

The Economic Returns of Immigrants' Bonding and Bridging Social Capital: The Case of the Netherlands¹

Bram Lancee European University Institute

This paper aims at explaining to what extent social capital can help immigrants in the Netherlands make headway on the labor market. Two forms of social capital are identified. Bonding refers to a dense network with thick trust and is measured as the strength of family ties and trust in the family. Bridging implies a crosscutting network with thin trust and is measured as inter-ethnic contacts and outward orientation. It is examined to what extent bonding and bridging for immigrants in the Netherlands can be associated with a higher likelihood of employment and higher income. Results show that (1) bridging networks are positively associated with both employment and income; (2) bonding networks do not affect economic outcomes; and (3) levels of trust (neither thick nor thin) cannot explain economic outcomes.

INTRODUCTION

The main contribution of this paper is to analyze to what extent immigrants in the Netherlands profit from different forms of social capital to make headway on the labor market. Researchers have suggested that social capital contributes to economic outcomes such as access to the labor market (Aguilera, 2002; Drever and Hoffmeister, 2008), wages (Boxman, De Graaf, and Flap, 1991; Aguilera, 2005), or occupational status (Lin, 1999). For immigrants, social capital is especially important, as relying on social networks is a way to reduce job search costs, for example in the presence of discrimination (Mouw, 2002). However, only little research into the labor market performance of migrants examines different forms of social capital simultaneously.

Recent discussions on social capital distinguish between "bonding" and "bridging" (Putnam, 2000; Burt, 2001; Leonard and Onyx, 2003;

© 2010 by the Center for Migration Studies of New York. All rights reserved. DOI: 10.1111/j.1747-7379.2009.00803.x

¹The author would like to thank Martin Kohli and Jaap Dronkers and the anonymous reviewers for their comments on an earlier version of this paper.

Schuller, 2007). Loosely defined, bonding refers to within-group connections, while bridging social capital refers to between-group connections. Often it is argued that returns depend on the different forms of social capital that people possess (Portes, 2000; Putnam, 2000; Beugelsdijk and Smulders, 2003). A frequently heard statement in that respect is that "whereas bonding social capital is to 'get by,' bridging social capital is to 'get ahead'" (Putnam, 2000).

When analyzing the relation between social capital and labor market performance for migrants, distinguishing between different forms of social capital seems especially important. First, because for immigrants, especially bridging social capital is expected to yield positive returns. As Haug (2007) points out, as most employers are natives, it is especially useful for immigrants to have contacts with natives. Moreover, establishing contact with the native population can be a strategy to circumvent discrimination (Mouw, 2002); and it implies building much needed host-country-specific capital (Friedberg, 2000; Kanas and Van Tubergen, forthcoming). The second reason to differentiate between bonding and bridging is that with respect to bonding, the "lack" of returns may not be that straightforward for migrants. It might be true that networks of immigrants are often characterized as being isolated and therefore hindering economic integration. That is, when being embedded into ethnic networks, successful upward mobility may be impeded due to social obligations, pressure to conformity, or downward leveling norms (Portes, 1998; Green, Tigges, and Diaz, 1999). Nonetheless, migrants are repeatedly characterized as a group with a tight social network that provides security, also with respect to the labor market. For example, family- and ethnic-based networks are found to be contributing to the performance on the labor market of Asians and Hispanics in the United States (Sanders and Nee, 1996; Sanders, Nee, and Sernau, 2002).

Whereas scholarly literature nowadays agrees on a division of social capital in bonding and bridging, they have not been conceptualized systematically yet (Patulny and Svendsen, 2007; Schuller, 2007). The objective of this paper is twofold. First, I use the existing body of literature to build a theoretical framework of bonding and bridging social capital for immigrants. Second, I operationalize bonding and bridging social capital and analyze which forms can be associated with higher employment chances and income for the four main non-western immigrant groups in the Netherlands. The central question in this paper is formulated as follows: "To what extent can bonding and bridging social capital

be associated with a higher likelihood of employment and higher income, for immigrants in the Netherlands?"

THEORY AND HYPOTHESES

Social capital theory implies that people well equipped with social resources - in the sense of their social network and the resources of others they can call upon – succeed better in attaining their goals. Additionally, people will invest in relations with others because of the expected future value of the resources made available by these relations (Flap and Völker, 2004:6). People's lives are embedded in the social networks that they form and these networks affect their lives. Consequently, people use their network to better attain their goals. A social network can be considered a social resource, which can produce returns in order to improve the conditions of living. In other words, one's social network can be treated as a capital (Flap and Völker, 2004:6). Van Der Gaag and Snijders (2004:200) describe individual social capital as "the collection of resources owned by the members of an individual's personal social network, which may become available to the individual, as a result of the history of the relationships the individual has with the members of his network." In this and the following section, I discuss the elements that are part of one's individual social capital, taking the definition of Van Der Gaag and Snijders (2004) as a starting point.

Social capital can be split up into a structural and a cognitive component (Poortinga, 2006; Van Deth, 2008). As opposed to cognitive social capital, structural social capital involves a behavioral component. The structural component refers to the "wires" in the network: the intensity and quantity of connections between people. It consists of a collection of ties characterized by the relation between the people connected, and the possible institutional embeddedness of these ties. The idea of the latter is that when ties are embedded in institutions, it is more likely that resources will be exchanged (Putnam, 1993; Hooghe and Stolle, 2003).

The cognitive component refers to the "nodes" in a network: attitudes and values such as perceptions of support, reciprocity, and trust that contribute to the exchange of resources (Poortinga, 2006). Often, trust is seen as the main component of social capital (Gambetta, 1988; Putnam, 1993; Fukuyama, 1995). According to Portes and Sensenbrenner (1993), bounded solidarity and enforceable trust are the main components of social capital in immigrant communities. In this paper, I label the level of trust in the nodes of a network *cognitive* social capital.

Two aspects in the approach taken should be emphasized at this point. First, social capital is analyzed on the individual level, as opposed to the collective level. Some scholars discuss social capital as collectively produced and benefiting the community (Coleman, 1990; Putnam, 1993). Others (Bourdieu, 1986; Lin, 2001; Flap and Völker, 2004) have focused on social capital as a pool of resources, which may be helpful for the individual's goal attainment. In this paper, I do not analyze the social capital effects of the "ethnic community" as such, but I focus on its returns for the individual.

