Harnessing the Diaspora: The Political Economy of Dual Citizenship, Migrant Remittances and Return[*]

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Comments Welcome

Abstract: Countries across the globe are in a continual competition for capital. Diaspora populations—migrants residing outside of their country of birth—are a source of both investment capital in the form of potential remittances and human capital in the form of their education and skills. I argue that expatriate dual citizenship rights help home countries leverage the human and material resources of their diasporas. I test this argument using macro level evidence for a large panel of countries over the period 1980-2009 as well as with micro level data from migrant surveys carried out in a variety of host countries. The results support the idea that dual citizenship generates larger remittances at the macro and micro levels and is associated with a higher likelihood of return migration.

Migration has always been a dynamic force in human history. Accounts as early as the Book of Genesis's story of the Tower of Babel describe how man came to be scattered across the face of the earth due to the "confusion of the tongues." History books are filled with images of heroic individuals seeking out new lands for settlement, exploration and exploitation. Historical and contemporary stories of migration, however, also document the dramatic and often perilous movement of peoples forced from their homeland due to conflict, repression and disaster. Regardless of the cause,

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migrants represent a significant slice of the world's population: today one out of every twenty-five individuals resides outside of their country of birth (United Nations 2011).

A diaspora—a group of people residing outside of their homeland—is an important extension of the homeland. Centuries ago this relationship found expression in the migrant's attempt to open new trade routes, discover new markets and locate raw materials. Economically successful émigrés would often endeavor to have family and friends join them by sending money back home. Today the importance of migrants as a source of external capital is at least, if not more, important. Migrants are increasingly part of the global supply chain and serve as consumers of products manufactured in their homeland. They act as entrepreneurs, exploiting informational advantages when they invest in their home countries (Leblang 2010). And, like their ancestors centuries earlier, they continue to funnel capital directly back to their families and friends through remittances. In more concrete terms the World Bank estimates that in 2008 and 2009 migrant remittances exceeded 300 billion USD—a staggering amount especially when recalling that this was the height of the financial crisis (World Bank 2011). These funds—transferred from family member to family member—are often used to facilitate investments in land, new home construction, businesses, agriculture and equipment (Ratha, et al 2011). In some cases remittances have been large enough to measurably reduce poverty and inequality in the poorest countries on the globe (Adams and Page 2005)[1].

[1] Recent research finds that remittances play an important role in shaping a country's exchange rate regime preferences (Singer 2009) as well as influencing the survival of leaders within autocratic regimes (Ahmed 2012).

Migrants are also an important source of human capital. Often migrants return home with work experience, education, and foreign contacts on top of any accrued financial savings.[2] The reintegration of these returnees into the home country's labor market generates positive externalities for the homeland as a whole as they can help with the adoption of new technologies and help disseminate "best practices" in their fields (Dumont and Spielvogel 2008).

How do home countries maintain ties with their expatriates and encourage them to remit their human and physical capital? There are any number of direct and concrete strategies ranging from the development of hometown associations to the creation of government ministries focusing on the diaspora. While these may be useful, these strategies require an organized and engaged diaspora. I argue that countries use a more powerful set of tools to signal their connection with their expatriate communities living outside their country of birth—the extension of political rights. The most tangible manifestation of this desire to maintain connections is the extension of dual citizenship rights to those who have left the homeland. The extension of dual citizenship, I argue, is an essential strategy as home countries attempt to reconnect with their external populations. By treating migrants as part of their "extended-nation," home countries attempt to increase the likelihood that their expatriates repatriate both physical capital in the form of remittances and the human capital embodied in themselves upon their return.

This paper contributes to the broad literatures in political economy and migration in a number of ways. First, it adds to a small but growing political economy scholarship that examines how migrant networks facilitate the cross-border flow of trade, aid and

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[2] It is worth noting that 6 of the last 10 Nobel prizes awarded to Americans went to individuals born abroad.

investment (e.g., Rauch and Trindade 2002; Leblang 2010). While that literature emphasizes the importance of migrant networks it gives pride of place to migrant networks and excludes the role that sending states play. By focusing on the strategies of expatriate engagement this paper begins to fill that gap. Second, the lion's share of migration research that focuses on immigration policy focuses on receiving or host societies (e.g., Howard 2009). There is little, if any, systematic empirical or measurement work focusing on the emigration policies of sending states.[3] This empirical focus also contributes to a more policy-focused literature evaluating the engagement strategies of sending states (e.g., Gamlen 2006). Finally, the paper adds to a surprisingly small literature—a literature concerned mostly with "brain drain"— that asks about the consequences of migration for home countries. This is a literature that heretofore has been concerned with the consequences of immigration for human capital development in the sending state (e.g., Kapur and McHale 2005).

The remainder of this paper proceeds as follows. In section one I develop the argument linking dual citizenship to generating remittances and return migration. The macro and micro level data, samples and statistical methods used to test these hypotheses are discussed in section two. Section three presents the results for the effect of dual citizenship on remittances using macro level data while section four examines the consequences of dual citizenship for remittances and return migration using migrant surveys. Section five concludes.

[3]The only paper I know of fitting this category examines the costs associated with obtaining a passport (McKenzie 2007).

1. Dual Citizenship, Remittances and Return

National citizenship connotes a set of exclusive rights and responsibilities that apply to members of a country's political community; a community that is generally defined by a nation's borders. Citizens of a country often have the right to own property, are eligible for employment, and entitled to public education, and other social programs and, in democracies, are often vested with the right to vote. With these rights come obligations including, but not limited, taxation and, in some cases, compulsory military service. Citizenship is, thus, a political construction with implications for social and economic life. Having dual citizenship allows an individual to possess political and economic rights in multiple countries; it often presents the citizen with the ability to enter the workforce and to exercise political rights. From the perspective of an immigrant, dual citizenship is advantageous as it eliminates the need to obtain a visa to return home and allows the expatriate an opportunity to purchase property and make investments in her homeland.

The international norm of the 19^{th} and 20^{th} centuries held that individuals would denounce home country citizenship rights before naturalizing in another country as holding multiple citizenships was seen as a moral failing. US Ambassador to Germany, George Bancroft, famously remarked that states should "as soon tolerate a man with two wives as a man with two countries; as soon bear with polygamy as that state of double allegiance which common sense so repudiates that it has not even coined a word to express it" (Bancroft 1949). This idea was echoed by the dominant international organization of the day. A 1925 League of Nations conference produced the 1930 Hague Convention on Certain Questions Relating to the Conflict of Nationality Laws, a document stating that “it is in the interest of the international community to secure that all members should recognize that every person should have a nationality and should have one nationality only” (League of Nations 1930 quoted in Koslowski 2003).

The rationale behind the abhorrence of dual citizenship prior in the 19th and early 20th century is consistent with the realpolitik view of international politics: dual citizenship was rejected because it blurred the lines of diplomatic protection and military obligation (Koslowski 2003); it potentially decreased the incentive for assimilation and participation in the host country[4] (Renshon 2005), and it was thought to promote “disloyalty and deceit, divided allegiances and torn psyches (Spiro 2002: 22). The dislike for dual citizenship find expression in how countries treat their expatriate populations, often referring to them as "traitors" who have turned their backs on their countrymen. Countries treated their expatriates "as prodigal sons and daughters who had abandoned their national family and who therefore should not be allowed to retain the original nationality" (Martin 2003, p.7).

