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Remittances of Immigrant Citizens, Attachment to the Host Country and Transnationalism

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Abstract

The purpose of the paper was to investigate the remittance behavior of immigrant citizens and the motivations behind it, to conceptualize and investigate the determinants of remittances, which have unique implications for immigrant citizens. In addition to the general effects, this study considered effects across immigrant groups and justified that these effects were similar regardless immigrants' origin. The study is based on the data of the 2011 Immigrant Survey that was conducted by the Israel Central Bureau of Statistics. This survey is unique since this is the only survey of immigrants in Israel which included questions about personal remittances, transnational activities and social adaptation. The sample of the survey was representative of the population of immigrant citizens in Israel and included 3,952 respondents. The study results revealed that remittance behavior of immigrant citizens is predominantly driven by motives of altruism, and only in part by insurance and investment motivation.

Keywords Altruism · Attachment to host country · Immigrant citizens · Remittance behavior · Transnationalism

Introduction

In recent decades, globalization and increasing numbers of international migrants accelerated remittances worldwide. Remittances received from abroad comprise more than 10 percent of the gross domestic product in 25 developing countries, when about 27 percent of worldwide remittances come from developed countries.

The original online version of this article was revised due to misplaced the corresponding author name.

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Remittances have an essential impact on macroeconomic indicators of either the receiving or sending countries (Rapoport and Docquier 2006), thus the importance of understanding incentives to remit.

There is a wide range of studies on remittance behavior of foreigners, who left family behind in their countries of origin, and for whom remittances are a part of their households' strategy to improve economic well-being (de la Brie're et al. 2002; Loschmann and Siegel 2015; Osili 2007; Sana and Massey 2005; Semyonov and Gorodzeisky 2008; Stark and Dorn 2013). However, little is known about the remittance behavior of naturalized immigrant citizens, most of whom entered the host country for settlement, often with their families, or united with their families later. Sinning (2011) called such persons "permanent immigrants", since they intend to remain in the host country for the long run or permanently. The concept of 'permanent settlement migration' implies that immigrants move permanently from one nation-state to another (Castles 2002), in many of which citizenship is granted on the basis of long-term residence. The patterns of remittance behavior and incentives to remit may differ for foreigners and immigrant citizens, since for the latter, the issue of attachment to the host country is more important, and having nuclear family abroad is less common (Friberg 2012).

Rare empirical studies concerning remittance behavior of naturalized citizens show that they also remit. Most of these studies do not focus particularly on naturalized migrants, but on all immigrants comparing groups with different status. The findings about remittance patterns of immigrant citizens are not univocal. In Germany, naturalized citizens remitted far less than foreign nationals (Holst et al. 2012), but they remitted larger sums (Holst et al. 2008). Immigrant citizens in Canada and USA also were less likely to send remittances than foreigners (Ley 2013). However, in Australia, immigrant citizens were more likely to remit (Bettin et al. 2012). In Norway, they remitted comparable sums at similar rates to foreigners (Bilgili 2015). The study of Ambrosetti et al. (2013), focusing on the effect of legal status on transnationalism and remittances, showed that naturalization facilitates economic integration that could also mean more financial means to be transnational and remit, but dual citizenship holders are, however, the least transnational. Immigrants with larger economic resources save more, diversifying their saved assets across countries, whereas a higher level of financial development in the country of origin is associated with higher money transfers of migrant citizens (Bettin et al. 2012). Citizenship of developed host countries may facilitate immigrants' mobility. It gives an opportunity for easier entrance to many countries, but also an opportunity for staying abroad longer without the necessity of getting back to the host country to maintain their legal status as foreigners must do (Ley 2013). Citizens spending longer time abroad are more transnational, but may be less economically integrated, which can explain controversial findings of previous studies.

The paucity of studies on remittance behavior of immigrant citizens is surprising in light of the importance of remittance flows for the economies of both the sending and host countries. To the best of my knowledge, there are no studies focusing on remittance behavior of immigrant citizens in Israel. This paper aims to fill this gap.

According to Israeli legislation (Law of Return), only Jews or members of their families are granted Israeli citizenship immediately upon arrival. In their



decision to immigrate, religious and ideological motivation is accompanied by fear of nationalist and security concerns, but economic and employment motives are also important (Amit 2010). For immigrants from the Former Soviet Union (FSU), the largest group of immigrants in Israel, the decision to immigrate was pragmatic rather than ideological (Remennick 2002). Since Jewish immigrants are perceived in Israel as a returning Diaspora, the governmental policy is to support and facilitate social and economic integration of Jewish migrant citizens (Semyonov et al. 2015). Labor migrants and asylum seekers in Israel receive only temporary permits and cannot obtain citizenship; they are forbidden to bring their families and have to leave the country after their temporary visas expire. Almost all temporary migrants in Israel remit money to their countries of origin (Raijman and Kushnirovich 2012), but remittance behavior of immigrant citizens in Israel has not been investigated yet.

Since 1990, more than 1.2 million immigrants who were granted citizenship came to Israel (Central Bureau of Statistics 2018). In the early 1990s Israel experienced a massive influx of immigrants from the FSU increasing its population by about 20 percent, but there was immigration also from other countries, mainly from Ethiopia, Middle Eastern countries and North Africa, Western Europe and North and South America (Semyonov et al. 2015). Traditionally, immigrants in Israel are divided into the following groups: so-called Western immigrants from Europe and America, immigrants from Asia and Africa, and immigrants from the Former Soviet Union. Immigrants from Europe and America are the most educated and highincome group in Israel, as they came from highly developed industrialized countries and relatively rich economies (Semyonov et al. 2015). Although most FSU immigrants came from the European territory of the FSU, they are usually considered a separate group because of their cultural particularities and communist-Soviet past in their countries of origin (Kushnirovich 2010). FSU immigrants are highly educated (Remennick 2002), but they are disadvantaged in terms of income compared to natives and immigrants from Europe and America (Kushnirovich and Youngmann 2017). Despite cultural differences between immigrants from Ethiopia and immigrants from the Muslim countries of North Africa and the Middle East, both these groups arrived from more traditional and less industrialized societies than the Israeli host society (Semyonov et al. 2015). They are both low-educated and low-income Jewish ethnic groups in Israel (Kushnirovich and Youngmann 2017). Therefore, in the national statistics, they are often united into one group (see, for example, Statistical Abstract of Israel (Central Bureau of Statistics 2018)).

The division by regions is justified not only by socio-economic similarities of immigrants who came from each region, but also by the levels of the gross domestic products (GDP) per capita of sending countries in these regions. Macroeconomic characteristics are important for understanding remittance behavior (Amuedo-Dorantes and Pozo 2013). GDP per capita is especially important since most remittances worldwide are sent to the countries with low and middle GDP per capita (de Haas 2007). Some scholars use GDP per capita as a proxy of the economic conditions of remittances recipients in the countries of origin (Bettin et al. 2012). The GDP per capita in the sending countries of the Americas and Europe (mostly USA, France, United Kingdom and Argentina) ranges from 11 to 51 thousand dollars, in



FSU countries from 4 to 11 thousand dollars, and in the sending countries of Africa and Asia (mostly Ethiopia, Morocco, Algeria, Tunisia, India and Iran) it ranges from 0.486 to 4.8 thousand dollars (World Bank 2016).

After the last wave of massive immigration to Israel in the 1990s, remittances outflows grew by more than 100 percent, raising Israel to the 24th place in the world for the sum of remittances (World Bank 2016). Immigrant citizens constitute about a quarter of the Israeli population; therefore, understanding remittance behavior of this group is very important. The purpose of the paper was to investigate remittance behavior of immigrant citizens and the motivations behind it, to conceptualize the determinants of remitting money, and to explain how these determinants affected remittance behavior across different immigrant groups.

The rest of this paper is as follows: the second part of the paper outlines theoretical considerations of remittance behavior, the next part sets out the study's model, the fourth part presents the data source and method, and the fifth part presents the findings, which are discussed in the final section.

