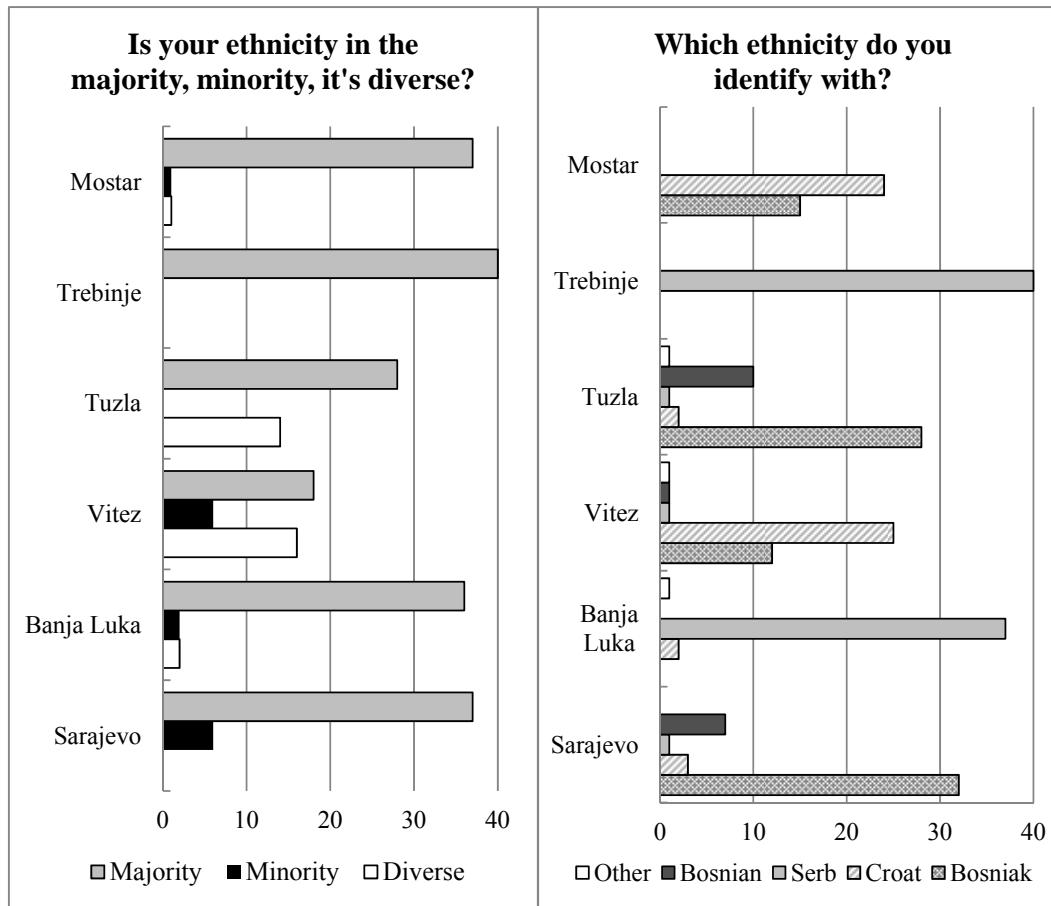


Figure 2

Bar charts showing ethnicity and perceptions of neighbourhood ethnic diversity



Note: The question on ethnic self-identification was open ended. In addition to the three major ethnic groups, some respondents declared their ethnicity more broadly as 'Bosnian'.