Over the later part of the 20th century this view of dual citizenship has been challenged as cross-border travel, marriage and adoption along with increasing integrated trade and investment relationships have increased the desirability and utility of plural citizenship. The anti-emigrant tide has turned as countries of emigration have increasingly recognized that their diasporas are an untapped asset.[5] Home countries have

[4] Schude (1998) argues the opposite—that dual citizenship actually decreases the cost of political and cultural integration by allowing for naturalization without consequence; this, in turn, would permit for the maintenance of transnational ties.

[5] It should be noted that ties to expatriates may not be unambiguously good. The extension of citizenship rights to expatriates may lead external populations to have too much say in domestic politics. Levitt and de la Dehensa (2003) and Rubio-Marin (2006) raise troubling concerns when they reflect on the possibility that expatriate communities may be of sufficient size to influence the outcome of a democratic election. In a more

deployed an assortment of strategies designed to maintain contact with their external populations. Turkey, for example, encourages remittances by allowing émigrés to "buy off" compulsory government service with foreign exchange. The governments of Egypt and India have established bank accounts for foreign deposits where interest earned is tax free. Sudan encourages remittances by offering an "incentive exchange rate" which provides a small premium above the official rate. The government of Mali provides up to $3,600 USD to returnees to aid in establishing new businesses. Sudan also makes funds available to returnees if those funds are used for home and business construction.

A variety of countries also attempt to engage their diasporas more directly: Armenia, Columbia, Mexico, Moldova, Peru and South Africa, for example, have set up government agencies to facilitate re-connecting with their expatriates. And the governments of El Salvador, India and the Philippines have established ministerial level offices designed to manage relations with their diasporas.[6] The desire of home countries to engage their diasporas manifests itself in measurable ways: countries build consulates where there are large clusters of expatriates, they encourage home town associations to facilitate a feeling of connectedness, they offer investment instruments designed to

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thorough critique of expatriate rights, Benedict Anderson notes that external participants "rarely pays taxes in the country in which he does his politics; he is not answerable to its judicial system; he probably does not cast even an absentee ballot in its elections because he is a citizen in a different place...But, well and safely positioned in the First World, he can send money and guns, circulate propaganda, and build intercontinental computer information circuits, all of which can have incalculable consequences in the zones of their ultimate destinations" (1994, p.327).

[6] El Salvador has a Vice Ministry for Salvadorans abroad; India established a Ministry for Overseas Indian Affairs; and there is the Philippines Overseas Employment agency.

appeal to their foreign nationals, and they host conventions and meetings to enhance a sense of home country engagement.[7]

These strategies attempt to create, recapture or cultivate feelings of membership in the nation; a nation that is tied to yet is geographically disconnected to the state itself. And the use of dual citizenship policies are especially important because they are designed to evoke a feeling of inclusion in the homeland, a feeling that will, hopefully, lead the emigrant to seek connections to the homeland (Newland 2004; Gamlen 2006). As David Fitzgerald remarks, "States deploy the language of nationalism precisely because migrants are outside state territorial borders but within the boundaries of the imagined nation" (Fitzgerald 2002).

This change in behavior is an explicit acknowledgement that expatriates are a resource to be leveraged for national economic betterment. A simple illustration of trends in dual citizenship and remittance behavior is compelling. While dual citizenship does not necessarily carry with it the right to vote it does provide the holder with the ability to travel under the homeland's flag and permits the émigré the same rights regarding property ownership as that afforded to residents. As seen in Figure 1, by 2006, 84 countries allowed for dual citizenship—a provision whereby migrants naturalizing abroad maintain home country citizenship.[8] This over-time variation is masks the fact that there

[7] It is important to note that not all large scale strategies for reconnecting and reintegrating expatriates have been successful. Black and Ammassars (2001) document the struggle that the International Organization for Migration's "Return of Qualified African Nationals" program had during its existence from 1983-1999.

[8] I use the following criteria to determine the existence of dual citizenship rights for expatriates: whether upon naturalizing abroad a citizenship retains or loses the right to own property in the home country. This may or (as is the case in a large number of countries) may not include retaining the right to vote or to stand for elective office. Coding dual citizenship right for expatriates was done through reference to national constitutions and related legislation, through documents held by the United Nations High Commission on Refugees, through secondary source material and through phone calls to national embassies. This is the same strategy deployed by Freeman and Ogelmann (1998).

is substantial variation in the recognition of expatriate dual citizenship by seemingly similar countries. Figure two shows that in 2000 Argentina, Bangladesh, Brazil, Ecuador, Egypt, Morocco and Nigeria granted dual citizenship to their expatriates while Bolivia, Chile, the Gambia, Indonesia, Malaysia Pakistan and South Africa did not.

How does dual citizenship influence behavior of expatriates? Certainly the parallel increase in dual citizenship and remittances over the past thirty years in figure one is food for thought but is the connection merely a correlation? Addressing this question empirically is difficult as both dual citizenship and remittances are often driven by similar factors.

As previously noted, countries deploy the language and symbolism of dual citizenship instrumentally. In large measure the extension of dual citizenship is a key component of a country's process of nation-building—an attempt to separate "us" from "them" within the context of national debate. Countries such as France, Italy and Spain, according to Christain Joppke, embrace what he calls "re-ethnicization:" a reconnection with their diasporas in order to (re)-create a sense of national identity (Joppke 2003). This becomes vitally important when national identity is placed at risk. At times this occurs early in the life of a nation. Devesh Kapur argues that "[S]hortly after independence, Kazakhstan began encouraging diaspora 'return' as a way to address the disadvantageous demographic position of ethnic Kazakhs within their own republic" (2010: 205). Patrick Weil (2009) tells a similar story about France at the end of WWII, a country where the numbers of ethnic French were in decline. Seeing that natives would soon be outnumbered, the French government extended dual citizenship rights to expatriates in the hopes not only that they would return, but also that they would continue to be engaged in the domestic political process.

The process of democratization also brings with it pressures to expand, permit or encourage citizenship rights for one's expatriates as it provides an opening for groups to make demands on the political system. In a comparative study of dual citizenship rights Rhodes and Harutyunyan (2010: 473) argue that "[A]lmost no state disqualified people from citizenship simply because they migration beyond territorial control. States become concerned when their emigrants acquire membership elsewhere." Within Africa dual citizenship has come about during periods of political liberalization via "strategic elite initiative, prolonged struggle by previously excluded groups, or both" (Rhodes and Harutyunyan 2010: 471).

Political openings accompanying democratization provide an opportunity for countries to (re)-engage their diasporas especially when the diaspora was formed through persecution. Both Senegal and Ghana established dual citizenship as part of political liberalization in acknowledgement of the large number of migrants who had left while their countries where governed by dictators (Whitaker 2011).[9]

In addition to the symbolic use of dual citizenship for the ends of nation-building, dual citizenship is used instrumentally as countries compete with one another for global capital. This idea is consistent with the efforts of sending states to maintain a connection

[9] There are exceptions. Nigeria, for example, recognized expatriate dual citizenship before political liberalization, while the country was under military rule.

with their diaspora. The idea that migrants are economic actors is by no means new.[10] In one of the first attempts to link migrant networks to international activity Rauch and Trindade (2002) examine the role that the Chinese diaspora plays in international trade and find that countries with large populations of ethnic Chinese have larger bilateral trade flows with China.