Theoretical Approaches to Remittance Behaviour

Motives to Remit

The growing literature on remittances in the two last decades revealed a variety of motives that may induce immigrants to remit. Two main approaches to remitting can be distinguished: the approach that stresses altruistic motives and the approach that focuses on self-interest.¹

Altruistic motives are the most commonly cited reasons for remitting money (Agarwal and Horowitz 2002; Lucas and Stark 1985). Altruistic incentives to remit encourage immigrants to send money to improve economic conditions and take care of their relatives and communities in their countries of origin (Fairchild and Simpson 2008). In this case, the utility function of the immigrant depends not only on his/ her own consumption, but also on the utility of the relatives in the country of origin (Lucas and Stark 1985), when the total utility may be expressed as a weighted average of these two elements (Stark 1995). Immigrants can derive utility not only from consumption, but also from self-respect (pure altruistic model), and from respect in the eyes of others (social-oriented altruistic model) i.e., close family or the wide ethnic immigrant community. Immigrants may use remittances as a compensation mechanism for their loss of status in the host country (Zhou and Li 2016). According to the *altruistic* model, immigrants' income is positively related to remittances since high-income immigrants are more capable of remitting (Loschmann and Siegel 2015; Rapoport and Docquier 2006; Stark 1995), and time spent in the host country is negatively related, since with time the ties with abroad wane and remittances decay (Agarwal and Horowitz 2002; Loschmann and Siegel 2015; Rapoport and Docquier 2006).

¹ For an overview, see Rapoport & Docquier (2006) and de Haas (2007).



Models focusing on self-interest include the exchange model, inheritance model, strategic motive, insurance, and investment models (Rapoport and Docquier 2006). Within the framework of the exchange model, immigrants send money to pay for various services that their family and friends perform for them in the country of origin, such as taking care of the migrant's assets (land, house) or relatives (children, elderly parents) (Cox 1987; Garip 2012). Under this motivation, remittances increase with growth in immigrants' income, and decrease with immigrants' education since more educated migrants have lower propensity to return (Rapoport and Docquier 2006). The *inheritance* model is based on the assumption that parents can encourage remittances by offering a "reward" in the form of inheritable assets (Hoddinott 1994; Rapoport and Docquier 2006). Within the inheritance model, immigrants' income is positively associated with remittances (de la Brie're et al. 2002; Rapoport and Docquier 2006), but education and time since arrival should not play a role (Rapoport and Docquier 2006). According to the strategic motive model, remittances may be a part of strategic interaction targeted at positive selection among migrants. Migrant workers are often paid based not on their individual productivity, but on the average productivity of their immigrant group; hence, skilled migrants can cause unskilled migrants to remain or return home (Rapoport and Docquier 2006; Stark 1995). In this model immigrants' income and education are positively related to remittances, and time since arrival is negatively related since with time workers' skills are valued by employers more fairly (Docquier and Rapoport 2000).

Insurance and investment models are based on new economics of labor migration theory (NELM) (Stark and Bloom 1985), which considers migration as a household strategy to spread income risks and overcome family income constraints (Amuedo-Dorantes and Pozo 2005; Holst et al. 2008; Semyonov and Gorodzeisky 2008). By sending money back home, migrants insure themselves against any risks associated with their migration (de Haas 2007; Fairchild and Simpson 2008). Under the insurance motivation, remittances depend on the recipient household's characteristics and not on the immigrant's characteristics (Rapoport and Docquier 2006). According to the investment model, remittances can be regarded as a return on household investments in migration and as a source of investment capital that can be used for entrepreneurial activities, education, or to facilitate the migration of other household members (de la Brie re et al. 2002; de Haas 2007; Lucas and Stark 1985). Remitting in order to acquire physical assets such as housing is widespread among immigrants (de la Brie re et al. 2002). Since families commonly invest more in education/migration of high skilled migrants, under this motivation remittances are positively associated with the immigrant's education and income in the host country (Holst et al. 2008; Rapoport and Docquier 2006).

More recent studies indicate that the phenomenon of remittance is complex and cannot be explained by a single motive. Motives of altruism and self-interest are often inextricable, because the motive of caring intertwines with the selfish wish to enhance prestige by being perceived as caring, so that altruism and self-interest are both important in the decision to remit (de Haas 2007; Lucas and Stark 1985). Some scholars found a combination of several motives: altruism and insurance (Foster and Rosenzweig 2001), altruism and a strategic motive (Docquier and Rapoport 2000), altruism, investment and insurance motives (Chimhowu et al. 2005).



Table 1 Summary of theoretical effects of detrminants to remit in the framework of different models

Determinants (Explanatory vari-	Motives	·	·		·	·
ables)	Altruism	Self-intere	st			
		Exchange	Inheritance	Strategic	Insurance	Investment
Expected effects based on Rapopo	ort and Doco	quier (2006)	:			
1. Migrant's income	>0	>0	>0	>0	ne	>0
2. Migrant's education	ne	< 0	ne	>0	ne	>0
3. Time since arrival	≤ 0	ne	ne	≤ 0	ne	ne
Expected effects based on Fokken (2005):	na et al. (20	13), Loschn	nann and Sieg	rel (2015),	Van Dalen e	t al.
4. Intentions to leave the host country	ne ^a	>0 ^a	$>0^{b}$	<0	ne ^b	>0 ^b
5. Transnational social ties	$> 0^{a,c}$	nea	$> 0^{c}$	nea	$> 0^{c}$	>0 ^c
Additional effects expected by this	s study:					
6. Attachment to the host country	>0	ne	<0	<0	>0	>0
7. Economic reasons of immigration	>0	ne	ne	>0	>0	>0

ne no effect

Based on a comprehensive review of literature on remittances, Rapoport and Docquier (2006) developed a framework of remittance predictors for different microeconomic models of remittances. Within this framework, migrants' income, education, and time since arrival affect remittances in different ways under different motivations (see the first three rows of Table 1).²

The framework of Rapoport and Docquier (2006) was transcended by other scholars who added the effects of return intentions on remittances. Remitting driven by self-interest is worthwhile as a preparation for an ensuing return (de la Brie're et al., 2002), therefore in *inheritance* and *investment* models, return intentions are positively associated with remittances (Loschmann and Siegel 2015). In the *insurance* model, remittances do not depend on return intentions (Loschmann and Siegel 2015). Fokkema et al. (2013) transcended this framework for remittance behaviour of second generation of immigrants, who are similar to immigrant citizens by their official status, having relatives abroad and maintaining social and economic ties with them. For the second generation, remittances are closely linked to investment

² The studies of Rapoport & Docquier (2006) included also other factors mostly related to the recipients' household characteristics, but not only. The current study addresses only factors relating to the migrants themselves (because of a lack of information about recipients of remittances).



^aSource: Fokkema et al. (2013). In the current study, instead of the term "return intentions" the broader term "intentions to leave the host country" was used

^bSource: Loschmann and Siegel (2015)

^cSource: Van Dalen et al. (2005)

in the ancestral country to where they could 'return' (or, more accurately, 'migrate'). Their study posited that under *exchange* motivation, 'return' intentions are positively associated with remittances, and under *altruism* motivation they have no effect on remittances (Fokkema et al. 2013). Return intentions of immigrants may reflect their failure in the host country (de Haas and Fokkema 2011). In this case, they feel less compelled to protect their current labor position by paying potential migrants for staying in the countries of origin. Thus, under *strategic* motivation, the effect of return intentions on remittances should be negative. Effects of the return intentions explained in the literature are presented in the fourth row of Table 1.

Remittances, Transnationalism, and Attachment to the Host Country

In the last decade, the new concept of transnationalism has emerged. It is based on the idea that developed communication, transportation and internet allow immigrants to keep in touch with their countries of origin across time. Numerous immigrants live in two or more countries at a time, maintaining close social links with their home countries and remaining a part of their original communities. This facilitates creation of new patterns of social relations and multiple belongings (Brzozowski et al. 2017a; de Haas and Fokkema 2011; Remennick 2002; Stark and Dorn 2013). One of the main questions in the literature on remittances is how transnationalism and attachment to the host country affect remittances, and how they are related to one another.

Assimilationist theories posit that immigrants should gradually assimilate in the receiving country, as their transnational ties simultaneously decline (Sana 2005; Snel et al. 2006). Within these theories, growing attachment to the host country replaces immigrants' attachment to the country of origin, and reduces their motivation to engage in transnational social activities (de Haas 2007; Sana 2005; Tamaki 2011). Maintaining social ties with the country of origin is an indicator of migrants' inability or unwillingness to adjust to the host society (de Haas and Fokkema 2011), and those who are poorly adjusted would show more transnational involvement (Snel et al. 2006). Correspondingly, maintaining ties to the country of origin is substitutive to attachment to the host country (Gans 1997), and the relationship between them would be negative (Ley 2013). Since maintaining developed transnational ties is positively associated with remittance-sending (Carling and Hoelscher 2013), according to assimilationist theories, immigrants who are more attached to the host country would be less involved in transnational activities and less likely to remit, which could explain why remittances decay over time.