Second, according to the definition of Van Der Gaag and Snijders (2004), resources may (or may not) become available. The question of may or may not refers to the distinction between access to and the actual use of resources (as discussed by Lin, 2001). I consider social capital as access to resources. The reason is that not only the resources you actually activate are essential but also the ones that are potentially available. When measuring activated social capital only, one potentially underestimates its effect. For example, Drever and Hoffmeister (2008) investigate to what extent German immigrants found jobs through their social networks (as opposed to other search methods). Analyzing social capital in such a manner overlooks that social networks can be effective in other ways as well, such as receiving help with applying, providing references, or negotiating wages. Besides, when analyzing the relation between social capital and being employed, one cannot rely on activated capital of this kind: all people considered already found a job. Hence, in this paper, I analyze whether having access to a number of resources through ties can be associated with a better position on the labor market. In the next sections, I discuss what this implies for bonding and bridging.

Bonding Social Capital

Bonding social capital implies having dense ties and thick trust. The underlying principle is that of network closure: In a network with closure the members of the network have ties with all members (Coleman, 1988). As discussed above, this can be split up in a structural and a cognitive part. In terms of structural social capital, the concept of bonding is based on the idea of the "strength of strong ties" (Lin, Ensel, and Vaughn, 1981; Coleman, 1990). The strength of a relationship refers to a combination of the time spent, emotional intensity, intimacy and reciprocity or acknowledged obligations. The stronger the relationship, the more likely the sharing and exchange of resources (Lin, 2001:66).

I define bonding *structural* capital as "ties that connect people and increase the degree of network closure." The clearest case of a network with a high degree of closure is probably the family. As Sanders and Nee (1996:233) point out: "As a social organization, the family's chief advantages are not simply tangible products, such as unpaid labor, but also involve the mutual obligation and trust characteristic of small groups." In other words, family ties may indeed be a good proxy for network closure. Within the family, social capital is distributed and effectively used (Coleman, 1988; Bubolz, 2001; Nauck, 2001) for example with respect to family businesses (Sanders and Nee, 1996; Alesina and Giuliano, 2007).

Not only family ties contribute to one's personal network with a high degree of closure. Depending on the level of analysis one chooses to focus on, one could classify all ties with co-ethnics as contributing to a dense network with closure. There is ample research suggesting that ethnic networks function as a means to make headway on the labor market, as these networks rely on ethnic solidarity and enforceable trust (see, e.g., Portes and Sensenbrenner, 1993; Waldinger, 1994; Portes, 1995). However, as Sanders and Nee (1996) argue, a limitation of solidarity based on ethnic ties per se is that they are difficult to enforce on the community level. The reason is that when opportunities are available outside the ethnic community, one is less dependent on ethnic resources; therefore the weaker is the mechanism that maintains bounded solidarity and enforceable trust within the ethnic group. Within the family, solidarity is likely to be less vulnerable. As Sanders and Nee (1996:233) point out: "Cooperation in the family not simply stems from self-interest, but from a moral order in which the accumulation of obligation among members builds a solidarity best described as 'household communism'". Structural bonding social capital will therefore be operationalized as the strength of family ties.

In terms of *cognitive* social capital, the relations in a network are characterized by their degree of trust. Within trust, one can differentiate between thick or particular and thin or generalized trust. Whereas thin or generalized trust refers to loose ties and trust in institutions, thick or particular trust is associated with strong ties, solidarity, and primary contacts (Hughes, Bellamy, and Black, 1999). Bonding social capital is associated with thick and particular trust.

The advantage of thick as opposed to thin trust is that it is more likely to be enforced. Coleman (1988) explains this with network closure: the combination of closure and thick trust increases the likelihood of resources to be exchanged. These networks consist of people who

mutually support each other because they share a similar social identity. This support is likely to be limited to insiders (Onyx and Bullen, 2000). Hence, thick trust in a social structure contributes to the exchange of resources within this structure. Subsequently, *cognitive* bonding social capital can be described as the attitudes and values (such as trust) that contribute to the exchange of resources among the members of an individual's close and dense network.

Bridging Social Capital

Structural bridging social capital refers to the collection of ties that form an individual's "wide" social network. A wide social network is a network that contains structural holes (Burt, 2001). Structural holes are gaps in networks, and an opportunity to broker the flow of information between people and create an advantage for the individual whose relationships span the holes. A bridge is a tie that spans a structural hole (Burt, 2001). The advantage of bridging ties is that unique information and opportunities come into reach (Putnam, 2000:22).

In most empirical studies, however, no conclusive network information is available; consequently structural holes cannot be observed directly (see also Marsden, 1990). Hence, ties that span structural holes need to be measured with a proxy. Structural holes are for example gaps across socioeconomic characteristics such as class, ethnicity, and age (Portes, 1998). Ties that cut across these socioeconomic variables can be seen as a proxy for ties that span structural holes.

Two types of crosscutting ties are identified in this paper (following Wuthnow, 2002): identity and status bridging. Identity bridging refers to ties that span culturally defined differences, such as ethnic origin. Ties that cut across the ethnic divide are especially important for immigrants, as they are a link out of the ethnic community and by that create a wider network containing more valuable resources, such as job opportunities (Heath and Yu, 2005). Status bridging refers to ties that span vertical arrangements of power, wealth, and prestige.² As a way to get access to resources, status bridging may be increasingly important for disadvantaged

²As bridging is a horizontal metaphor, the ties between people with a different authority or social-economic status (*i.e.*, vertical ties) are sometimes also referred to as linking social capital. To avoid introducing more terminology, I will continue to refer to status bridging.

people (Erickson, 1996; Lin, 2001; Wuthnow, 2002). Access to institutions is often assumed to contribute in establishing ties that bridge across status (Putnam, 2000). As a result, I include inter-ethnic contacts and access to institutions with predominantly native residents, and construct a scale that proxies spanning structural holes (*see* section Data and Measurement).

According to Granovetter's (1973) "strength of weak ties hypothesis," it is usually weak ties that serve as bridges, since strong ties, such as family members, do not provide new information. However, Burt (2001) points out that it is not necessarily tie strength as such, but spanning a structural hole that encloses new information. Once a hole is bridged, opportunities for valuable information increase. Also Leonard and Onyx (2003) conclude that networks are not necessarily best connected through weak ties. In other words, building bridges is done both through weak and strong ties. In the measurement, I therefore focus on spanning structural holes by building inter-ethnic contacts, rather than taking the weak ties in one's network. I hence include strong ties, such as having a partner born in the Netherlands and weak(er) ties, such as having native Dutch friends or acquaintances.