Strategically dual citizenship is used to shape attitudes and behaviors and to signal who is part of the "in group" and who is disconnected. Yossi Shain (1999) remarks that governments use this power to "promote and sustain the attachment of the people to the motherland" (Shain 1999, 662-3). And dual citizenship policies have often been used strategically. Ostergaard-Nielsen (2003) shows that the Turkish government attempted to engage its diaspora was designed to upgrade its image to facilitate entry into the EU. Itzigsohn (2000) and Goldring (1998) strike a hopeful tone and argue that the extension of dual citizenship should help persuade expatriates to become more involved in their home countries; an involvement that will hopefully lead to steady flows of capital through remittances and return.[11]

The provision of dual citizenship, however, may be a double-edged sword. In extending dual citizenship rights home countries often hope that expatriates will naturalize in their host countries. Using survey data Jones-Correa (2001) and Mazzolari (2007) find ample evidence— based on Latin American immigrants to the United

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[10] See Itzigsohn (2000) for a discussion of the linkage between transnational behavior and policies surrounding citizenship rights in the country of origin. While Itzigsohn focuses on remittances the argument is more generally applicable to all types of transnational economic activity.

[11] Indeed, Forner (2007) describes how Italy deployed dual citizenship rights in the 1890s specifically to Italians living in the United States because it provided a steady stream of savings back to the homeland.

States—to support this conjecture. Naturalization, in turn, not only provides an opportunity to influence the host country's political process, but it is also increases the migrant's access to labor markets.[12] Encouraging naturalization, while seemingly at odds with the idea that sending countries attempt to strengthen ties with their diasporas, is a strategic decision. Freeman and Ogelman (1998) argue that "sending countries are likely to be strategic and to be directed toward such goals as enhancing their control and influence over their nationals living abroad and, through them, increasing their influence over the foreign and domestic policies of receiving states" (p.771).

This view of dual citizenship is consistent with existing theories of migrant remittances and return. Two dominant theories have been developed to explain the propensity of immigrants to remain connected to their homeland. One theory focuses on altruistic behavior on the part of migrants, arguing that the goal of migrant remittances is to improve the living standards of those left behind. Remittances, from this point of view, are a mechanism designed to increase aggregate consumption in the homeland (e.g., Stark 1995) or to act as an insurance mechanism and smooth consumption in the event of exogenous shocks (e.g., Lucas and Stark 1983). The second theory—one that is compatible with the altruism argument—focuses on immigrant self-interest. The self-interest perspective holds that remittances are seen as a form of repayment for debts associated with education or with the cost(s) of migration itself (e.g., Poirine 1997). Remittances are also seen as a form of investment

[12] Mazzolari (2007) finds that immigrants from countries granting dual citizenship where 3.6% more likely to find full time employment relative to immigrants from other Latin American countries.

behavior whereby migrants send money home in order to have access to financial assets upon their return home (Yang 2011).

It is empirically difficult to disentangle these theories from one another—especially without experimental data. In a broad survey of the literature, Wang (2011) concludes that the micro-data is consistent with both theories. Interestingly this is similar to the findings of empirical work on the determinants of return migration. Drawing on a wide range of studies Constant and Massey (2002) conclude that there is no support for a specific theory of return; rather that migrants have “heterogenous motives” when it comes to return to their homelands.

These theories of remittance and return behavior are consistent with the efforts of sending states to maintain a connection. Even while countries of origin struggle with normative conditions surrounding expatriate rights, residents of that country remained linked to those that have left. And the immigrants that have gone abroad create social, economic and political linkages with their home country; linkages that have been emphasized in the study of "transnationalism." This transnational focus—a focus on migrant ties that link societies across national borders—is useful. But because it gives pride of place to the social relationship it does not help us understand the ways in which sending countries attempt to reconstruct citizenship and national identity.

Dual citizenship can, from this perspective, provide the linkage between expatriate and homeland as envisioned by theories of remittances. I hypothesize, therefore, that expatriate dual citizenship will be associated with larger remittances and a greater probability of return migration.

Section two details the sample, data and measures used to test this hypothesis while sections three and four provide macro and micro level evidence. Section five concludes.

2. Sample, Data, Measures

At the most general level dual citizenship is a national level policy affecting a general class of the population—those who reside outside of a state's territorial borders. It is designed to influence an emigree's feeling of connection to their homeland. Thus we would expect dual citizenship to influence individual level behavior; extracting true behavior—especially with regard to sensitive behavior such as an intention to return home or the nature of household expenditures. Because of this concern my research design examines remittances at both the macro and the micro levels. In the first set of analyses I examine the effect of dual citizenship on a country's ability to generate remittances at the national level.[13] This allows me to observe the effect of dual citizenship on remittances over time and across countries and, because of the nature of the data, I am able to estimate the long- and short-term effect of dual citizenship on remittances. The second set of analyses draws on migrant surveys undertaken in a number of countries; these surveys allow me to test the micro-level mechanism underlying the aggregate findings. In addition to asking questions regarding remitting behavior, surveys of migrants living in Spain and Germany also ask whether the migrant intends to return home. In the rest of this section I describe the samples, data sources and variables used to test my hypothesis.

[13] The focus is on remittances rather than on return as broad cross-national data on either return intention or actual return by immigrants is not available.

For the macro-level analysis I assemble a global sample of 133 developing and emerging market economics over the period 1972-2009. The dependent variable is remittances in current US dollars obtained from the World Bank's World Development Indicators (WDI) on-line.[14] As this variable is significantly skewed I take the log. In addition to the measure of home country dual citizenship described above I include a set of variables to control for factors other than dual citizenship that may drive remittances over time and country. The first is a GDP weighted measure of a country's diaspora—a variable that weights the size of its émigré population by the per-capita income of their host country.[15] This variable proxies for the availability of external capital which could, all else equal, be remitted by émigrés to their homeland. It is important to note that this is an imperfect measure as while it accounts for the opportunity to remit it does not capture the ability of migrants to remit. And because I use the average per-capita income of the migrant's host country I am unable to capture the fact that most remittances are sent by migrants from the lower part of the income distribution.

Following Chami, Fullenkamp and Jahjah (2005) I control for (logged) per-capita GDP in PPP terms and its square to capture differences in the average level of wealth in the migrant's homeland. The squared term helps to account for the possibility of

[14] If I use remittances per capita for the recipient country I obtain almost identical results. Those results are contained in the appendix to this paper.

[15] Fitzgerald, Leblang and Teets (2012) have collected bilateral migration data measuring the stock of migrants residing in 21 host countries broken down by country of origin for the period 1960-2007.1 take that data, weight it by per capita GDP (in PPP terms) in the host country and then sum it by origin country and year. This provides a variable capturing the size of a country's external population weighted by income; a variable that provides a proxy of the potential to send remittances.

selection on the part of migrants whereby migration—and difference in the rate of emigration—changes as countries undergo economic development. The WDI is also the source of data for the variable measuring the homeland's rate of exchange rate appreciation which helps proxy for the opportunity cost associated with saving money in the host country or remitting it back home.

Larger countries may, all else equal, have a larger number of emigrants. To control for the potential for these countries to generate large remittances I control for the recipient country's population. Drawing on Yang's (2011) work I also include a variable measuring the log of the estimated cost (in per capita USD) of natural disasters in the migrant's homeland. Migrants may be concerned with the transparency of financial system in their homeland and I proxy for this using the measure of capital account openness developed by Chinn and Ito (2008). Finally, there is some evidence that a country's political institutions provide a signal about a country's level of economic transparency and corruption (Ahmed 2012). An imperfect but comparable indicator institutional clarity is the country's level of democracy, which I measure using the POLITY measure of institutional democracy. All the country-level independent variables are lagged by one year to decrease the risk of simultaneity bias.