Transnationalism theories perceive transnationalism as an alternative form of socio-economic adaptation in the host societies (Brzozowski et al. 2017a; Portes et al. 2002). Transnationalism may be an option, which enables to escape from the traditional alternative between "here" and "there" (Waldinger 2008). Within this framework, stronger attachment to the host country does not necessarily mean weaker ties with the sending country: they may be independent (Ley 2013; Snel et al. 2006; Tamaki 2011) or even complementary processes (Carling and Hoelscher



2013; Van Dalen et al. 2005; Fokkema et al. 2013; Portes et al. 2002). For example, Portes et al. (2002) found that immigrants who were better adapted and attached to the host country were also more likely to be engaged in transnational activities. Thus, attachment to the host country and transnational practices are not necessarily mutually exclusive.

Assimilationist and transnationalism theories offer different interpretations of the relations between attachment to the host country, maintenance of transnational social ties, and remittance-sending. Nevertheless, neither assimilationist nor transnationalism approaches leave a doubt that both attachment to the host country and maintaining transnational social ties may significantly affect remittance behavior of immigrants.

Some scholars included different manifestations of transnational ties in the framework of remittance predictors of Rapoport and Docquier (2006). For example, Van Dalen et al. (2005) found a positive effect of family ties between immigrants and households in the home countries on remitting under either *altruism* or self-interest models (*inheritance*, *investment* and *insurance*). Having transnational knowledge and networks at their disposal, immigrants may utilize them to invest and diversify savings between the host and sending countries (Amuedo-Dorantes and Pozo 2013; Osili 2007). Such diversification may help immigrants to increase benefits and lessen risks, simultaneously increasing their propensity to remit. Fokkema et al. (2013) substantiated positive effects of emotional (but not behavioral or social) attachment to the countries of origin on remitting within the *altruism* model, but no effects within *exchange* or *strategic* models. The supplements describing the role of transnational ties are presented in the fifth row of Table 1.

Theoretical Model of the Study

Table 1 presents the expected effects of the main explanatory variables on remittances. The first 3 rows show effects developed in the work of Rapoport and Docquier (2006); rows 4–5 indicate the expected effects of additional explanatory variables developed by Fokkema et al. (2013), Loschmann and Siegel (2015), and Van Dalen et al. (2005). Based on the literature review, several additional factors, which were not considered by the previous theories, may be included in the framework of remittance predictors: attachment to the host country and economic reasons for migration.

Attachment to the host country is usually conceptualized as a link with the host country (Stark and Dorn 2013) in terms of language, culture, ethnic self-identification and ethnic interaction, which may be achieved through assimilation and integration strategies (Constant et al. 2009). Stark and Dorn (2013) posited that under *altruistic* motivation, assimilation in the host country is positively associated with remittances. They explain it by the fact that immigrants, to maximize utility derived from the wellbeing of their relatives in the home countries, choose the optimal share of income to be remitted. The higher the altruism intensity is, the larger the marginal utility, and the higher an inclination to remit. Increase in remittances need higher



income, which can be received via higher labor endowment or assimilation in the host country.

In the *investment* and *insurance* models, Rapoport and Docquier (2006) considered remittances as a family arrangement to spread income risks, when the family in the country of origin invested in education and migration of its member, who repays through remittances. However, better assimilated immigrant citizens may be interested in investing and diversifying their own assets (Amuedo-Dorantes and Pozo 2013; Osili 2007). Acquisition of host country language skills and better cultural understanding provide immigrants with greater employment opportunities and better access to information required to succeed economically (Constant et al. 2009). Immigrants who are more attached and better adapted to the host country are more capable of remitting (Bilgili 2015; Carling and Hoelscher 2013; Itzigsohn and Saucedo 2002), they remit more for investment purposes (Bilgili 2015) and are more inclined to diversify their assets (Kushnirovich 2016). Thus, attachment to the host country should be positively associated with remittances under *investment* and *insurance* motivation.

Highly adapted and attached to the host country immigrants usually have not only higher paid but also morestable jobs (Bilgili 2015), and immigrants with a less precarious situation in the host country would be less apprehensive regarding the arrival of newcomers. Therefore, under strategic motivation, the effect of attachment to the host country on remittances should be negative. Attached to the host country, integrated immigrants are less likely to return (de Haas and Fokkema 2011), and hence, less likely to bargain for inheritances with remittances (Garip 2012). Thus, also under inheritance motivation, attachment to the host country should be negatively associated with remittances. Under exchange motivation, immigrants send money for taking care of their relatives or properties, sometimes acquired prior migration. The amount of remittances for exchange purposes increases with increasing demand for services at home (Bollard et al. 2009), however, this demand does not depend on attachment to the host country. Hao (2004) found that immigrants across the income spectrum have estates in their home countries, whereas there was no relationship between owing properties (houses and land) in the country of origin and remitting (Carling and Hoelscher 2013).³ Thus, under exchange motivation, attachment to the host country should have no effect on remittances.

Therefore, it can be hypothesised that (H1) attachment to the host country is a determinant of remittance behavior. It would be positively related to remittances under *altruistic*, *investment*, and *insurance* motivation, negatively associated with remittances under *strategic* and *inheritance* motivation, whereas there would be no association between them under *exchange* motivation.

Economic reasons for migration are the next additional factor, which may affect remittance behavior. They are at the center of the NELM theory developed by Stark (Stark and Bloom 1985), which considers migration as a household strategy to minimize income uncertainty and overcome market constraints (de la Brie`re et al. 2002;

³ The variable of properties used by Carling and Hoelscher (2013) precluded transfers for investment purposes.



Semyonov and Gorodzeisky 2008; Stark 1995). However, immigrants for economic reasons may remit also for altruism. Osaki (2003) found that among immigrants from Thailand, mostly driven by altruism, economic (work) reasons for immigration were positively associated with remitting. Migrants for whom economic reasons are important tend to migrate to high-income destinations, with high wage differentials between sending and receiving countries (Chiswick 1999; Waldinger 2008). Agarwal and Horowitz (2002) found that under either altruistic or insurance motivation, those who immigrated to high-income countries were more likely to remit. Economic immigrants have more innate ability and motivation for economic advancement (Chiswick 1999), whereas higher economic achievements, according to the economic theory, induce higher savings and investments, either in the country of residence or abroad (Kushnirovich 2016). Thus, under investment motivation, economic reasons should have a positive effect on remittances. Under strategic motivation, remittances rise with the migrant's pre-transfer economic achievements and the income inequality between sending and receiving countries (Rapoport and Docquier 2006; Stark 1995). Both of these are attributed to immigrants for economic reasons. Thus, economic reasons for migration are expected to be positively related to remittances under altruistic, investment, insurance and strategic motivation.

Under *inheritance* motivation, remittances are strongly related to the probability of inheriting abroad (Fokkema et al. 2013; Hoddinott 1994). For immigrant citizens, whether they came for economic reasons or not, family reunification in the host country is relatively easy (Holst 2012). Many of them had been encouraged to immigrate by relatives who already lived in the receiving country (Amit 2010). This reduces the likelihood of having relatives who can inherit abroad, regardless of economic reasons for migration. Thus, under inheritance motivation, economic reasons for migration should have no significant effect on remittances. Similar reasoning may also be applied to exchange motivation. Cox (1987) found that immigrants' demand for services in their country of origin is inelastic; namely, immigrants require the same amount of services at any price. The demand depends on having relatives, ancestors' graves or assets abroad, which need care irrespective of immigrants' reasons for migration (Kushnirovich 2016). Fokkema et al. (2013) found that even second-generation immigrants, who live in Germany permanently and never migrated themselves, had assets in their home countries and remitted for taking care of them.