Cognitive bridging social capital is characterized by thin or particular trust: "it is associated with the organic solidarity of looser, more amorphous and secondary relations" (Newton, 1997:578). Thin trust is also associated with confidence in institutions or in the government (Nooteboom, 2007). Often thin trust is related to the values shared in a society. Whereas one might have difficulties in imagining what "organic solidarity" in daily life means, values of (modern) society are more straightforward. For example, Uunk (2003) analyzes the "modern" attitudes of the four main immigrant groups in the Netherlands. He differentiates between (1) the gender-specific division of roles, (2) the role of women in society, (3) central family issues, (4) authority relations, (5) moral issues, and (6) religion. Ode and Veenman (2003) also include outward orientation in their analysis, which includes both opinions on interethnic contacts and the use of the host society's language. They find that both modernization and outward orientation contribute positively to the economic integration of immigrants in the Netherlands. As a result, I describe cognitive bridging social capital as "thin trust, that is the attitudes and values such as outward orientation that contribute to the exchange of resources in one's wide social network."

Social Capital and Labor Market Outcomes

So far, several forms of social capital have been discussed. In the following section I argue how these forms are expected to relate to the position of immigrants on the labor market. One could identify three arguments that explain why for migrants bridging social capital is expected to result in better labor market outcomes.

First, building bridging social capital implies realizing access to unique information by means of network diversification: it refers to spanning structural holes across identity and status. These bridges create opportunities for upward mobility on the labor market (Granovetter, 1995). As Burt (2004) puts it, standing near a structural hole in a network structure has a higher risk of having "good ideas," because people connected across groups are more confronted with alternative ways of thinking which gives them more options to select from.

Second, the idea of social capital being a *capital* – in the sense that it yields positive returns – is based on the assumption that social relations connect people to valuable resources. As Haug (2003; *see* also Friedberg, 2000; Kanas and Van Tubergen, forthcoming) points out, it is in particular *host-country-specific* (social) capital that is beneficial for labor market outcomes. In other words, bridging the ethnic divide is effective for migrants, as it implies accessing a network that contains valuable host-country-specific resources.

Third, for migrants, inter-ethnic ties are important, as they are a link out of the ethnic community and by that provide alternative channels for the search for (better) jobs (Heath and Yu, 2005), for example as a strategy to circumvent discrimination (Mouw, 2002).

Analyzing the labor market outcomes for Puerto Rican and Mexican immigrants in the United Sates, Aguilera (2002, 2005) finds that having inter-ethnic friends and organizational involvement is positively related to hourly earnings and participation on the labor market. Kanas and Van Tubergen (forthcoming) also use the Social Position and Use of Utilities Immigrants' Survey (SPVA) data and, although the paper focuses on the impact of origin and host country schooling, they find little support for the effect of contacts with natives on employment. Additionally, earlier research shows that a tie with a higher status improves the chances of finding a better job (Lin, Ensel, and Vaughn, 1981; De Graaf and Flap, 1988). As natives often hold higher occupational statuses than immigrants, it can be expected that inter-ethnic contacts contribute to status

bridging. This is probably even more the case when these inter-ethnic ties are embedded in institutions.

With respect to cognitive bridging social capital, Ode and Veenman (2003) also make use of the SPVA data that are used in this paper, and analyze the relation between informal participation, modernization and out-group orientation and occupational level for immigrants in the Netherlands. They find a positive effect for modernization. This leads me to formulate the following hypothesis:

H1: There is a positive relationship between the level of bridging social capital and labor market outcomes (*i.e.*, the likelihood to be employed and higher income).

The returns of bonding social capital are less clear-cut. Two opposing lines of argumentation can be followed. The first is the "closure argument," as put forward by Coleman (1988, 1990). Closure in a network provides more reliable communication channels, and protection from exploitation by the members of the network; it hence is a capital with positive returns. One could argue that especially immigrants need sincere network support, as they are more vulnerable than the native population. As Nee and Sanders (2001:390) put it: "The social capital embodied in family relationships promotes cooperation needed in realizing both economic and non-economic values. Coleman's (1988) analysis of social capital, for example, illustrates how relations within the family account for differences in school performance. The social connections that individual members invest in and accumulate, provide information and access to resources available to all members of the family."

The above argument is challenged by the "isolation" argument. It runs counter to the argument of bridging social capital: whereas bridging ties create opportunities, high closure does not, because the same information is being circulated within the network. This is the argument rooted in the statement that "whereas bonding is to get by, bridging is to get ahead" (Putnam, 2000). This could be true for immigrants, as migrant communities can be isolated from the native population, who is in control of the most valuable resources. When being embedded into ethnic networks, successful upward mobility may be impeded due to social obligations, pressure to conformity, or "downward leveling norms" (Portes, 1998). Such mobility traps can consequently lead to ethnic segmentation or "downward assimilation" (Portes, 1995). The embedding into ethnic networks may prevent contacts with the host society and thus hamper

integration (Haug, 2007:100). Furthermore, social capital, especially that of the bonding type, can be a burden as it may imply giving without receiving (Portes, 2000).

The little research available on immigrants' performance on the labor market and their family-based social capital seems to support the closure argument. Sanders, Nee, and Sernau (2002:308) conclude that: "...our research helps explain how family- and ethnic-based social networks, through their properties of social capital and closure, influence the incorporation of immigrants into their host society." Along the same line, Sanders and Nee (1996) find that family social capital increases the likelihood of immigrants in the U.S. being self-employed. Sanders, Nee, and Sernau (2002), studying Asian immigrants in Los Angeles, find that job seekers ask their better-connected relatives, friends, and acquaintances to serve as intermediaries. These networks provide resources in order to make headway on the labor market. In other words, due to closure in their social network, immigrants improve their position on the labor market. I thus follow the closure argument and hypothesize that:

H2: There is a positive relationship between the level of bonding social capital and labor market outcomes (*i.e.*, the likelihood to be employed and higher income).