For the micro-level analyses I draw on three different sets of migrant surveys. The first is an aggregation of migrant surveys compiled by a team at the World Bank. Bollard, McKenzie, Morten and Rapoport (2011) collect and create concordances between responses for migrant surveys conducted in the USA, Italy, France, Australia and Japan. While their interest is in examining the effect of education on remittance behavior their model provides a useful framework within which to introduce the effect of dual citizenship. For this collection of migrant surveys the dependent variable is the amount the migrant reports remitting during the year of the survey in constant US dollars. I include the same individual level control variables as Bollard and his co-authors: education, the number of years spend abroad, income, employment status, marital status and family situation and location of parents and children.

The other two migrant surveys are broader in terms of country coverage than the individuals surveys aggregated by Bollard, et al. In 2006-2007 the Spanish Statistical Office undertook a survey of immigrants living in Spain. The result—the National Immigrant Survey of Spain—released in 2008 contains detailed responses from over 15,0000 immigrants in Spain from over 80 countries of origin.[16] Germany has been oversampling migrants in its annual Socio-Economic Panel (GSEOP) since 1984. Unlike Spain, however, German did not allow migrants to hold dual citizenship until its citizenship law was reformed in 2000. Consequently I use data from the GSEOP for the years 2000-2009.

Empirical survey based studies of remittance and return behavior include measures of age, gender, contact with the homeland, education, income and labor force status (e.g., Rapoport and Docquier 2006; Dustmann and Weiss 2007). Unfortunately neither the Spanish nor the German surveys provide consistent measures for all these variables so I analyze the two surveys separately.

In the Spanish survey respondents were asked "Do you send money overseas" and "Do you intend to return to your home country." Both of these variables are dichotomous and are coded "1" if the respondent answers in the affirmative.

[16] http://www.ine.es/en/prodyser/micro_inmigra_en.html.

Interviewees were also asked whether they are in touch with family and/or friends in their country of origin, their level of education, their gender, their work force status—whether they are unemployed or are retired/pensioner—and whether they possess Spanish citizenship. This last question is of particular importance as it provided a opportunity to examine the effect of dual citizenship and naturalization in Spain on return and remittance behavior.

The GSOEP also asks similar questions about remittance behavior and return intention; it also measures the respondents gender, education level and whether they are currently unemployed. Respondents to the German survey provide information about the size of their household in Germany as well as answering a question asking whether financial gain was the principal motivation for migrating.

3. Remittances: Macro Evidence

I expect that dual citizenship will have a substantively importance effect on remittances to the home country. In table one I use macro-level data for an unbalanced panel of countries to evaluate this hypothesis. Column one of table one presents the core macro results: controlling political, economic and environmental factors countries that provide dual citizenship to their expatriate populations receive approximately 78% more remittances than those countries – and at those times – when dual citizenship is not in place.

To get a better sense of the magnitude of this increase I plot, in Figure Three, the average predicted amount of remittances holding all other variables at their means while altering dual citizenship policy. Consider first Mexico—a country that receives a huge sum of remittances. Mexico introduced expatriate dual citizenship in 1998; had they not done so the model predicts remittances of approximately 2.3 billion US dollars. By changing this policy the model predicts an increase in remittances of over 100 percent to a little less than six billion dollars a year. While that is the largest predicted increase among this set of six countries other counterfactuals are substantively large as well.. India, a country with a large expatriate population that has yet to embrace expatriate dual citizenship is predicted to increase remittances by 75% if they changed their policy. Thailand's remittances would increase by a similar magnitude. While the increases for other countries are smaller they are substantial. The Philippines, for example, is predicted to receive half a billion dollars a year in additional remittances from the adoption of dual citizenship policy.

It is possible that the estimated effect of dual citizenship on remittances is driven by reverse causality; that countries receiving large amounts of remittances are likely to implement inclusive dual citizenship policies. In columns two and three of table one I confront this possibility head-on through the use of instrumental variables regression. Identifying an instrument for dual citizenship is difficult as a number of factors influencing the adoption of dual citizenship also influence a country's access to remittances. Consequently I draw on the literature on policy diffusion and use as an instrument for dual citizenship in country *i* the number of countries that have dual citizenship that also share a border with country *i*. This instrument is motivated by the observation that countries—especially neighboring countries—often compete for capital and tend to adopt policies similar to one another (Simmons and Elkins 2004) as well as by the observation that the adoption of dual citizenship policies tended to cluster together within certain regions (Jones-Correa 2001).

The instrumental variables estimates are broadly consistent with those obtained via OLS thought the effect of dual citizenship on remittances is substantially attenuated, decreasing in size by one half. Yet the impact is still impressive: dual citizenship increases remittances by almost forty percent. The instrument used in the first stage is well defined—the F-statistics for the exclusion of this variable is 918.36, well above the rule-of-thumb cut-off of ten (Stock and Yogo 2004). The first stage model also provides a bit of evidence consistent with the discussion in section one: countries with large expatriate populations and that are democratic are more likely to provide dual citizenship to their expatriates even after controlling for the influence of countries in their neighborhoods.

Does dual citizenship influence remittances because of the feeling of attachment to the homeland or because dual citizenship provides other sets of rights? As observed in figure two, while some countries that provide dual citizenship also allow their expatriates the right to vote that is not universal. Yet is could be the extension of voting rights that is driving remitting behavior. To get at this in column four and five of table one I include a dummy variable coded "1" if the home country provides voting right.[17] In neither specification—one that includes dual citizenship and one that does not—do voting rights have a statistically significant effect on remittances.

As a final check on the robustness of the central macro results I ask whether the estimated effect in column one of table one is influenced by the omitted variables that

[17] Data on external voting rights is derived from the International Institute for Democracy and Electoral Assistance's *Voting from Abroad: The International IDEA Handbook* accessed online: http://www.idea.int/publications/voting_from_abroad/. This publication differentiates between politics that allow voting from abroad from those that require expatriates to return home to cast their ballots. I club together these two different conceptions of voting from abroad in constructing the external voting rights variable; using procedures individually or independently does not alter the null finding reported above.

vary either over time or across countries. To that end I replication the OLS (column 1) and IV (column 2) models including country fixed effects, year fixed effects and both set of fixed effects. Note that in the country fixed effects regressions the coefficient on dual citizenship is identified off of only those countries that change dual citizenship policy during the sample period.

The results are summarized graphically in figure four where I plot the parameter estimate for dual citizenship along with its 95% confidence interval. The results demonstrate that dual citizenship has a statistically robust and substantively significant impact on remittances; in only the IV model with year fixed effects does the 95% confidence interval come close to zero (the lower boundary is .053).

While the results in table one provide consistent support for the hypothesis that dual citizenship enables governments to harness the economic resources of their diaspora, the use of panel data enables us to push this analysis a bit farther. In table two I estimate an error correction model (ECM) where the dependent variable is the change in remittances. In estimating a full ECM model I include changes and lags of all explanatory variables used in table one; this enables me to capture the immediate but transitory effect of dual citizenship on remittances along with longer term effects of this policy.