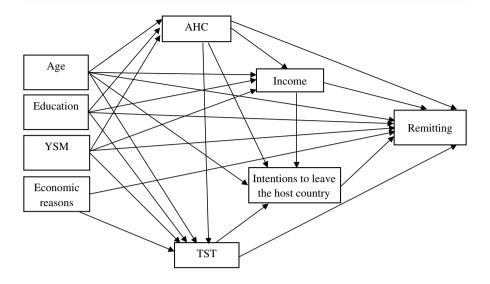
It can be hypothesised that (H2) economic reasons for migration is an additional determinant of remittance behavior. It would be positively associated with remittances under *altruistic*, *investment*, *insurance* and *startegic* motivation, whereas there would be no association between them under *exchange* and *inheritance* motivation.

Expected effects of additional factors under various motivations are presented in Table 1 (rows 7 and 8). Based on the predicted direction of effects of different determinants, the study will answer the following research question:

RQ1: What is the main motive of immigrant citizens to remit?

The literature has shown that assimilationist and transnationalism theories offer different interpretations of the relations between attachment to the host country, maintenance of transnational social ties, and remittance-sending, and lead to





YSM - Years since migration

AHC - Attachment to the host country

TST - Transnational social ties

Fig. 1 The conceptual model of remittance behavior

somewhat contradictory claims about the relationships between them. Based on the literature, the following research question maybe formulated:

RQ2: What is the relationship between attachment to the host country and transnational activities of immigrant citizens? Negative relationships between them would provide support for the assimilation approach, and a positive relationship would provide support for the transnational approach.

The impact of the considered factors may be more complicated, since some determinants may affect the others. Education and time passed since migration can influence either maintenance of transnational social ties (de Haas 2007; Fairchild and Simpson 2008; Guarnizo et al. 2003; Ley 2013; Portes et al. 2002; Sana and Massey 2005; Tamaki 2011), adaptation to the host country and attachment to it (de Haas 2007; Tamaki 2011), or income (Loschmann and Siegel 2015; Portes et al. 2002; Snel et al. 2006), when income itself may be significantly related to the former two (Itzigsohn and Saucedo 2002; Stark and Dorn 2013). Attachment to the host country can be associated with transnational ties (Carling and Hoelscher 2013; Tamaki 2011), and each of them may affect intentions to leave the country (de Haas and Fokkema 2011).

The conceptual model of remittance behavior is presented in Fig. 1. The main predictors of remitting according to the conceptual model are outlined as: immigrant's income, education, years passed since migration (YSM), intentions to



leave the host country, maintaining transnational social ties, attachment to the host country, economic reasons for migration, and age (background variable), while these predictors may also influence one another.

Immigrants from some countries remit more than others (Amuedo-Dorantes and Pozo 2013; Bilgili 2015; Holst et al. 2008; Sinning 2011). This can be explained by different economic situations (Carling and Hoelscher 2013), as well as by different norms as to remitting in the different cultures, when remittance scripts reflect the context-specific cultural foundations (Carling 2014). Since immigrants of various origins may have different patterns of remittance behaviors owing to different cultural and economic backgrounds, the model of remittances should be tested across groups of immigrants of different origins.

Method

Data

This study is based on the data of the 2011 Immigrant Survey that was conducted by the Israel Central Bureau of Statistics. The sample of this survey is representative of the population of immigrant citizens in Israel. The sampling method was stratification sampling, when the strata were defined as the intersection of three variables: age, period of immigration, and country of origin. Since then, no other surveys including questions on remittances and based on a representative sample have been conducted. This is the only survey, which makes it unique. The sample included immigrants who lived in Israel in households at least three years, and had Israeli citizenship at the time of the survey.⁴ The data of the survey were gathered via a postal survey questionnaire, internet and telephone interviews. The original survey questionnaire was published in a Hebrew version and was translated into Russian and English. The rate of response to the survey was about 81%.

The sample included 3952 immigrants. For analysis, immigrants were divided into three large groups by the regions of their origin traditionally used in the national statistics. 2528 respondents were immigrants from the Former Soviet Union, 503 immigrants from Europe and America, and 921 immigrants from Asia and Africa. As was mentioned in the Introduction, the division by regions was justified not only by similarities of educational and socio-economic characteristics of immigrants who came from each region, but also by the levels of the gross domestic products (GDP) per capita of sending countries in these regions. Table 2 provides a breakdown of descriptive statistics for the sample.

⁴ Immigrants in this survey were defined by the Central Bureau of Statistics as persons who entered Israel for permanent settlement, in accordance with the Law of Return or the Law of Entry.



Table 2 Characteristics of the sample and description of the variables

Characteristics	Regions of origin "			Total
	A&A N=921	FSU N=2528	E&A N=503	N = 3932
Gender, percent of males	48.5	42.4	44.1	44.0
Age, mean (SD) (1=24-32; 2=33-42; 3=43-52; 4=53-62; 5=63-72)	3.0 (1.4)	3.2 (1.4)	3.1 (1.5)	3.1 (1.4)
Education, years, mean (SD)	7.3 (7.0)	14.1 (3.0)	15.8 (4.4)	12.7 (5.4)
YSM ^c , mean (SD) (1=1-3 years; 2=4-6; 3=7-10; 4=11-14; 5=15-18)	3.7 (1.4)	3.7 (1.1)	3.6 (1.4)	3.7 (1.2)
Economic reason for migration, percent $(1 = yes, 0 = no)$	19.7	32.7	25.4	28.4
Income per capita, thousand NIS ^b , Mean (SD)	3.167 (3.003)	4.539 (3.074)	5.154 (5.302)	4.299 (3.480)
Intentions to leave the host country (scale 1-4), mean (SD)	1.1 (0.3)	1.2 (0.5)	1.2 (0.4)	1.2 (0.5)
Having Israeli friends, percent	52.6	46.7	75.5	51.7
Social events/meetings with natives, mean (SD) $(1 = \text{never}, 2 = \text{rare}, 3 = \text{sometimes}, 4 = \text{often})$	2.2 (1.1)	2.2 (1.0)	2.8 (1.0)	2.3 (1.1)
Israeli identity, percent	16.1	34.5	29.1	29.5
Hebrew skills, mean index (SD)	2.8 (1.4)	2.9 (1.3)	3.6 (1.1)	3.0 (1.3)
Regularity of contacts with relatives abroad (scale 1-5), mean (SD)	2.3 (1.4)	3.0 (1.2)	3.7 (1.2)	2.9 (1.3
Regularity of contacts with friends abroad (scale 1-5), mean (SD)	1.8 (1.1)	2.6 (1.2)	2.9 (1.2)	2.5 (1.2)
Met abroad in two last years with relatives/friends, percent	26.3	37.7	62.2	38.2
Relatives from abroad visited the host country in last two years, percent	27.9	44.4	72.7	44.1
Remitted, percent	19.1	20.5	9.4	18.4
Of them:				
Remitted occasionally, percent	15.8	18.8	8.9	16.6
Remitted on regular base, percent	3.3	1.7	1.6	1.8



 ^{b}NIS New Israeli Shekel; 1 NIS = 3.8\$

c YSM Years since migration

Measures

Migrant's education, years since immigration, age, economic reason for migration,⁵ income, and intentions to leave the host country, presented by variables based on single items, are described in Table 2. Intentions to leave the host country⁶ were measured by the following item: 'Do you believe that you will be staying in Israel in the coming years' on a scale of '1'=I am certain I will stay in Israel, '2'=I might stay in Israel, '3'=I might not stay in Israel, '4'=I am certain I will not stay in Israel.

The variable 'maintaining transnational social ties' (TST) was measured on the basis of four items: regularity of contacts (by phone, mail or e-mail/Internet) with relatives living abroad (categorized on a scale of 1–5 from '1'=never to '5'=every day or almost every day); regularity of contacts with friends or acquaintances living abroad (categorized on the same scale of 1—5); meetings abroad during the previous two years with relatives or friends who do not live in Israel (coded as '1'=met and '0'=did not meet); and visits of relatives from abroad to the host country in the last two years (coded as '1'=visited and '0'=did not visit). Standard scores were used due to different scaling. The internal reliability value was 0.76.

The variable 'attachment to the host country' (AHC) was measured on the basis of four items: having native-born friends (coded '1'=have Israeli-born friends or '0'=do not have); regularity of participation in social events/meetings with native-born Israelis (categorized on a scale of 1–4 from '1'=never to '4'=often); Israeli identity (coded '1'=the main identity is Israeli, '0'=non-Israeli), and Hebrew skills. Hebrew skills were an index computed as an average of the self-evaluation of speaking, reading and writing in Hebrew, when each was categorized on a scale from '1'=no command at all to '5'=very good command (internal reliability of these three items was 0.958). All variables were translated to standard scores. The internal reliability value of AHC was 0.71.