DATA AND MEASUREMENT

For the empirical analyses, I make use of the 2002 wave of the SPVA (Groeneveld and Weyers-Martens, 2003). The SPVA contains detailed information on the economic and social position of the four largest non-western immigrant groups in the Netherlands: Turks, Moroccans, Antilleans, and Surinamese.³ The Netherlands has been a net immigration country since the 1960s. Until the 1990s, immigration in the Netherlands has been dominated by these four ethnic groups. Suriname and the Dutch Antilles were former colonies of the Netherlands; the Moroccans and Turks came to the Netherlands in the 1960s providing mainly unskilled labor. In 2007, these four groups accounted for 7.1% of the total Dutch population.

The SPVA survey is the main data source for monitoring the position of ethnic minorities in the Netherlands (Guiraudon, Phalet, and

³For a detailed description of survey and sampling technique, *see* Groeneveld and Weyers-Martens (2003).

Ter Wal, 2005). The survey is a stratified sample, in which the respondents are selected in 13 communities (including the four biggest cities) with relatively large numbers of these four minority groups. The SPVA survey claims to be a representative sample with respect to the social and economic position of the four main non-western immigrant groups in the Netherlands. Although the SPVA is a unique data set, there are also some limitations. First, the data are cross-sectional, which implies that it is impossible to examine the causality of relationships. This is also addressed in the discussion. Second, the non-response was rather high (ranging from 48% for the Turks and Moroccans to 56% for the Surinamese). Although this is high, there are no indications for systematic non-response; furthermore, measures were taken to also include those that are less integrated culturally and economically (Groeneveld and Weyers-Martens, 2003).

The sample for the analysis of employment consists of those active on the labor market and in the age category 25–45 years. The lower boundary has been chosen because those older than 24 are assumed to have finished their studies and to be active on the labor market; the higher boundary, as entrance to the labor market is primarily decided in the first part of one's working life (Müller and Gangl, 2003). The sample for the analysis of income consists of people currently employed⁴ and in the age category 25–65 years. Income is measured as total net income in Euro.

For the different forms of social capital, measurement scales are developed rather than including items separately. The argument to do so is that if several items are considered part of a concept, they should also be treated accordingly. Scaling techniques test whether these items can also be taken together from an empirical point of view. Two scaling techniques are applied. First, a nonparametric item response theory (IRT) model for developing cumulative scales, the so-called "Mokken scaling method" (Mokken, 1996). The logic of IRT is based on the pattern in the items regarding the number of people that gave a positive response, rather than the items simply being correlated. The advantage of IRT models – as opposed to reliability analysis – is that a Mokken scale deals with the ordinal structure between the items. The following example illustrates this advantage. Few of the respondents in the sample have a partner who is born in the Netherlands. It therefore correlates relatively low with the other items that measure inter-ethnic contacts. However, it appears

⁴Following the definition of the CCS 91: more than 11 h work per week (Groeneveld and Weyers-Martens, 2003).

that those who have a native Dutch partner also score positively on the other items that measure inter-ethnic contacts, but not (necessarily) the other way around. IRT models take into account such a stepwise ordering of the items. The most important measure that a set of items must meet to form an acceptable survey construct is Loevinger's homogeneity coefficient (H). The following cut-off values are conventional to judge a Mokken scale: H > 0.30 being a useful scale, H > 0.40 a medium strong scale, and H > 0.50 a strong scale (Mokken, 1996). As a second measure, the more conventional reliability of the scale is estimated with Cronbach's alpha. A Cronbach's alpha of 0.60 is an often-mentioned threshold for a scale to be a reliable survey construct.

The two scales measuring bonding structural and cognitive social capital consist of 12 items that cover family ties and values (*see* Table 1). The scale for structural bonding consists of six items that measure the strength of family ties by the frequency of giving or receiving help and/or advice from one's parents or children, and the frequency of contact with

TABLE 1
THE ITEMS USED TO MEASURE DIFFERENT FORMS OF SOCIAL CAPITAL

Bonding	Structural	Received help from parent/child in past 3 months ^a
C	Network closure	Helped parent/child in past 3 months ^a
		Got advice from parent/child in past 3 months ^a
		Gave advice to parent/child in past 3 months ^a
		Saw parent/child in past 12 months ^b
		Had contact with parent/child in past 12 months ^b
	Cognitive ^c	Trust family more than friends
	Thick trust	Discuss problems rather with family
		Family members should be there for each other
		You can always count on your family
		In case of worries family should help
		Family members keep each other informed
Bridging	Structural	More contact with native Dutch than own ethnic group ^a
	Spanning	Has native Dutch friends or acquaintances (y/n)
	structural holes	Receives visits at home from native Dutch friends or neighbors ^d
		Contact with native Dutch in private life ^d
		Partner born in the Netherlands (y/n)
		Member of an association that has little or almost no members who have the same ethnicity as the respondent (y/n)
	Cognitive ^c	Openness about sex is wrong (item reversed)
	Thin trust	Contact between men and women is too liberal (item reversed)
		It is best when children live at home until they marry (item reversed)
		Men and women can live together unmarried

Notes: aRange: no, sometimes, frequently.

^bRange: 1 (never)-7 (daily).

cRange: 1 (do not agree at all)-5 (fully agree).

^dRange: never, sometimes, often.

one's parents or children (H = 0.46, alpha = 0.73). Evidently, this measurement does not cover one's entire family network; it furthermore emphasizes recent help, as opposed to support in the long run. As it was not available in the survey, relations with siblings, or long-term family support could not be included. This is a drawback, especially because siblings are of similar age as the respondent, making it perhaps more likely to have useful contacts and knowledge. On the other hand, it is also argued that inter-generational closure is especially beneficial for migrants, as the older generation may provide useful (host-country-specific) knowledge (Waldinger, 1994; Massey and Espinosa, 1997). Although possibly selective, the scale does proxy the strength of family ties. It could hence be argued that a person having strong relations with one's parents and/or children also has a good contact with his or her siblings. The same can be argued with respect to the emphasis on recent help: it is likely that family members who provide support in the short term also do so in the long term. The scale for cognitive bonding consists of six items covering trust in and positive attitudes toward the family (see Table 1). As these items deal with the family in a general way, these items do not have the disadvantages mentioned above. The values of Loevinger's H(0.40) and the Cronbach's alpha (0.77) clearly indicate that these items can be seen as a single construct.

Structural bridging is measured with a Mokken scale (H = 0.57, alpha = 0.71), based on six items that deal with inter-ethnic contacts. Identity bridging is included as having inter-ethnic contacts such as friendships, or receiving visits from native Dutch and having a partner that is born in the Netherlands. Status bridging is measured by being a member of an association that contains little or almost no members who have the same ethnicity as the respondent does. The associations included in the survey are sports/hobby clubs, unions, NGOs, political parties, and religious organizations. Last, cognitive bridging social capital is measured with a Mokken scale (H = 0.46, alpha = 0.73), based on the items that were used by Uunk (2003) to measure outward orientation: opinions about living together unmarried, the contact between men and women, and sexual openness.