Table two contains the results of four different specifications of the ECM. All models include a set of country fixed effects to capture potential omitted factors, models two and four also include year fixed effects and models three and four are estimated via instrumental variables.[18] The effect of dual citizenship on the change in remittances is

[18] Because the ECM has two potentially endogenous variables—the lagged level of dual citizenship and the change in dual citizenship policy—I need two instruments. To maintain comparability I use number of border countries that have dual citizenship lagged one year (the same instrument used in table one) and the

remarkably consistent across specifications both the level and change in dual citizenship having a positive and statistically significant effect. In column one of table two the immediate effect of providing expatriates with dual citizenship rights—given by the coefficient on the contemporaneous change in dual citizenship—is 0.26 which translates into an immediate increase in remittances of almost thirty percent. The long-term effect—given by the coefficient on the lagged level of dual citizenship divided by the coefficient on the lagged dependent variable—shows the impact of introducing dual citizenship across future periods. In column one this effect is quite large: an increase in remittances of over one hundred percent; numbers that are consistent with some of the results displayed in figure three.

4. Remittances and Return: Evidence from Migrant Surveys

While section three provides evidence of a robust relationship between dual citizenship and remittances based on macro-data the theoretical discussion is based on micro-level motivations. In this section I use a variety of migrant surveys to see whether dual citizenship increases the likelihood of migrants to remit or return to their homelands.

This analysis begins in Table Three where I draw on the collection of migrant surveys compiled by Bollard, et al (2011) and used in their study of remittances. To their baseline specification I add the dummy variable for dual citizenship. In addition, because of the potential for omitted variables I include a set of country dummy variables along with the macro-level covariates used in Table One. These models are estimated via OLS and include probability weights standardized across the various surveys.

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change in this variable entered contemporaneously. In both cases the F-test for instrument strength well exceeds the rule-of-thumb cutoff of 10.

The Bollard, et al sample pools together surveys of migrants residing in the US (two sample: NIS and PEW), Japan, Italy, France and Australia. I first estimate the effect of dual citizenship using the pooled sample and then present the analysis for each individual country survey.[19] Full results for all models are included in Table Three with the effect of dual citizenship displayed graphically in Figure Five.

In the aggregate dual citizenship increases individual remittances by an average of $267 US dollars. When disaggregating the surveys there is clearly substantial variance across migrants in different host countries. Depending on the sample, migrants remit either the largest amount on average (the US sample from the PEW organization) or the least (the US sample from the New Immigrant Survey). The estimates from the PEW organization are likely overestimates as they draw on a relatively small number of migrants (900) from only 19 primarily Latin American home countries. The effect of a small number of sending countries is also apparent in the French sample that only surveyed migrants from three countries. Yet with the exception of France and Australia, migrants in the US, France, Japan and Italy reported remitted larger sums to those countries that provide them with dual citizenship rights than those migrants from countries where said rights do not exist.

In the remainder of the empirical analysis I draw on the Spanish and German migrant surveys. Column one of table four along with figure 6 contains the baseline results for remittances in Spain. The baseline probability of remitting is 48%. Migrants who remain in contact with friends or family in their homelands are 45% more likely to remit than

[19] In results not reported I also estimate the model as a hierarchical linear model with home country fixed effects entered as level two variables. The results are comparable though attenuated downwards by approximately 10%.

those without similar connections. Those working are 22% more likely to remit than the unemployed. And retired or migrants on a pension are 24% less likely to remit than those who are employed. In contrast with the findings of some recent scholarship (Bollard, et al 2011), the results in column one provide evidence of a negative and statistically significant relationship between a migrant's level of education and their propensity to remit. Finally, the baseline model provides indicates that naturalization may reap negative consequences for the homeland; those migrants who possess Spanish citizenship are 24% less likely to remit than those who have not naturalized.

The dummy variable for home country dual citizenship is also included in column one of table four. Migrants in Spain from countries extending dual citizenship are over 13% more likely to remit than those migrants from countries that do not allow their expatriates home country rights after naturalizing abroad. It may be that dual citizenship is correlated with other home country variables; in column 2 a batter of additional macro determinants of remittances are added. While only the GDP variables are statistically significant, their inclusion does attenuate the parameter estimate for dual citizenship.

Home countries, of course, may be motivated to extend dual citizenship because they are already dependent on inflows of remittances. In column 3 I deal with the potential for reverse causality through the use of instrumental variables. The second stage of the instrumental variables probit model is consistent with the earlier results. The effect of dual citizenship on the probability of remittances remains positive and statistically significant and is almost identical to the coefficient from the probit model in column two.

There are, of course, multitudes of other individual and country level variables potentially influencing the propensity to remit yet are excluded from the analysis due to missing data or model mispecification. In column four I take an unorthodox approach to this issue and estimate the model from column two using migrants from just two homelands: Columbia and Venezuela. Both countries have a large number of migrants in Spain, they share common colonial histories and histories of political instability, their economies are quite alike and they share a number of cultural similarities. Yet the two countries are different in how they treat their expatriates: Columbia dual citizenship to expatriates living in Spain while Venezuela does not. And the coefficient on dual citizenship in column 5 supports the proposition that dual citizenship matters: Columbians are 44% more likely than expatriates from Venezuela to send remittances back to their home country.

I also evaluate the robustness of this this result in more standard ways: I replicate the model in equation two of table four using a hierarchical probit model using home country fixed effects as level two variables, I calculate the standard errors for the coefficients in equation two of table four using a nonparametric bootstrap, and I deploy a permutation test to create an empirical sampling distribution for the coefficient on dual citizenship. In all cases the results are consistent with those reported in table four.

Table five and figure seven repeat this analysis using the Spanish survey substituting as a dependent variable a question asking whether the migrant intends to return to their homeland. Because the question focuses return rather than remittances these models do not include measures of the exchange rate depreciation, capital account openness or the squared term on the log of per capita GDP.[20] In the Spanish sample (table 6 and figure 6)

[20] Inclusion of these variables does not alter the reported results. They are excluded because there is no good theoretical reason why these variables should influence a migrant's intention to return home.

the baseline probability of return is 8%. The marginal effect of dual citizenship on the probability of return is relatively consistent—increasing this baseline probability between two and three percent depending on the specification. In column 5 migrants are from Colombia have a 5.6% greater probability of returning home than those migrants from Venezuela.[21]

The same analysis for remittances and return are repeated in Table six and Figure eight using the GSOEP surveys of migrants living in Germany. The baseline probability of remitting for this sample is 10% and, as observed in Figure eight, dual citizenship increases that baseline by 2% though that effect is not statistically significant. That effect increases when macro-level determinants of remittances are included (column 2) and when I use instrumental variables (column 3). Column five includes immigrants from two countries—the Czech Republic which does not allow expatriate dual citizenship and Poland which does. And, as with the earlier results, dual citizenship significantly increases the probability of remitting.

A similar pattern is found in table six and figure nine using data from the GSOEP. The baseline probability of expressing an intention to return home for immigrants in Germany is 8% and the extension of dual citizenship rights by the homeland increases that probability to between 11 and 13%. That is approximately equal to the estimated effect in column 5 where intentions are compared between migrants from Poland and the Czech Republic. In the case of Poland—which offers dual citizenship—the probability of expressing an intention to return is 10% compared to 2% for migrants from the Czech Republic.

[21] These results are also robust to the use of HLM, the non-parametric bootstrap, and permutation tests.

5. Conclusion

I argue that countries use dual citizenship to access a steady stream of international capital, capital that is available through their external populations through remittances and return migration. Using a variety of data sources and country samples I find not only that immigrant populations serve as an economic engine for their home country but also that national policies of emigrant engagement enhance that relationship. Of course countries want to maintain connections to their diaspora for reasons other than the access to capital. Migrant communities can serve as advocates for the home country and can lobby their host countries for foreign assistance, preferential economic and military policies, and better treatment of immigrants from their countries. The extension of political rights by the home country helps maintain those connections and may provide better connections between host and home country governments.