The validity of constructs TST and AHC was justified by means of Confirmatory Factor Analysis (CFA) using Amos 22. Initially, the CFA-model was examined for each group separately (the fit indices were found acceptable); next, measurement invariance was tested by means of multi-group CFA. The fit indices of the unconstrained model were found acceptable and even good: CMIN/df=2.169, RMSEA=0.031, CFI=0.977, NFI=0.971, and RFI=0.925. The fit indices of the measurement weights model, measurement intercepts model, and structural covariances model were found acceptable, when the differences in Chi-square values between the models were found to be non-significant. Thus, three levels of

⁶ The data of the Immigrant Survey did not contain information about return intentions, but only about intentions to leave Israel, which is a broader concept.



⁵ 28.4% of the sample noted an economic reason for migration. The other reasons considered in the survey were a lack of individual safety in the sending country (29%); anti-Semitism in the sending country (27%); political situation in the sending country (27%); Zionism (41%); desire to live in a Jewish state (65.8%); desire to ensure children's future (55%); decision made by parents, spouse or another family member (38%); having family members and/or friends making immigration (51%); inability to immigrate to any other country (9%); other (13%). The sum is more than 100% because of multiple choices.

invariance were shown, meaning that the factors built on the basis of several items were latent variables with good psychometric properties, and that they represented reliably across groups.

The dependent variable 'remitting' was measured by the following item: 'How often do you send or deliver money to family members or friends who live abroad?' on a scale '0'=does not remit, '1'=remits occasionally, '2'=remits on a regular basis.

Most studies on remittances used a logit/probit model with dependent variable remittances, but for this study, a structural equation model (SEM) was more appropriate. First, SEM is strongly recommended when the study uses constructs based on multiple indicators, such as AHC and TST constructs in this study. Capturing constructs based on multiple indicators, SEM identifies measurement errors, which allow producing more accurate relationships between the constructs compared to multiple regression analysis (for an overview on the advantages of SEM over regression analysis see Jeon (2015)). Second, SEM allowed applying CFA, which justified the structure and measurement invariance of the constructs across immigrants of different origin. Third, SEM allowed controlling for a situation in which some predictors of the dependent variable are predicted by others. All aforesaid justified using SEM. AMOS software, version 22 was used; the estimation method was Maximum Likelihood.

Results

Remittances of Migrant Citizens

The study revealed that about one fifth (18.4 percent) of immigrant citizens remitted abroad. Of them, 9.8 percent remitted regularly, and the rest occasionally. Immigrants from Europe & America were the least likely to remit: only 9.4 percent of them remitted, but 17.0 percent of those who sent money abroad, did so on a regular basis. No differences were found between immigrants from Asia & Africa and the FSU: about 20 percent of them remitted (20.5 percent and 19.1 percent correspondingly). However, immigrants from Asia & Africa were more likely to remit regularly (17.3 percent of those who remitted) than immigrants from the FSU (only 8.3 percent).

Findings from the Estimated Model

The SEM path diagram in Fig. 2 presents the results of the trimmed model including significant relationships only. The fit indices indicated a good fit of the model: CMIN/df=2.387, NFI=0.959, RFI=0.926, TLI=0.934, CFI=0.963, RMSEA=0.042. The direct and total effects of all explanatory variables, except 'intention to leave the host country', were significant (effects are presented at the



bottom of Fig. 2). Although indirect effects of education, time since arrival, attachment to the host country and age were significant, the signs of direct and total effects for all variables were similar. Namely, even after mediation, the direct effects remained significant and retained the same direction: for example, negative effects of education even after mediation remained negative, and effect of attachment to the host country remained positive.

The study revealed that older immigrants demonstrated lower attachment to the host country, maintained more transnational social ties, but had less intentions to leave the host country. Correspondingly, they were more inclined to remit than the younger immigrants were. More educated immigrants had a higher income, showed higher attachment to the host country and simultaneously maintained more transnational ties. Nevertheless, education had a strong negative effect on remitting the money. Like education, years since migration in the host country were positively related to immigrants' income. With increased duration of time in the host country immigrants became more attached to it and maintained less transnational social ties. Immigrant citizens who lived longer in the host country remitted to a smaller extent. Income had a positive but weak effect on remitting.

Both attachment to the host country and maintaining transnational social ties were positively associated with remitting money. Since the effect of attachment to the host country on remitting was significant, hypothesis (H1) that attachment to the host country is a determinant of remittance behavior was supported. This means that immigrants who applied strategies of high receiving-culture acquisition were more likely to remit than immigrants who applied other strategies.

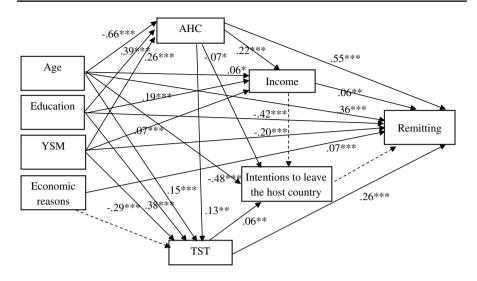
Immigrants who reported higher attachment to the host country demonstrated lower intentions to leave Israel, and those who maintained transnational ties, showed higher intentions to leave. However, no relationship was found between intentions to leave and remitting, namely, immigrants who were inclined to leave the host country did not remit more than those who were not inclined to leave.

Economic reasons for migration had a significant effect on remittances, thus, hypothesis (H2) was also supported. Those for whom economic reasons were important in their decision to migrate, remitted more than those who came for non-economic reasons.

To answer the research question (RQ1) what the main motives of immigrant citizens to remit were, concurrencies between the found and expected effects were examined. According to a framework of remittance predictors (see Table 1), the largest number of coincidences – six of the seven examined effects – between theoretically predicted effects and empirically revealed effects, was found for the *altruism* model of remittances: positive effect of income, negative effect of years since migration, positive effects of attachment to the host country, transnational social ties, and economic reasons for immigration, no effect of the intentions to leave the host country. Concurrencies, although to a smaller extent, were also found with the

⁷ Initially, the model included also gender. Since no relationships were found between gender and any dependent variable, gender was trimmed. It seems that for immigrant citizens, the decision to remit is a household decision and not a personal one.





Explanatory variables		t, indirect and total effects on remitting money	
	Direct effects	Indirect effects	Total effects
Migrant's income	0.062**	0	0.062*
Migrant's education	-0.415***	0.344***	-0.071**
YSM (Years since migration)	-0.198***	0.085**	-0.114*
Intention to leave the host country	-0.003	0	-0.003
AHC (Attachment to the host country)	0.552**	0.048**	0.6**
TST (Transnational social ties)	0.259**	0	0.259**
Economic reasons for migration	0.069***	0	0.069*
Migrant's age	0.359***	-0.352***	0.007

Dotted line - path coefficients are not significant

*** p < 0.001; ** p < 0.01; * p < 0.05

Fig. 2 Path model of remittance behavior

insurance and investment models, where four of the examined effects were in line with these motivations: positive effects of economic reasons for migration, attachment to the host country, and transnational social ties in both models; no effect of intentions to leave the host country in the insurance model; and positive effect of immigrant's income in the investment model. Thus, immigrant citizens have mixed motivations for remitting.

The other research question (RQ2) was about the relationship between attachment to the host country and maintaining transnational ties of immigrant citizens. The study revealed that they were positively associated one with another. Immigrant citizens more attached to the host country were more involved in transnational activity, a finding that supports the transnationalism approach.



Multi-groups Analysis of the Model

Immigrants from different regions of origin may have various remittance behaviors depending on the economic situation, culture of the country of origin, and characteristics of the groups. To examine the full model across different groups of immigrants for measurement invariance, firstly, the model was tested for each group separately. For all groups, the fit indices were found acceptable, supporting evidence of configural invariance: χ^2/df was in the range of 2.000 to 3.309, RMSEA from 0.020 to 0.055, CFI from 0.941 to 0.979, TLI from 0.916 to 0.954, NFI from 0.895 to 0.972. Then the multigroup SEM was run. The fit indices of the unconstrained multi-group model were found acceptable: CMIN/df=3.303, NFI=0.958, TLI=0.935, CFI=0.970, RMSEA=0.024. The χ^2 difference tests between unconstrained model, measurement weights model, and measurement intercepts model were not statistically significant, supporting evidence of metric and scalar invariance. However, the $\Delta \chi^2$ between the measurement intercepts model and the model where the path coefficients were constrained to be equal between the groups, was significant ($\Delta \chi^2$ [8]=719.3, p<0.000), namely, differences in paths occurred. To identify which paths significantly differed between the groups, each specific path was tested separately by comparing the model constrained specific path coefficient and the unconstrained model. The results are presented in Table 3.