A number of controls are included in the analyses. The main part of the difference in labor force status between immigrants in the Netherlands is due to differences in educational attainment and language proficiency (Bevelander and Veenman, 2004). Generally, language proficiency is found to have a positive impact on employment (Van Tubergen, Maas,

and Flap, 2004) and income (Dustmann and Van Soest, 2002). Therefore, besides educational attainment a Mokken scale of language proficiency is included as a control variable.⁵

Furthermore, I control for the educational attainment of the parents (measured as the highest degree obtained by either the father or the mother), gender, age, being married, urban versus rural domicile, ethnic group, first versus second generation and with respect to income for the number of contracted working hours, having a temporal job and being self-employed. First-generation immigrants are defined as those who are born in Turkey, Morocco, Suriname, or the Dutch Antilles. Second-generation immigrants are those who are born in the Netherlands with at least one parent born in one of the aforementioned countries, or those who are born abroad and migrated to the Netherlands at an age younger than 6.

Last, the duration of stay in the host society may have an impact on labor market outcomes (Li, 2004). Logically, duration of stay also affects the creation of bridging social capital: it is likely that the time spent in a country increases the probability of building bridges and thin trust. Duration of stay will therefore partially incorporate the effect of social capital. Yet, the duration of stay also proxies other factors influencing economic outcomes, such as familiarity with the labor market and the institutional design of the host society (Büchel and Frick, 2005).

RESULTS

In Table 2, the frequency or mean and standard deviation of the independent variables are presented for both samples. Most respondents have a rather low educational attainment (around 30% has up to primary education only); this is even lower for their parents (almost 60% of the respondent's parents highest degree obtained is that of primary education). Last, the sample contains slightly less women, and a relatively small part of the sample can be classified as a second-generation immigrant.

In Tables 3 and 4, the likelihood of employment and logged income is predicted by the social capital variables and controls. To make them comparable within models, all variables are standardized between 0 and 1. With respect to multi-collinearity, the highest variance inflation

⁵The items included were: "Problems with speaking Dutch," "Problems with reading Dutch," "Frequency of using Dutch with partner" and "Frequency of using Dutch with children." The Loevinger's H = 0.65, Cronbach's alpha = 0.83.

TABLE 2
DESCRIPTIVE STATISTICS SAMPLE

	Sample En	nployment	Sample Income	
	Mean	SD	Mean	SD
Social Capital				
Cognitive bonding	0.70	0.17	0.68	0.17
Structural bonding	0.40	0.26	0.41	0.26
Cognitive bridging	0.43	0.23	0.46	0.22
Structural bridging	0.32	0.22	0.36	0.23
Age	35.23	5.75	38.88	8.51
Duration of stay in years	17.77	8.41	20.21	9.16
Language proficiency	0.67	0.29	0.73	0.27
Number of hours working	_	_	35.14	8.56
C	%	N	%	N
Ethnic Group				
Moroccans	24.27	467	18.22	271
Turks	27.44	528	22.60	336
Antilleans	22.35	430	25.42	378
Surinamese	25.94	499	32.74	293
Second generation	15.33	290	13.99	208
Female	46.54	895	38.16	567
Married	51.09	983	50.24	747
Urban domicile	68.19	1,312	65.37	972
Temporary job	_	_	11.70	174
Self-employed	_	_	5.45	81
Educational Attainment				
Up to primary	30.72	591	24.28	361
Lower secondary	24.84	478	25.15	374
Upper Secondary	28.59	550	30.73	457
College/University	14.55	280	18.49	275
No information on educational level	1.30	25	1.34	20
Parental Education				
Up to primary	62.01	1,193	57.09	849
Lower secondary	13.05	251	15.47	230
Upper Secondary	8.21	158	9.75	145
College/university	9.72	187	11.16	166
No information on educational level	7.02	135	6.52	97
Total	100	1,923	100	1,487

Source: SPVA (2002).

factor found is 3.05, which is below the often-mentioned threshold of 5. To account for possible bias in the standard errors due to heteroskedasticity, Huber-White robust estimates of the standard errors are reported.

The Likelihood of Employment

In Table 3, the likelihood of employment is predicted by the social capital scales and the controls; the coefficients representing odds ratios.

TABLE 3

LOGISTIC REGRESSION PREDICTING THE LIKELIHOOD OF EMPLOYMENT, ODDS RATIOS (N = 1,923)

	Coefficient	SE
Social Capital		
Cognitive bonding	0.834	0.318
Structural bonding	1.523	0.354
Cognitive bridging	1.746	0.606
Structural bridging	2.225*	0.744
Ethnic Groups		
Surinamese	Ref.	
Turkish	0.668	0.141
Moroccan	0.435***	0.088
Antillean	0.670*	0.126
Second generation	0.897	0.197
Duration of stay	0.714	0.486
Female	0.291***	0.036
Age	4.962	4.217
Married	1.499**	0.219
Urban domicile	1.034	0.130
Educational Attainment		
Primary education	Ref.	
Lower secondary	1.614***	0.234
Upper secondary	2.639***	0.396
College/university	4.063***	0.980
No info on educational level	4.076**	2.116
Language proficiency	3.142***	0.819
Parental Education		
Parent primary education	Ref.	
Parent lower secondary	1.160	0.236
Parent upper secondary	1.070	0.255
Parent college/university	1.370	0.372
Parents no info on educational level	0.964	0.228
Constant	0.553	0.280
Log-likelihood	-995.100	
Pseudo R^2	0.176	

Notes: *p < 0.05, **p < 0.01, ***p < 0.001 (two-tailed test), robust standard errors.

Source: SPVA (2002).

Only structural bridging can be associated with a higher likelihood of being employed. Those with a maximum score on structural bridging social capital are 2.2 times more likely to be employed than those with a minimum score. The effect size of structural bridging is similar to having upper secondary education, when being compared to those with primary education only. Cognitive bridging social capital, as well as both scales that measure bonding social capital, cannot be associated with a higher likelihood of being employed. It was also tested whether the effect of bridging social capital is different for men and women or for the ethnic groups, but this appeared not to be the case (data not shown).