This increase in the political rights afforded to external populations presents very real analytical and normative challenges. Analytically speaking, the expansion of rights to citizens—in fact the very use of the word *citizen*—is a challenge both to well established notions of state sovereignty as well as to the very definition of the nation-state itself. Dual citizenship effectively "decouples" citizenship from residence and disrupts the notion of a nation-state defined as a territory with a well-defined population sharing a common culture and history. Normatively, providing populations outside of legal borders political rights renders those borders less meaningful. Expatriate rights also raise complex issues so far as justice and fairness is concerned as these rights constitute the extension of a right without a substantive or meaningful obligation.

There is, of course, much to be done. In addition to cataloguing dual citizenship and voting rights for migrants, it would be valuable to identify other immigrant engagement strategies—strategies designed to strengthen the connection between emigrant and the home country. More can be learned about the causes of return migration from tapping the large (and growing) number of immigrant surveys that have been carried out in Canada, Australia, New Zealand, the United States and Sweden. An analysis of these surveys could help clarify whether migrant engagement strategies are successful in harnessing those members of the diaspora that the home country most wants—those that embody human capital.

And more needs to be done to help make sense of the seeming disconnect between rights and duties afforded to national populations. The normative questions associated with allowing external populations to influence politics in the home country—and the desirability of trading these rights for economic flows—do not have easy or simple solutions.

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Table One:
Determinants of Per Capita Remittances

	(1)	(2)	(3)	(4)	(5)
	OLS	Instrumental Variables		Voting Rights	
		2nd stage	1st stage		
Dual Citizenship$_{t-1}$	0.785**	0.390**		0.788**	
	(0.111)	(0.109)		(0.115)	
(Expatriates/Population)*100$_{t-1}$	0.0402**	0.0445**	0.0159**	0.0401**	0.0490**
	(0.00774)	(0.00654)	(0.00243)	(0.00781)	(0.00885)
Share of Young Population$_{t-1}$	-0.0492**	-0.0498**	0.00692**	-0.0494**	-0.0493**
	(0.00756)	(0.00564)	(0.000949)	(0.00759)	(0.00782)
Log(GDP Per Capita)$_{t-1}$	3.498**	3.622**	-0.0181	3.501**	3.727**
	(0.393)	(0.291)	(0.0404)	(0.392)	(0.377)
Log(GDP Per Capita)^2$_{t-1}$	-0.223**	-0.230**	0.00504*	-0.223**	-0.235**
	(0.0242)	(0.0180)	(0.00272)	(0.0242)	(0.0234)
Exchange Rate Appreciation$_{t-1}$	-1.796**	-1.810**	-0.0808*	-1.800**	-1.809**
	(0.378)	(0.323)	(0.0441)	(0.381)	(0.390)
Log(Cost of Natural Disasters)$_{t-1}$	0.0188**	0.0171**	0.00115	0.0189**	0.0152*
	(0.00874)	(0.00792)	(0.00115)	(0.00874)	(0.00912)
Democracy Score$_{t-1}$	0.0274**	0.0273**	0.00203*	0.0273**	0.0272**
	(0.0103)	(0.00782)	(0.00109)	(0.0103)	(0.0108)
Capital Account Openness$_{t-1}$	0.295**	0.289**	0.00803	0.296**	0.280**
	(0.0377)	(0.0284)	(0.00489)	(0.0376)	(0.0386)
Log(Population)$_{t-1}$	0.839**	0.856**		0.839**	0.875**
	(0.0359)	(0.0284)		(0.0371)	(0.0375)
# of Border Countries with DC$_{t-1}$			0.169**		
			(0.00566)		
External Voting Rights$_{t-1}$				-0.0239	0.0933
				(0.147)	(0.143)
Constant	-6.750**	-7.395**	-0.270*	-6.719**	-8.136**
	(1.907)	(1.419)	(0.154)	(1.933)	(1.841)
Observations	2346	2346	2346	2346	2346

* $p < 0.10$, ** $p < 0.05$
Dependent variable is the log(remittances in current USD).
Robust standard errors in parentheses.
F-test for the exclusion of the instrument in equation (3): 918.36 (p<.0000), partial R-squared=0.53.

Table Two
Determinants of Per Capita Remittances
Error Correction Model

	(1)	(2)	(3)	(4)
	OLS		IV	
Log(Remittances Per Capita) $_{t-1}$	-0.245**	-0.272**	-0.245**	-0.273**
	(0.0135)	(0.0142)	(0.0136)	(0.0143)
ΔDual Citizenship	0.261**	0.217*	0.256*	0.258*
	(0.123)	(0.122)	(0.146)	(0.145)
Dual Citizenship $_{t-1}$	0.254**	0.214**	0.250**	0.236**
	(0.0667)	(0.0666)	(0.0824)	(0.0825)
Δ (Expatriates/Population)*100	0.0000858	0.00229	0.0000888	0.00226
	(0.00388)	(0.00408)	(0.00388)	(0.00408)
(Expatriates/Population)*100 $_{t-1}$	0.00610	0.00632	0.00611	0.00629
	(0.00416)	(0.00436)	(0.00416)	(0.00436)
ΔShare of Young Population	0.0528	0.0806	0.0522	0.0840
	(0.0755)	(0.0762)	(0.0759)	(0.0766)
Share of Young Population $_{t-1}$	-0.00916	0.0156	-0.00921	0.0158
	(0.00934)	(0.0101)	(0.00940)	(0.0102)
ΔLog(GDP Per Capita)	-0.259	-0.645	-0.259	-0.638
	(1.716)	(1.722)	(1.716)	(1.723)
Log(GDP Per Capita) $_{t-1}$	0.481	1.532**	0.480	1.534**
	(0.417)	(0.447)	(0.417)	(0.447)
ΔLog(GDP Per Capita)^2	0.0628	0.0571	0.0628	0.0568
	(0.118)	(0.119)	(0.118)	(0.119)
Log(GDP Per Capita)^2 $_{t-1}$	-0.0189	-0.113**	-0.0189	-0.113**
	(0.0273)	(0.0308)	(0.0273)	(0.0308)
ΔExchange Rate Depreciation	-0.314**	-0.170	-0.314**	-0.169
	(0.108)	(0.113)	(0.108)	(0.113)
Exchange Rate Depreciation $_{t-1}$	-0.537**	-0.333**	-0.538**	-0.331**
	(0.130)	(0.139)	(0.130)	(0.139)
Log(Cost of Natural Disasters)	-0.00367	-0.00489	-0.00367	-0.00488
	(0.00301)	(0.00301)	(0.00301)	(0.00301)
ΔLog(Cost of Natural Disasters) $_{t-1}$	0.000304	-0.00220	0.000310	-0.00220
	(0.00427)	(0.00428)	(0.00427)	(0.00428)
Democracy Score	0.00111	-0.000742	0.00109	-0.000620
	(0.00834)	(0.00835)	(0.00835)	(0.00835)
ΔDemocracy Score $_{t-1}$	0.00527	0.00295	0.00527	0.00300
	(0.00494)	(0.00496)	(0.00494)	(0.00496)
ΔCapital Account Openness	0.0919**	0.0874**	0.0919**	0.0873**
	(0.0339)	(0.0342)	(0.0339)	(0.0342)
Capital Account Openness $_{t-1}$	0.0142	0.0101	0.0142	0.00983
	(0.0174)	(0.0175)	(0.0174)	(0.0175)
ΔLog(Population)	-2.227	-3.756*	-2.216	-3.815*
	(2.129)	(2.130)	(2.135)	(2.134)
Log(Population) $_{t-1}$	0.703**	-0.571**	0.703**	-0.564**
	(0.159)	(0.253)	(0.159)	(0.253)
Constant	-8.902**	8.299**	-8.900**	8.183**
	(3.158)	(4.157)	(3.159)	(4.166)