Table 3 shows that many effects were invariant across all groups. The major differences were found between immigrants from A&A and FSU, and only a few differences were found between immigrants from E&A and A&A, and from E&A and FSU. The effects of attachment to the host country on remitting and on maintenance of transnational social ties were invariant across all three groups; and the effects of the transnational ties on remitting were positive and invariant across two groups, for immigrants from A&A it was significantly larger, but still positive. For immigrants from E&A, attachment to the host country and maintenance of transnational social ties did not affect intentions to leave the host country, and for other groups had weak effects with only minor differences between the groups. Since the effect of intentions to leave on remitting was not found for all groups, this factor was not substantial for predicting remitting behavior. The effects of age, education and years since migration on remitting were non-invariant between some groups, but even when the differences in size of effects occurred, the signs of effects (positive/negative) were the same.

Though some effects were non-invariant the study found considerable similarities between the groups. Intentions to leave, economic reasons for migration, and income had no effect or a very small positive effect on remitting across all groups. Age, attachment to the host country, and maintenance of transnational social ties affected remitting positively; education and years since migration affected remitting negatively for all groups.

Discussion and Conclusions

This paper uses a unique dataset combining remittance behavior with various dimensions of transnational activities and social adaptation of migrant citizens from the host country perspective. Most studies on remittances focus on immigrants



originating from a particular region. The used dataset includes data on immigrant citizens from both developed and developing countries of Europe, the Americas, Africa, Asia and the FSU, who immigrated for economic and non-economic reasons. This diversity of origins allowed to examine immigrants' remitting behaviour across different sending countries. The paper contributes to the existing literature with the following potential innovations. First, it focused on remittance behavior of migrant citizens, a group under-investigated in the literature. Moreover, this is the first study on remittance behavior of immigrant citizens in Israel. According to the literature, immigrant citizens usually have a weak propensity to remit (Holst et al. 2012; Ley 2013). This study revealed that about 20 percent of the immigrant citizens in Israel remitted to their relatives and friends who live abroad. Second, this study transcended the framework of remittance predictors under different motivation developed by Rapoport and Docquier (2006). In addition to classic determinants of remittances under different motivation — which are typically addressed by the literature — this study conceptualized and investigated additional determinants, which have unique implications for immigrant citizens: attachment to the host country and economic reasons for migration. Third, the novelty is that in addition to the general effects, it considered effects across immigrant groups and justified that these effects are similar regardless of the immigrants' origin.

The additional and main novelty of this study is that it revealed a new self-interest motivation, not considered by Rapoport and Docquier (2006), that prompts immigrant citizens to send remittances for investment purposes to diversify their assets, taking advantage of their transnationalism. The combination of effects found in the study supports the presence of mostly altruistic motivation, and in part, insurance and investment motivation for remitting. The presence of investment motivation was found although the negative effect of education on remittances was not in line with the theoretical effect formulated in the framework of Rapoport and Docquier (2006). It may be explained by the fact that Rapoport and Docquier (2006) considered remittances in the investment model as the repayment of the migration costs or the cost of the migrant's education. However, for immigrant citizens, investment and insurance motives may be considered as a diversification of their own assets and not as a family arrangement at the origin, as was explained in the NELM theory. Immigrant citizens may invest and accumulate assets for many of the same reasons that nonmigrants do, but they differ from non-migrants because they can diversify assets between the host and the home countries, especially when investment conditions in the home country are better than in the host country (Amuedo-Dorantes and Pozo, 2013; Osili, 2007). Immigrants may take advantage of their transnational knowledge and social ties, as relatives and friends in the country of origin may help them to make investments. It seems to be an individualistic self-interest motivation, not considered by Rapoport and Docquier (2006). In other words, remittances of immigrant citizens can represent an immigrant's risk diversification strategy, realized through transnationalism, when more rights of naturalized immigrants could trigger stronger transnationalism.

Attachment to the host country was found to complement maintenance of transnational social ties, and was positively associated with remitting irrespective of the immigrants' origin. This supports the transnationalism approach (Carling and Hoelscher



Table 3 Results of SEM model - standardized coefficients of the model predicting remitting of immigrants

FSU A&A E&A FSU-A&A A&A-E&A - 0.73*** - 0.43*** - 0.65*** 41.1*** 33.8**** 0.25*** 0.67*** 0.26*** 41.1*** 33.8**** 0.29*** 0.19*** 0.26*** 1.15** 11.5** 0.10*** 0.25*** 0.014** 25.3*** 11.5** 0.10*** 0.43*** 0.02*** 0.014** 25.3*** 0.15** 0.02*** 0.014** 0.03*** 17.5** 0.15** 0.02*** 0.03*** 0.03*** 17.5** 0.15** 0.02*** 0.015** 0.03*** 0.11** 0.02*** 0.015** 0.05*** 0.10*** 0.04*** 0.05** 0.12** 0.29*** 0.04*** 0.05** 0.44*** 42.8** 0.10** 0.008** 0.009* 0.005** 4.7** 0.11** 0.02*** 0.010* 0.03*** 0.03*** 0.25*** 0.17*** 0.010* 0.04*** 4.2** 0.15*** 0.02*** 0.045*** 0.045*** 0.009** 0.05*** 0.03*** 0.045*** 0.009** 0.009** 0.05*** 0.05*** 0.009** 0.009** 0.009** 0.05*** 0.05*** 0.009** 0.009** 0.009** 0.05*** 0.000*** 0.009** 0.009** 0.009** 0.000*** 0.000*** 0.009** 0.009** 0.000*** 0.000*** 0.009** 0.009** 0.000*** 0.000*** 0.009** 0.009**	Paths		Standardized patl	Standardized path estimates, by origin ^a	- G	Differences when groups: $\Delta \chi^{2b}$	Differences when comparing path estimates between groups: $\Delta\chi^{2b}$	mates between
1→ AHC − 0.43**** − 0.43**** − 0.65**** 41.1**** 33.8*** 1→ AHC 0.25*** 0.65*** 0.66*** 11.4*** 33.8*** 1→ TST 0.13** 0.13** 0.14** 0.54** 5.4** 1→ TST 0.10*** 0.13** 0.14* 9.4** 5.4* 1→ TST 0.13** 0.14** 0.14** 5.4* 5.4* 1→ TST 0.15** 0.22** 0.03 0.14** 5.4* 5.4* 1→ Income 0.13** 0.14** 0.24** 5.4* 5.4* 1 Income 0.11** 0.29*** 0.14** 0.24** 5.4* 5.4* 1 Income 0.11** 0.29*** 0.14** 0.24** 4.2** 4.2** 1 Incitions to leave the bost country 0.04** 0.16** 0.05** 4.2** 4.2** 1 Incitions to leave the bost country 0.06** 0.16** 0.01** 4.2** 4.2** </th <th></th> <th></th> <th>FSU</th> <th>A&A</th> <th>E&A</th> <th>FSU-A&A</th> <th>A&A-E&A</th> <th>FSU-E&A</th>			FSU	A&A	E&A	FSU-A&A	A&A-E&A	FSU-E&A
1→ AHC	Age→	AHC	- 0.73***	- 0.43***	- 0.65***	41.1***		
HGC 0.29*** 0.19*** 0.30*** 0.50*** 11.5** FST 0.11*** 0.13*** 0.23*** 0.01 16.7*** 11.5** FST 0.10*** 0.45*** 0.14** 0.45*** 11.5** FST 0.10*** 0.45*** 0.14** 0.45*** 11.5** Income Income 0.12*** 0.28*** 0.13** 0.13** 0.14** 0.14** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.14*** 0.15** 0.12** 0.15	Education→	AHC	0.25***	***29.0	0.26***		33.8***	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$YSM \!\!\rightarrow$	AHC	0.29***	0.19***	0.30***	25.3***		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Age→	TST	0.13**	0.32***	0.01	16.7***	11.5**	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Education→	TST	0.10***	0.45***	0.14*	9.4**	***************************************	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$YSM \rightarrow$	TST	- 0.28***	- 0.37***	- 0.29***	7.5**		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$AHC \rightarrow$	TST	0.15**	0.22**	0.03			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Age→	Income	- 0.02	0.19***	0.15*	9.2**		
$\begin{array}{llllllllllllllllllllllllllllllllllll$	Education→	Income	0.11***	0.28***	0.14**			
$\begin{array}{llllllllllllllllllllllllllllllllllll$	$YSM \rightarrow$	Income	0.12***	0.03	0.01	8.8**		
	$AHC \rightarrow$	Income	0.29***	0.13*	0.12*			
$\begin{tabular}{ l l l l l l l l l l l l l l l l l l l$	Age→	Intentions to leave the host country	- 0.44***	- 0.45*	- 0.52**			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$AHC \rightarrow$	Intentions to leave the host country	- 0.06*	-0.16*	- 0.05	8.4**		
Remitting Continuous Con	$TST \!$	Intentions to leave the host country	**80.0	*60.0	- 0.05			6.5*
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Age→	Remitting	0.45***	0.11**	0.34***	42.9***	4.7*	12.2*
	Education→	Remitting	-0.15***	- 0.75***	- 0.22***	46.5***	43.1***	
reasons of Remitting Remitting 0.11*** 0.02 -0.01 Remitting 0.56*** 0.52*** 0.45*** Remitting 0.23*** 0.39*** 0.19** Remitting 0.09*** 0.04 0.00	$YSM \!\! \to \!\!$	Remitting	- 0.22***	- 0.17***	- 0.10*		4.2*	14.4***
Remitting 0.56*** 0.52*** 0.45*** Remitting 0.23*** 0.39*** 0.19** 8.9** Remitting 0.09*** 0.04 0.00	Economic reasons of migration→	Remitting	0.11***	0.02	- 0.01			5.3*
Remitting 0.23*** 0.39*** 0.19** 8.9** Remitting 0.09*** 0.04 0.00	$AHC \rightarrow$	Remitting	0.56***	0.52***	0.45***			
Remitting 0.09*** 0.04 0.00	$TST \!\!\to\!$	Remitting	0.23***	0.39***	0.19**		**6*8	
	Income→	Remitting	***60.0	0.04	0.00			7.9**