TABLE 4 Ordinary Least Squares Regression Predicting Income (ln), Standardized Coefficients (N = 1,487)

	Coefficient	SE
Social Capital		
Cognitive bonding	0.050	0.055
Structural bonding	0.041	0.036
Cognitive bridging	0.000	0.055
Structural bridging	0.139**	0.050
Ethnic group		
Surinamese	Ref.	
Turkish	-0.023	0.030
Moroccan	-0.070*	0.029
Antillean	-0.024	0.026
Second generation	-0.037	0.036
Duration of stay	0.323***	0.089
Female	-0.154***	0.021
Age	0.168	0.089
Married	0.017	0.023
Urban domicile	0.017	0.018
Temporary job	-0.091**	0.030
Contracted hours	1.432***	0.157
Self-employed	0.067	0.078
Educational Attainment		
Primary education	Ref.	
Lower secondary	0.044	0.025
Upper secondary	0.105***	0.024
College/university	0.329***	0.033
No info on educational level	0.027	0.055
Language proficiency	0.115**	0.040
Parental Education		
Parent primary education	Ref.	
Parent lower secondary	-0.003	0.026
Parent upper secondary	-0.024	0.030
Parent college/university	-0.012	0.033
Parents no info on educational level	-0.021	0.035
Constant	6.233***	0.098
Adjusted R^2	0.386	

Notes: p < 0.05, p < 0.01, p < 0.01, p < 0.001 (two-tailed test), robust standard errors.

Source: SPVA (2002).

With respect to the controls, their coefficients correspond with findings from previous literature. Both educational attainment and language proficiency increase the odds of being employed. Respondents with a maximum score on the language proficiency scale are 3.1 times more likely to be employed than those with a minimum on the scale. The education of the parents does not affect the likelihood of employment. This is probably due to the fact that the parents' influence is included in the coefficient of the educational attainment of the respondent. Moreover, as most migrants in the sample are first-generation migrants, the intergenerational transmission of parental resources is likely to be less strong than for

native residents. Furthermore, those who are married have a higher likelihood to be employed than those who are not; women are less likely to be employed than men are. There is no significant effect for the second generation, the duration of stay, or the place of residence. Last, taking into account the controls, Moroccans are significantly less likely to be employed than the Surinamese.

Income

In Table 4, the regression model with respect to income is presented. Again, only structural bridging social capital can be positively associated with one's income. Neither cognitive bridging nor the scales that measure bonding can be associated with income. It was tested with interaction terms whether the coefficients of social capital are different for men and women. It appears that for women, cognitive bridging is positively associated with income, but not for men (data not shown). It was also tested whether the effects of the several forms of social capital were different for the ethnic groups, but this was not the case (data not shown). Hence, only structural bridging social capital can be positively associated with income. For women, this also holds for cognitive bridging.

The control variables behave similar as in the analysis of employment. However, in the analysis of income, the duration of stay is positively associated with income. Also, there is no difference in income with respect to those who are married and those who are not. Furthermore, those who have a temporary job have a lower income, people who work more hours in a week, have a higher income. Those who are self-employed do not have a higher or lower income than those who have a job with an employer.

CONCLUSION AND DISCUSSION

In this paper, I analyzed the returns of bonding and bridging social capital on the likelihood of employment and income for the four main non-western immigrant groups in the Netherlands. I hypothesized that both bonding and bridging social capital are positively associated with labor market outcomes. Besides the distinction between bonding and bridging, I differentiated between the structural (or behavioral) part of social capital, and the cognitive (or attitudinal) part. Bonding social

capital was conceptualized as a network with high closure and thick trust. It was operationalized as the strength of family ties (structural), and solidarity and trust toward the family (cognitive). Bridging social capital was conceptualized as networks that span structural holes by building bridges to the native population, together with thin trust. It was operationalized as having inter-ethnic contacts and memberships of organizations with a high share of native residents (structural), plus having attitudes that are congruent with that of the native residents (cognitive).

The findings indicate that for immigrants in the Netherlands, only structural bridging social capital can be associated positively with the likelihood of being employed and with income. Both cognitive bridging social capital and bonding social capital cannot be associated with the likelihood of being employed, nor can they be associated with income. Bonding social capital, measured as closure in the most dense network - that of the family - does not influence the labor market outcomes of immigrants in the Netherlands. This supports the "isolation" rather than the "closure" argument: High closure in the family network may indicate a high level of solidarity and enforceable trust, but it does not provide one with new and valuable information that is useful in finding a (better paid) job. Hence this type of network is not effective for making headway on the labor market. On the other hand, it was found that networks that include inter-ethnic contacts can be positively associated with labor market outcomes. Those people with a high level of bridging social capital are more than two times more likely to be employed than those who do not possess bridging social capital. For those who have work, structural bridging social capital is more strongly associated with income than language proficiency is. This is neither different for men and women, nor does it matter which ethnic group one belongs to. In other words, having inter-ethnic networks seems to pay off, both in terms of access to the labor market as in earnings.

Furthermore, the findings show differences between structural and cognitive social capital. Although the attitudinal aspect of social capital is often thought to have positive effects (*see*, *e.g.*, Gambetta, 1988), this was not found in the present study. Only for women, cognitive bridging is positively associated with their income. Further research needs to be carried out to investigate whether this is also true in other situations.

Limitations

The findings of this study have to be seen in light of some limitations. The first is the cross-sectional nature of the data used. As several scholars point out (Mouw, 2002; Offe and Fuchs, 2004), many studies on social capital suffer from an endogeneity problem: On the one hand, social capital may contribute to economic success, but economic participation may on the other hand also enhance social capital. This limitation also applies to the current study, and could for example be solved with a longitudinal approach. The second limitation concerns the measurement of structural bonding social capital. Due to the availability of the data, the measurement of structural bonding was limited to the strength of family ties with one's parents and/or children. Being unable to include information on, for example, siblings or co-ethnics in general, one does not capture potentially valuable information from family members of similar age as the respondent. Whereas one can argue that this measurement serves as a proxy for the strength of all family ties, it is however likely that the effect is underestimated. Further research would be necessary to answer this question.