Observations	2263	2263	2263	2263
Country Fixed Effects	X	X	X	X
Year Fixed Effects		X		X

Robust standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$
Dependent variable is Δlog(remittances)

Table Three
Remittances
Migrant Surveys

	(1) Pooled Sample	(2) USA (PEW)	(3) Italy	(4) France	(5) Austral	(6) Japan	(7) USA (NIS)
Dual Citizenship	267.2**	1269.3**	629.0**	-117.3	8.457	585.5*	371.1**
	(115.6)	(607.7)	(168.4)	(424.8)	(109.3)	(277.2)	(75.41)
University degree	157.3**	-610.0	0.631	212.2	65.01	407.1	234.4*
	(69.31)	(374.8)	(662.2)	(310.0)	(63.08)	(263.2)	(116.0)
Years spent abroad	24.50**	55.79	228.8	-84.30	45.59	315.6**	12.11
	(9.692)	(43.08)	(41.05)	(61.63)	(34.15)	(24.39)	(10.66)
Years spent abroad^2	-0.776**	-1.606*	-10.26	0.813	-1.647	-12.94**	-0.321
	(0.252)	(0.907)	(4.396)	(0.599)	(1.067)	(0.965)	(0.237)
Legal immigrant	-112.2		-165.8				
	(261.6)		(119.1)				
Log income	40.87**	-5.249	4.683	155.6**	12.24**	86.75**	65.06**
	(11.78)	(76.05)	(29.41)	(51.21)	(5.981)	(29.80)	(16.27)
Working	416.9**	886.3*	2952.5**	688.3*	300.1**	1577.9**	124.7
	(78.91)	(451.8)	(174.6)	(416.1)	(50.37)	(392.2)	(82.30)
Household size	-8.885		-759.7	774.4**	-62.24**		-10.62
	(21.00)		(461.5)	(250.0)	(21.14)		(26.75)
Married	68.97	470.6	-207.6		-49.29		-13.95
	(114.3)	(446.6)	(501.7)		(91.28)		(112.6)
Spouse outside country	647.4**		1264.8		108.9		380.3
	(180.8)		(1401.0)		(252.4)		(322.7)
Number of children	-86.94**	-204.4**	501.0		-6.488		-59.12**
	(24.04)	(94.94)	(426.5)		(18.36)		(20.36)
Children outside country	238.3**	5.817	178.4		159.5**	1335.1**	228.6**
	(42.58)	(144.6)	(702.8)		(68.54)	(415.4)	(47.38)
Number of parents	-32.52		917.7		7.273		8.005
	(37.20)		(1352.6)		(38.80)		(41.47)
Parents outside country	130.8**		-193.9		32.16		141.1**
	(40.81)		(1219.7)		(37.28)		(47.23)
Constant	-4284.4	-195.3	-1394.2	-633.3	6.205	-1251.9	-551.4**
	(24202.8)	(771.1)	(1051.7)	(672.0)	(160.5)	(776.6)	(186.3)
Observations	11453	928	1072	368	2215	846	5106

Dependent variable the dollar amount of remittances in USD
All Models Include a Set of Country of Birth Dummy Variables. Model 1 also includes country of origin variables lagged one year: exchange rate appreciation, share of young population, log of GDP per capita and it's square, capital market openness, the cost of natural disasters, and the Polity Democracy index.
Robust standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$

Table Four
Remittances
Spanish Migrant Survey

	(1) Micro	(2) Micro & Macro	(3) IV	(4) Columbia v. Venezula
Dual Citizenship	0.379**	0.254**	0.273**	1.102**
	(0.0371)	(0.0445)	(0.0684)	(0.116)
Home Country Contact	1.471**	1.476**	1.474**	1.023**
	(0.0704)	(0.0813)	(0.0813)	(0.210)
Employed Last Week	0.494**	0.479**	0.479**	0.535**
	(0.0278)	(0.0312)	(0.0312)	(0.0981)
Level of Education	-0.0866**	-0.0464**	-0.0462**	-0.0427
	(0.0103)	(0.0115)	(0.0115)	(0.0417)
Male	0.0385	0.0871**	0.0870**	0.190**
	(0.0240)	(0.0270)	(0.0270)	(0.0860)
Year of Birth	-0.000193	-0.000134	-0.000135	0.000666*
	(0.000129)	(0.000144)	(0.000144)	(0.000371)
Retired	-1.175**	-0.527**	-0.526**	-0.943**
	(0.0874)	(0.0917)	(0.0917)	(0.407)
Spanish Citizenship	-0.591**	-0.137**	-0.137**	-0.562**
	(0.0270)	(0.0327)	(0.0327)	(0.102)
Exchange Rate Appreciation		0.106	0.110	
		(0.373)	(0.372)	
Share of Young Population		0.00407	0.00396	
		(0.00258)	(0.00260)	
Log(GDP Per Capita)		1.186**	1.159**	
		(0.199)	(0.209)	
Log(GDP Per Capita)^2		-0.103**	-0.101**	
		(0.0119)	(0.0125)	
Capital Market Openness		0.0410**	0.0393**	
		(0.0136)	(0.0142)	
Natural Disasters		-0.0231**	-0.0229**	
		(0.00379)	(0.00380)	
Democracy Score		0.0243**	0.0243**	
		(0.00390)	(0.00390)	
Constant	-1.387**	-4.474**	-4.377**	-3.127**
	(0.271)	(0.873)	(0.903)	(0.800)
Observations	13374	12155	12155	1102

Robust Standard errors in parentheses
Cell Entries are Probit Coefficients
Dependent Variable Coded '1' if Individual remits to their home country
* $p < 0.10$, ** $p < 0.05$

Table Five
Return
Spanish Migrant Survey

	(2) Micro	(3) Micro & Macro	(4) IV	(5) Columbia vs. Venezuela
Dual Citizenship	0.289**	0.231**	0.216**	0.491**
	(0.0610)	(0.0627)	(0.0916)	(0.198)
Home Country Contact	1.165**	1.203**	1.204**	
	(0.167)	(0.190)	(0.190)	
Employed Last Week	0.0550	0.00970	0.00959	0.0474
	(0.0420)	(0.0453)	(0.0453)	(0.150)
Level of Education	0.0253	0.0262	0.0258	0.0895
	(0.0160)	(0.0176)	(0.0176)	(0.0689)
Male	-0.0602*	-0.0258	-0.0259	-0.0740
	(0.0365)	(0.0399)	(0.0399)	(0.129)
Year of Birth	-0.000398**	-0.000414**	-0.000415**	-0.00178**
	(0.000155)	(0.000157)	(0.000157)	(0.000381)
Retired	-0.396**	-0.232**	-0.233**	0.310
	(0.0997)	(0.103)	(0.103)	(0.400)
Spanish Citizenship	-0.463**	-0.329**	-0.329**	-0.228
	(0.0444)	(0.0492)	(0.0492)	(0.174)
Log(GDP Per Capita)		-0.192**	-0.192**	
		(0.0230)	(0.0231)	
Natural Disasters		0.00627	0.00623	
		(0.00484)	(0.00484)	
Democracy Score		0.0424**	0.0425**	
		(0.00563)	(0.00570)	
Constant	-2.050**	-0.760*	-0.744*	1.181
	(0.356)	(0.410)	(0.415)	(0.748)
Observations	12022	10959	10959	1003