FSU—immigrants from the Former Soviet Union; A&A—immigrants from Asia and Africa; E&A—immigrants from Europe and America

^bThe Chi-square differences between the unconstrained models and the models where specific path estimates were constrained to be equal between the groups. The empty cells mean that path estimates were invariant across the groups





2013; Portes et al. 2002), and refutes the claims of assimilationist theories (Gans 1997; Ley 2013; Snel et al. 2006). One possible explanation is that the better adapted immigrants have more resources and technical possibilities to communicate, and higher economic capability to remit. Second, better adapted immigrants are more economically successful and may be interested in benefitting from diversification of their savings and consumption. Given growing marginal propensity to save with the income increases, they should be more likely to remit for investment purposes. This finding also supports a presence of revealed further self-interest motivation, which may be attributed to immigrant citizens.

The finding that immigrant citizens remit irrespective of their intensions to leave the host country contradicts previous studies (Brzozowski et al. 2017b; Loschmann and Siegel 2015). One possible explanation is that immigrant citizens usually come to the host country for settlement, with hopes to succeed there, and low intentions to leave (in this study, only 12.4 percent of respondents reported that they probably would leave Israel). The fact that immigrant citizens, who do not intend to move abroad also remit, supports mixed altruistic and revealed self-interest motivation.

Though the study found different remitting rates for immigrants from the FSU, Asia & Africa and Europe & America, most effects were present for all groups of immigrants irrespective of their origin; even if the scopes of the effects were larger for some groups, the directions of effects (positive/negative) were the same. Thus, the set of outlined determinants was relevant for various groups of immigrant citizens regardless of the levels of wealth, prosperity and social norms in the various cultures of origin. The finding that the country of origin of immigrant citizens does not matter, and the delineated determinants affect remittance behaviors of immigrants from different regions of origin in a similar manner, is one of the novel contributions of this study.

Thus, this study revealed the pattern of remittance behavior of immigrant citizens. They are fuelled by altruism, but also by the desire to diversify their own assets taking advantage of their transnational ties. Better adapted and attached to the host country immigrants maintain more transnational ties and remit more, regardless of their intentions to leave the host country.

The study has important policy implications. The finding that immigrant citizens remit for investment purposes, regardless of their intentions to return, may help decision-makers to channel remittances to fund economic development efforts. The governments may create a better investment climate for immigrants with dual citizenship who invest in productive matters such as businesses, cultivable land, or house construction in their countries of origin. This has implications for developing countries that need to identify strategies of resources mobilization, especially in light of the slowdown in rates of the world economic growth, which may impact both aid and foreign direct investment.

Limitations

The data of the Immigrant Survey did not contain information regarding the sums of remittances, or specific countries of origin. Therefore, more precise comparisons across groups according to economic situation in the countries of origin could



not been performed. The next limitation is that a limited scope of transnationalism has been used in the analyses – focusing only on the behavioral component, not on the imagined component (ways of belonging, referring to identification with, etc.). Although the survey contained the information to whom money was sent, to relatives or friends, the small numbers of those who sent money to friends did not allow examining this issue. The survey also did not contain information about recipients' households and other additional factors that might explain the remittance behaviour of immigrant citizens, considered in the literature: recipient's long run income, assets, shocks in recipients' income, recipient's household size and number of migrants, distance etc. An additional limitation is that age and years since migration were presented in the survey by ordinal variables and were consequently translated to standard scores. The present study found that the effects of education, time since arrival, attachment to the host country and age on remitting are mediated by other factors. However, the complexity of the model did not allow distinguishing between numerous mediators. Further studies are needed in this field. The Immigrant Survey did not examine remittance rates of the veteran Israeli population. A comparison of remittances of veteran Israelis to remittances of immigrants would be an interesting issue for further research.

References

- Agarwal, R., & Horowitz, A. W. (2002). Are international remittances altruism or insurance? Evidence from Guyana using multiple-migrant households. *World Development*, 30(11), 2033–2044.
- Ambrosetti, E., Cela, E., & Fokkema, T. (2013). Differential impact of migrants' legal status on transnationalism: just a matter of time and integration? *Journal of Mediterranean Studies*, 22(1), 33–60.
- Amit, K. (2010). Determinants of life satisfaction among immigrants from Western countries and from the FSU in Israel. *Social Indicators Research*, 96, 515–534.
- Amuedo-Dorantes, C., & Pozo, S. (2005). On the use of differing money transmission methods by Mexican immigrants. *International Migration Review*, 39, 554–576.
- Amuedo-Dorantes, C., & Pozo, S. (2013). Remittances and portfolio values: An inquiry using immigrants from Africa, Europe, and the Americas. *World Development*, 41, 83–95.
- Bettin, G., Lucchetti, R., & Zazzaro, A. (2012). Financial development and remittances: Micro-econometric evidence. *Economic Letters*, 115, 184–186.
- Bilgili, Ö. (2015). Economic integration to send money back home? Journal of Immigrant and Refugee Studies, 13(4), 379–400.
- Bollard, A., McKenzie, D., Morten, M., & Rapoport, H. (2011). Remittances and the brain drain revisited: The microdata show that more educated migrants remit more. *The World Bank Economic Review*, 25(1), 132–156.
- Brzozowski, J., Cucculelli, M., & Surdej, A. (2017a). The determinants of transnational entrepreneurship and transnational ties Dynamics among immigrant entrepreneurs in ICT sector in Italy. *International Migration*, 55(3), 105–125.
- Brzozowski, J., Gruszka, M., Majka, M., Szymańska, J., & Ulasiński, C. (2017b). International return migration and remittances: The regional perspective. *Ekonomista*, 1, 47–66.
- Carling, J. (2014). Scripting remittances: Making sense of money transfers in transnational relationships. *International Migration Review*, 48, S218–S262.
- Carling, J., & Hoelscher, K. (2013). The capacity and desire to remit: Comparing local and transnational influences. *Journal of Ethnic and Migration Studies*, 39(6), 939–958.
- Castles, S. (2002). Migration and community formation under conditions of globalization. *International Migration Review*, 36(4), 1143–1168.
- Cela, E., & Moretti, E. (2013). Gendered remittances of Romanians in Italy. *RivistaItaliana di Economia-*Demografia e Statistica, 67(3), 79–86.