Furthermore, the relation between structural bridging social capital and labor market outcomes cannot be ascribed to the *network* effect of social capital only. It could very well be that measurement of inter-ethnic contacts to some extent also captures unobserved characteristics related to other dimensions of (social or psychological) integration. In other words, it is not only social capital that is positively related to performance on the labor market; this also holds for other dimensions of integration. These dimensions may be captured by "having inter-ethnic contacts." Last, the current study is a single-case study. It therefore remains a question to what extent these findings also apply to other immigrant populations. However, the position of immigrants in the Netherlands is not exceptional when compared with that of immigrants in other European societies (Fleischmann and Dronkers, 2008).

To conclude, the findings with respect to bonding and bridging social capital are comparable for employment and income; variables that stand for rather different labor market outcomes. The reasoning behind bonding and bridging as applied in this paper seems to be similar for both access to and performance on the labor market. Keeping in mind its conceptualization, the statement that "whereas bonding is to get by, bridging is to get ahead" also seems to apply to the case of immigrants in the Netherlands.

REFERENCES

Aguilera, M. B.

2002 "The Impact of Social Capital on Labor Force Participation: Evidence from the 2000 Social Capital Benchmark Survey." *Social Science Quarterly* 83(3):854–874.

2005 "The Impact of Social Capital on the Earnings of Puerto Rican Migrants." *The Sociological Quarterly* 46(4):569–592.

Alesina, A., and P. Giuliano

2007 "The Power of the Family." Harvard Institute of Economic Research Discussion Paper no. 2132. Cambridge: Harvard University.

Beugelsdijk, S., and S. Smulders

2003 "Bridging and Bonding Social Capital: Which Type is Good for Economic Growth?" In The Cultural Diversity of European Unity, Findings, Explanations and Reflections from the European Values Study. Ed. W. Arts, J. Hagenaars, and L. Halman. Leiden: Koninklijke Brill. Pp. 147–184.

Bevelander, P., and J. Veenman

2004 "Variation in Perspective: The Employment Success of Ethnic Minority Males in the Netherlands, 1988–2002." *International Migration* 42(4):35–64.

Bourdieu, P.

1986 "The Forms of Capital." In *Handbook of Theory and Research for the Sociology of Education*. Ed. J. G. Richardson. New York: Greenwood. Pp. 241–258.

Boxman, E. A. W., P. M. De Graaf, and H. D. Flap

1991 "The Impact of Social and Human Capital on the Income Attainment of Dutch Managers." *Social Networks* 13(1):51–73.

Bubolz, M. M.

2001 "Family as Source, User, and Builder of Social Capital." *Journal of Socio-Economics* 30:129–131.

Büchel, F., and J. R. Frick

2005 "Immigrants' Economic Performance Across Europe – Does Immigration Policy Matter?" *Population Research and Policy Review* 24(2):175–212.

Burt, R. S.

2001 "Structural Holes Versus Network Closure as Social Capital." In *Social Capital: Theory and Research.* Ed. N. Lin, K. Cook, and R. S. Burt. New York: Aldine De Gruyter. Pp. 31–56.

2004 "Structural Holes and Good Ideas." American Journal of Sociology 110(2):349–399.

Coleman, J. S.

1988 "Social Capital in the Creation of Human Capital." *The American Journal of Sociology* 94(Suppl.):S95–S120.

1990 Foundations of Social Theory. Cambridge: Belknapp Press.

De Graaf, P. M., and H. Flap

1988 "With a Little Help from my friends. Social Resources as an Explanation of Occupational Status and Income in the Netherlands, the United States and West Germany." *Social Forces* 67(2):453–472.

Drever, A. I., and O. Hoffmeister

2008 "Immigrants and Social Networks in a Job-Scarce Environment: The Case of Germany." *International Migration Review* 42(2):425–448.

Dustmann, C., and A. Van Soest

2002 "Language and the Earnings of Immigrants." *Industrial and Labor Relations Review* 55(3):473–492.

Erickson, B. H.

1996 "Culture, Class, and Connections." American Journal of Sociology 102(1):217-251.

Flap, H. D., and B. Völker

2004 Creation and Returns of Social Capital. London: Routledge.

Fleischmann, F., and J. Dronkers

2008 "De sociaaleconomische integratie van immigranten in de EU. Een analyse van de effecten van bestemmings- en herkomstlanden op de eerste en tweede generatie." *Sociologie* 4:2–37.

Friedberg, R. M.

2000 "You Can't Take it with You? Immigrant Assimilation and the Portability of Human Capital." *Journal of Labor Economics* 18(2):221–251.

Fukuyama, F.

1995 Trust: The Social Virtues and the Creation of Prosperity. New York: The Free Press.

Gambetta, D.

1988 Trust: Making and Breaking Cooperative Relations. Oxford: Blackwell.

Granovetter, M.

1973 "The Strength of Weak Ties." American Journal of Sociology 78(6):1360-1380.

1995 Getting a Job. A Study of Contacts and Careers. Chicago: University of Chicago Press.

Green, G. P., L. M. Tigges, and D. Diaz

1999 "Racial and Ethnic Differences in Job-Search Strategies in Atlanta, Boston and Los Angeles." *Social Science Quarterly* 80(2):263–278.

Groeneveld, S., and Y. Weyers-Martens

2003 Minderheden in beeld, SPVA-02. Rotterdam: Instituut voor Sociologisch-Econmisch Onderzoek (ISEO).

Guiraudon, V., K. Phalet, and J. Ter Wal

2005 "Monitoring Ethnic Minorities in the Netherlands." *International Social Science Journal* 57(1):75–88.

Haug, S.

2003 "Interethnische Freundschaftsbeziehungen und soziale Integration. Unterschiede in der Ausstattung mit sozialem Kapital bei jungen Deutschen und Immigranten." Kölner Zeitschrift für Soziologie und Sozialpsychologie 55(4):716–736.

^{2007 &}quot;Soziales Kapital als Resource im Kontext von Migration und Integration." In Soziale Netzwerke und soziale Ungleichheit. Zur Rolle von Sozialkapital in modernen

Gesellschaften. Ed. J. Lüdicke, and M. Diewald. Wiesbaden: VS Verlag für Sozialwissenschaften. Pp. 85–112.

Heath, A. F., and S. Yu

2005 "Explaining Ethnic Minority Disadvantage." In *Understanding Social Change*. Ed. A. F. Heath, J. Ermish, and D. Gallie. Oxford: Oxford University Press. Pp. 187–224.