Figure 3

Predictive Margins of Network Size Interacted with Trust

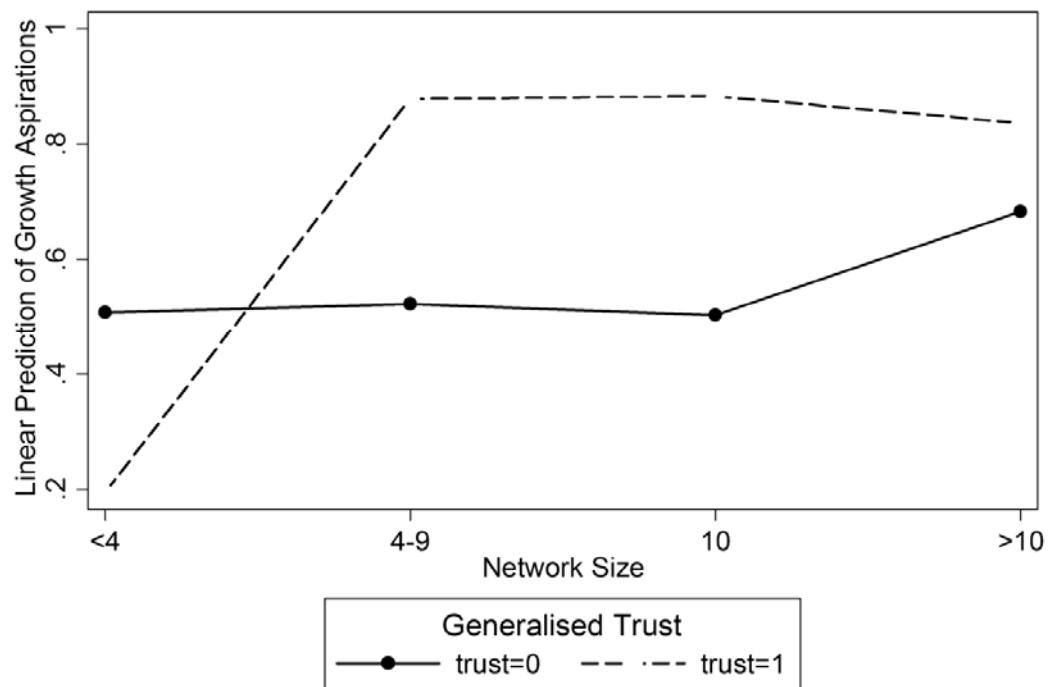


Table 1 Descriptive statistics

	Mean	Median	SD	Min	Max	No. obs
Employment aspirations (expected change in number of employees)	6.53	0.5	41.41	-1	498.5	243
Area ethnically diverse (diverse = 1, otherwise = 0)	0.14	0	0.34	0	1	243
Ethnic majority (majority = 1, otherwise = 0)	0.80	1	0.40	0	1	243
Ethnic minority (minority = 1, otherwise = 0)	0.06	0	0.24	0	1	243
Generalised trust (most people can be trusted: yes = 1, no = 0)	0.08	0	0.27	0	1	243
Institutional trust (confidence in institutions: none = 1, a great deal =5)	2.46	2.5	0.72	1	4.3	243
Network size (continuous) (no. of people in discussion network)	14.49	9	31.66	0	300	243
Network size 0 – 3 (network size: 0-3 people = 1, otherwise = 0)	0.30	0	0.46	0	1	243
Network size 4 -9 (network size: 4-9 people = 1, otherwise =0)	0.20	0	0.40	0	1	243
Network size 10 (network size: 10 people = 1, otherwise = 0)	0.26	0	0.44	0	1	243
Network size over 10 (network size: 11+ = 1, otherwise = 0)	0.23	0	0.42	0	1	243
% of external ties in network (no external ties = 0, all ties external = 1)	0.32	0.4	0.27	0	1	176
EI index (no external ties = -1, all ties external = 1)	-0.36	-0.2	0.54	-1	1	176
Male (male = 1, female = 0)	0.77	1	0.42	0	1	243
Age (Age of respondents in years)	38.63	38	9.80	20	79	243
Business experience (Business experience in years)	9.98	7	7.66	1	40	243
Owner-manager of firm (respondent owner-manager of firm=1, otherwise= 0)	0.42	0	0.49	0	1	243
Change in sales (over 1 year: decreased a lot =1, increased a lot =5)	2.98	3	0.93	1	5	243
No. of employees (current number of employees)	11.01	4	28.99	1	400	243
Member of business association (member of a business association: yes = 1, no = 0)	0.23	0	0.42	0	1	243
Manufacturing (firm's main sector manufacturing = 1, otherwise = 0)	0.09	0	0.29	0	1	243
Hotels (firm's main sector hotels,	0.03	0	0.18	0	1	243
Construction (firm's main sector construction = 1, otherwise = 0)	0.06	0	0.24	0	1	243
Transport (firm's main sector transport = 1, otherwise = 0)	0.03	0	0.17	0	1	243
Trade (firm's main sector trade = 1, otherwise = 0)	0.45	0	0.50	0	1	243
Business services (firm's sector business services=1, otherwise=0)	0.33	0	0.47	0	1	243

Table 2 OLS regression – the dependent variable: employment growth aspirations

<i>Explanatory variables:</i>	(1)	(2)	(3)	(4)	(5)
Area ethnically diverse	0.295*	0.287*	0.287*	0.284*	0.299*
	(0.141)	(0.137)	(0.137)	(0.136)	(0.141)
Generalised trust	0.030	-0.224	-0.224	-0.227	-0.314
	(0.148)	(0.158)	(0.158)	(0.159)	(0.223)
Institutional trust	0.151*	0.150†	0.150†	0.155†	0.156*
	(0.065)	(0.084)	(0.084)	(0.082)	(0.066)
Network size 4-9	0.090	0.082	0.082	0.095	0.015
	(0.118)	(0.136)	(0.136)	(0.134)	(0.128)
Network size 10	0.093	0.027	0.027	0.025	-0.005
	(0.134)	(0.180)	(0.180)	(0.180)	(0.144)
Network size over 10	0.263†	0.252	0.252	0.256	0.175
	(0.134)	(0.189)	(0.189)	(0.188)	(0.147)
G.Trust x Network size 4-9					0.669*
					(0.312)
G.Trust x Network size 10					0.693†
					(0.373)
G.Trust x Network size >10					0.467
					(0.356)
E-I index		-0.212†			
		(0.115)			
External / Total ties			-0.424†		
			(0.230)		
Family / Total ties				0.205	
				(0.376)	
Friends / Total ties				0.507*	
				(0.253)	
Owner-manager	0.221*	0.201*	0.201*	0.209*	0.258**
	(0.088)	(0.099)	(0.099)	(0.102)	(0.091)
Male	-0.142	-0.240*	-0.240*	-0.269*	-0.157
	(0.101)	(0.110)	(0.110)	(0.114)	(0.103)
Age	0.000	0.003	0.003	0.002	0.001
	(0.005)	(0.006)	(0.006)	(0.006)	(0.005)
Business experience	-0.006	-0.011	-0.011	-0.010	-0.005
	(0.006)	(0.008)	(0.008)	(0.008)	(0.006)
Business association	-0.039	0.101	0.101	0.086	-0.017
	(0.093)	(0.101)	(0.101)	(0.104)	(0.094)
Change in sales	0.072	0.097	0.097	0.100†	0.075
	(0.049)	(0.060)	(0.060)	(0.060)	(0.049)
No. of employees	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Constant	-0.147	-0.524	-0.313	-0.760*	-0.163
	(0.270)	(0.383)	(0.435)	(0.357)	(0.273)
Adjusted R-squared	0.173	0.242	0.242	0.240	0.178
N	227	166	166	166	227
F	4.726	6.557	6.557	6.401	5.795

Notes: Robust standard errors in parentheses. ** p<0.01, * p<0.05, † p<0.10

Both regions- and industry-sectors fixed effects included but not reported.