- Central Bureau of Statistics, (2018). Statistical Abstract of Israel 2018. https://www.cbs.gov.il/he/publications/doclib/2018/4.%20shnatonimmigration/st04_02.pdf. Accessed 13/08/2019.
- Chimhowu, A., Piesse, J., & Pinder, C. (2005). The socioeconomic impact of remittances on poverty production. In M. M. Samuel & R. Dilip (Eds.), Remittances Development Impact and Future Prospects. Washington DC: The World Bank.
- Chiswick, B. (1999). Are immigrants favourably self-selected? *American Economic Review*, 89(2), 181–185.
- Constant, A. F., Roberts, R., & Zimmermann, K. F. (2009). Ethnic identity and immigrant homeownership. Urban Studies, 46(9), 1879–1898.
- Cox, D. (1987). Motives for private income transfers. Journal of political economy, 95(3), 508-546.
- De Haas, H. (2007). Remittances Migration and Social Development A Conceptual Review of the Literature. Geneva: United Nations Research Institute for Social Development.
- De Haas, H., & Fokkema, T. (2011). The effects of integration and transnational ties on international return migration intentions. *Demographic Research*, 25, 755–782.
- De la Brie're, B., Sadoulet, E. de Janvry, A., & Lambert, S. (2002). The roles of destination, gender, and household composition in explaining remittances: An analysis of the Dominican Sierra. *Journal of Development Economics*, 68, 309–328.
- Docquier, F., & Rapoport, H. (2000). Strategic and Altruistic Remittances. Brussels: ULBUniversite Libre de Bruxelles.
- Fairchild, S. T., & Simpson, N. (2008). A comparison of Mexican migrant remitances across US regions. *Contemporary Economic Policy*, 26(3), 360–379.
- Fokkema, T., Cela, E., & Ambrosetti, E. (2013). Giving from the heart or from the ego? Motives behind remittances of the second generation in Europe. *International Migration Review*, 47(3), 539–572.
- Foster, A. D., & Rosenzweig, M. R. (2001). Imperfect commitment, altruism and the family: Evidence form transferb in low-income rural areas. *Review of Economics and Statistics, LXXXII, I*(3), 389–407.
- Friberg, J. H. (2012). The stages of migration. From going abroad to settling down: Post-accession Polish migrant workers in Norway. *Journal of Ethnic and Migration Studies*, 38(10), 1589–1605.
- Gans, H. J. (1997). Toward a reconciliation of "Assimilation" and "Pluralism": The interplay of acculturation and ethnic retention. *International Migration Review*, 31(4), 875–892.
- Garip, F. (2012). An integrated analysis of migration and remittances: Modeling migration as a mechanism for selection. *Population Research and Policy Review*, 31(5), 637–663.
- Guarnizo, L., Portes, A., & Haller, W. (2003). Assimilation and transnationalism: Determinants of transnational political action among contemporary migrants. *American Journal of Sociology*, 108(5), 1211–1248.
- Hao, L. (2004). Wealth of immigrant and native-born Americans. *International Migration Review*, 38, 518–546.
- Hoddinott, J. (1994). A model of migration and remittances applied to Western Kenya. Oxford Economic Papers, 46, 450–475.
- Holst, E. S., Schäfer, A., & Schrooten, M. (2008). Bringing Home the Money: Xenophobia and Remittances The Case of Germany. Berlin: DeutschesInstitutfürWirtschaftsforschung.
- Holst, E., Schäfer, A., & Schrooten, M. (2012). Gender and remittances: Evidence from Germany'. Feminist Economics, 18(2), 201–229.
- Itzigsohn, J., & Saucedo, S. (2002). Immigrant incorporation and sociocultural transnationalism. *International Migration Review*, 36(3), 767–798.
- Jeon, J. (2015). The strengths and limitations of the statistical modeling of complex social phenomenon: Focusing on SEM, path analysis, or multiple regression models. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, 9*, 1559–1567.
- Kushnirovich, N. (2010). Ethnic niches and immigrants' integration. *International Journal of Sociology and Social Policy*, 30(7/8), 412–426.
- Kushnirovich, N., & Youngmann, R. (2017). Paths to success of Israeli immigrants from different countries of origin. *International Journal of Intercultural Relations*, 60, 51–59.
- Kushnirovich, N. (2016). Immigrant investors in financial markets: Modes of financial behavior. *Journal of Business Economics and Management*, 17(6), 992–1006.
- Ley, D. (2013). Does transnationalism trump immigrant integration? Evidence from Canada's links with East Asia. *Journal of Ethnic and Migration studies*, 39(6), 921–938.
- Loschmann, C., & Siegel, M. (2015). Revisiting the motivations behind remittance behaviour: Evidence of debt-financed migration from Afghanistan. *Migration Letters*, 12(1), 38–49.



Lucas, R. E., & Stark, O. (1985). Motivations to remit: Evidence from Botswana. *Journal of Political Economy*, 93, 901–918.

- Osaki, K. (2003). Migrant remittances in Thailand: Economic necessity or social norm? *Journal of Population Research*, 20(2), 203–221.
- Osili, U. (2007). Remittances and savings from international migration: Theory and evidence using a matched sample. *Journal of Development Economics*, 83, 446–465.
- Portes, A., Guarnizo, L. E., & Haller, W. J. (2002). Transnational entrepreneurs: An alternative form of immigrant economic adaptation. *American Sociological Review*, 67(2), 278–298.
- Rapoport, H., & Docquier, F. (2006). The economics of migrants' remittances. *Handbook of the economics of giving, altruism and reciprocity*, 2, 1135–1198.
- Remennick, L. (2002). Transnational community in the making: Russian-Jewish immigrants of the 1990s in Israel. *Journal of Ethnic and Migration Studies*, 28(3), 515–530.
- Raijman, R., & Kushnirovich, N. (2012). Labor Migration Recruitment Practices in Israel. EmekHefer: Ruppin Academic Center.
- Sana, M. (2005). Buying membership in the transnational community: Migrant remittances, social status, and assimilation. *Population Research and Policy Review*, 24, 231–261.
- Sana, M., & Massey, D. S. (2005). Household composition, family migration, and community context: Migrant remittances in four countries. *Social Science Ouarterly*, 86(2), 509–528.
- Semyonov, M., & Gorodzeisky, A. (2008). Labor migration, remittances and economic well-being of households in the Philippines. *Population Research and Policy Review*, 27, 619–637.
- Semyonov, M., Raijman, R., & Maskileyson, D. (2015). Ethnicity and labor market incorporation of post-1990 immigrants in Israel. *Population Research and Policy Review*, 34(3), 331–359.
- Sinning, M. G. (2011). Determinants of savings and remittances: Empirical evidence from immigrants to Germany. *Review of Economics of the Household*, *9*(1), 45–67.
- Snel, E., Engbersen, G., & Leerkes, A. (2006). Transnational involvement and social integration. Global Networks, 6(3), 285–308.
- Stark, O., & Bloom, D. E. (1985). The new economics of labour migration. *American Economic Review*, 75(1), 191–196.
- Stark, O. (1995). Altruism and beyond. Oxford and Cambridge: Basil Blackwell.
- Stark, O., & Dorn, A. (2013). Do family ties with those left behind intensify or weaken migrants' assimilation? *Economics Letters*, 118(1), 1–5.
- Tamaki, E. (2011). Transnational home engagement among Latino and Asian Americans: Resources and motivation. *International Migration Review*, 45(1), 148–173.
- van Dalen, H. P., Groenewold, G., & Fokkema, T. (2005). The effect of remittances on emigration intentions in Egypt, Morocco, and Turkey. *Population Studies*, 59(3), 375–392.
- Waldinger, R. (2008). Between "Here" and "There": Immigrant cross-border activities and loyalties. *International Migration Review*, 42(1), 3–29.
- World Bank (2016). World Development Indicators and Global Development Finance Data Base http://databank.worldbank.org/ddp/home.do?Step=2&id=4. Accessed 9 March 2016.
- Zhou, M., & Li, X. (2016). Remittances for collective consumption and social status compensation: Variations on transnational practices among Chinese international migrants. *International Migration Review*. https://doi.org/10.1111/imre.12268.

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