Hooghe, M., and D. Stolle

2003 Generating Social Capital: Civil Society and Institutions in Comparative Perspective. New York: Palgrave.

Hughes, P., J. Bellamy, and A. Black

1999 "Building Social Trust Through Education." In Social Capital and Public Policy in Australia. Ed. I. Winter. Melbourne: Australian Institute of Family Studies. Pp. 225–249.

Kanas, A., and F. Van Tubergen

Forthcoming "The Impact of Origin and Host Country Schooling on the Economic Performance of Immigrants." *Social Forces*, in press.

Leonard, R., and J. Onyx

2003 "Networking Through Loose and Strong Ties: An Australian Qualitative Study." Voluntas: International Journal of Voluntary and Non-profit Organizations 14(2):189–203.

Li, P. S.

2004 "Social Capital and Economic Outcomes for Immigrants and Ethnic Minorities." Journal of International Migration and Integration 59(2):171–190.

Lin, N.

1999 "Social Networks and Status Attainment." Annual Review of Sociology 25:467-487.

2001 Social Capital: A Theory of Social Structures and Action. Cambridge University Press: Cambridge.

----, W. M. Ensel, and J. C. Vaughn

1981 "Social Resources and Strength of Ties: Structural Factors in Occupational Attainment." *American Sociological Review* 46(4):393–405.

Marsden, P. V.

1990 "Network Data and Measurement." Annual Review of Sociology 16(1):435-463.

Massey, D. S., and K. E. Espinosa

1997 "What's Driving Mexico-U.S. Migration? A Theoretical, Empirical, and Policy Analysis." *American Journal of Sociology* 102:939–999.

Mokken, R. I.

1996 "Nonparametric Models for Dichotomous Responses." In *Handbook of Modern Item Response Theory.* Ed. W. J. Van Der Linden, and R. K. Hambleton. New York: Springer. Pp. 351–367.

Mouw, T.

2002 "Racial Differences in the Effects of Job Contacts: Conflicting Evidence from Cross-Sectional and Longitudinal Data." Social Science Research 31(4):511–538.

Müller, W., and M. Gangl

2003 Transitions from Education to Work in Europe: The Integration of Youth into EU Labour Markets. Oxford: Oxford University Press.

Nauck, B.

2001 "Social Capital, Intergenerational Transmission and Intercultural Contact in Immigrant Families." *Journal of Comparative Family Studies* 32(4):465–488.

Nee, V., and J. Sanders

2001 "Trust in Ethnic Ties: Social Capital and Immigrants." In *Trust in Society*. Ed. K. S. Cook. New York: Russell Sage Foundation. Pp. 374–392.

Newton, K.

1997 "Social Capital and Democracy." American Behavioral Scientist 40(5):575-586.

Nooteboom, B.

2007 "Social Capital, Institutions and Trust." Review of Social Economy 65(1):29-53.

Ode, A., and J. Veenman

2003 "The Ethno-Cultural and Socio-Economic Position of Ethnic Minority Groups in the Netherlands." In *Integrating Immigrants in the Netherlands. Cultural Versus Socio-Economic Integration*. Ed. L. Hagendoorn, J. Veenman, and W. Vollebergh. Aldershot: Ashgate. Pp. 173–198.

Offe, C., and S. Fuchs

2004 "A Decline of Social Capital? The German Case." In *Democracies in Flux.* Ed. R. D. Putnam. New York: Oxford University Press. Pp. 189–244.

Onyx, J., and P. Bullen

2000 "Measuring Social Capital in Five Communities." *The Journal of Applied Behavioral Science* 36(1):23–42.

Patulny, R. V., and G. L. H. Svendsen

2007 "Exploring the Social Capital Grid: Bonding, Bridging, Qualitative, Quantitative." International Journal of Sociology and Social Policy 27(1/2):32–51.

Poortinga, W.

2006 "Social Relations or Social Capital? Individual and Community Health Effects of Bonding Social Capital." *Social Science and Medicine* 63:255–270.

Portes, A.

1995 The Economic Sociology of Immigration. Essays on Networks, Ethnicity and Entrepreneurship. New York: Russell Sage Foundation.

1998 "Social Capital: Its Origins and Applications in Modern Sociology." *Annual Review of Sociology* 24(1):1–24.

2000 "The Two Meanings of Social Capital." Sociological Forums 15(1):1-12.

----, and J. Sensenbrenner

1993 "Embeddedness and Immigration: Notes on the Social Determinants of Economic Action." *The American Journal of Sociology* 98(6):1320–1350.

Putnam, R. D.

1993 Making Democracy Work. Civic Traditions in Modern Italy. Princeton: Princeton University Press.

2000 Bowling Alone. The Collapse and Revival of American Community. New York: Simon and Schuster.

Sanders, J., and V. Nee

1996 "Immigrant Self-Employment: The Family as Social Capital and the Value of Human Capital." *American Sociological Review* 61(April):231–249.

----, ----, and ----

2002 "Asian Immigrants' Reliance on Social Ties in a Multiethnic Labor Market." *Social Forces* 81(1):281–314.

Schuller, T.

2007 "Reflections on the Use of Social Capital." Review of Social Economy 65(1):11-28.

Uunk, W.

2003 "The Cultural Integration of Immigrants in the Netherlands: A Description and Exploration of Modern Attitudes of Turks, Moroccans, Surinamese, Antilleans and the Indigenous Population." In *Integrating Immigrants in the Netherlands. Cultural Versus Socio-Economic Integration.* Ed. L. Hagendoorn, J. Veenman, and W. Vollebergh. Aldershot: Ashgate. Pp. 199–234.

Van Der Gaag, M. P. J., and T. A. B. Snijders

2004 "Proposals for the Measurement of Individual Social Capital." In *Creation and Returns of Social Capital*. Ed. H. Flap, and B. Völker. London: Routledge. Pp. 199–218.

Van Deth, J.

2008 "Measuring Social Capital." In *The Handbook of Social Capital.* Ed. D. Castiglione, J. Van Deth, and G. Wolleb. Oxford: Oxford University Press. Pp. 150–176.

Van Tubergen, F., I. Maas, and H. D. Flap

2004 "The Economic Incorporation of Immigrants in 18 Western Societies: Origin, Destination and Community Effects." *American Sociological Review* 69(5):704–727.

Waldinger, R.

1994 "The Making of an Immigrant Niche." International Migration Review 28(1):3-30. Wuthnow, R.

2002 "Religious Involvement and Status-Bridging Social Capital." Journal for the Scientific Study of Religion 41(4):669–684.