Robust tandard errors in parentheses
Cell Entries are Probit Coefficients
Dependent Variable Coded '1' if Individual Intends to Return to Home Country
* $p < 0.10$, ** $p < 0.05$

Table Six
Remittances
German Migrant Survey

	(1) Micro	(2) Micro & Macro	(3) IV	(4) Czech Rep Vs. Poland
Dual Citizenship	0.106	0.224^{**}	0.356^{**}	1.561^{**}
	(0.0720)	(0.0955)	(0.171)	(0.390)
Education Level	0.324^{**}	0.401^{**}	0.406^{**}	0.645^{**}
	(0.0461)	(0.0554)	(0.0552)	(0.167)
Household Size	-0.0582^{**}	-0.0520^{*}	-0.0561^{*}	0.0310
	(0.0256)	(0.0288)	(0.0293)	(0.0884)
Income	0.00000687	0.0000186^{**}	0.0000199^{**}	0.000132^{**}
	(0.00000814)	(0.00000801)	(0.00000832)	(0.0000446)
Migrated for Income	0.615^{**}	0.372^{**}	0.370^{**}	1.088^{**}
	(0.168)	(0.179)	(0.180)	(0.444)
Male	-0.000942	0.0480	0.0476	-0.321
	(0.0678)	(0.0760)	(0.0758)	(0.214)
Currently Unemployed	-0.388^{**}	-0.303^{**}	-0.296^{**}	0.0733
	(0.0778)	(0.0899)	(0.0901)	(0.228)
Exchange Rate Appreciation		-0.00561^{*}	-0.00553^{*}	-0.0163
		(0.00331)	(0.00330)	(0.0163)
Share of Young Population		0.00139	0.00137	
		(0.00743)	(0.00735)	
Log(GDP Per Capita)		-1.500^{**}	-1.582^{**}	
		(0.440)	(0.449)	
Log(GDP Per Capita)^2		0.0758^{**}	0.0798^{**}	
		(0.0268)	(0.0270)	
Capital Market Openness		-0.0852^{*}	-0.0686	
		(0.0445)	(0.0477)	
Natural Disasters		0.0143^{*}	0.0118	
		(0.00778)	(0.00816)	
Democracy Score		-0.0000420	-0.00395	
		(0.0116)	(0.0119)	
Constant	-1.733^{**}	4.978^{**}	5.330^{**}	-4.791^{**}
	(0.142)	(1.872)	(1.910)	(0.660)
Observations	2653	2342	2342	534

Robust standard errors in parentheses
Cell Entries are Probit Coefficients
Dependent Variable Coded '1' if Individual Remits to their Home Country
* $p < 0.10$, ** $p < 0.05$

Table Seven
Return
German Migrant Survey

	(1) Micro	(2) Micro & Macro	(3) IV	(4) Czech Rep Vs. Poland
Dual Citizenship	0.367**	0.388**	0.340*	1.098**
	(0.0628)	(0.0743)	(0.205)	(0.367)
Education Level	-0.0540	-0.0609	-0.0641	0.0991
	(0.0391)	(0.0417)	(0.0426)	(0.192)
Household Size	0.0852**	0.0776**	0.0794**	-0.0389
	(0.0198)	(0.0230)	(0.0242)	(0.111)
Income	-0.0000202*	-0.0000278**	-0.0000284**	0.0000995**
	(0.0000105)	(0.0000121)	(0.0000140)	(0.0000397)
Migrated for Income	-0.0178	0.0272	0.0272	
	(0.158)	(0.162)	(0.172)	
Male	0.0984*	0.0557	0.0556	-0.251
	(0.0572)	(0.0606)	(0.0618)	(0.225)
Currently Unemployed	-0.384**	-0.382**	-0.386**	-0.697**
	(0.0634)	(0.0674)	(0.0706)	(0.316)
Log(GDP Per Capita)		0.270**	0.271**	
		(0.0411)	(0.0394)	
Natural Disasters		0.0193**	0.0204**	
		(0.00630)	(0.00755)	
Democracy Score		-0.0420**	-0.0407**	
		(0.00952)	(0.0109)	
Constant	-1.099**	-3.165**	-3.151**	-2.822**
	(0.122)	(0.343)	(0.333)	(0.760)
Observations	2653	2350	2350	523

Robust standard errors in parentheses
Cell Entries are Probit Coefficients
Dependent Variable Coded '1' if Individual Intends to Return to Home Country
* $p < 0.10$, ** $p < 0.05$

APPPENDIX
Table One:
Determinants of Per Capita Remittances

	(1)	(2)	(3)	(4)	(5)
	OLS	Instrumental Variables		Voting Rights	
		2^{nd} Stage	1^{st} Stage		
Dual Citizenship $_{t-1}$	0.711^{**}	0.359^{**}		0.710^{**}	
	(0.0766)	(0.0720)		(0.0769)	
(Expatriates/Population)*100 $_{t-1}$	0.0441^{**}	0.0472^{**}	0.0159^{**}	0.0441^{**}	0.0505^{**}
	(0.00692)	(0.00583)	(0.00243)	(0.00693)	(0.00784)
Share of Young Population $_{t-1}$	-0.0372^{**}	-0.0384^{**}	0.00692^{**}	-0.0370^{**}	-0.0387^{**}
	(0.00563)	(0.00421)	(0.000949)	(0.00562)	(0.00586)
Log(GDP Per Capita) $_{t-1}$	2.398^{**}	2.490^{**}	-0.0181	2.395^{**}	2.558^{**}
	(0.250)	(0.183)	(0.0404)	(0.250)	(0.248)
Log(GDP Per Capita)^2 $_{t-1}$	-0.156^{**}	-0.161^{**}	0.00504^{*}	-0.156^{**}	-0.163^{**}
	(0.0163)	(0.0118)	(0.00272)	(0.0162)	(0.0161)
Exchange Rate Appreciation $_{t-1}$	-1.268^{**}	-1.282^{**}	-0.0808^{*}	-1.266^{**}	-1.280^{**}
	(0.221)	(0.196)	(0.0441)	(0.221)	(0.232)
Log(Cost of Natural Disasters) $_{t-1}$	-0.0127^{**}	-0.0122^{**}	0.00115	-0.0127^{**}	-0.0114^{*}
	(0.00569)	(0.00487)	(0.00115)	(0.00571)	(0.00590)
Democracy Score $_{t-1}$	0.0215^{**}	0.0210^{**}	0.00203^{*}	0.0215^{**}	0.0206^{**}
	(0.00707)	(0.00541)	(0.00109)	(0.00707)	(0.00758)
Capital Account Openness $_{t-1}$	0.245^{**}	0.238^{**}	0.00803	0.245^{**}	0.227^{**}
	(0.0285)	(0.0214)	(0.00489)	(0.0286)	(0.0296)
# of Border Countries with DC $_{t-1}$			0.169^{**}		
			(0.00566)		
External Voting Rights $_{t-1}$				0.0155	0.110
				(0.0948)	(0.0955)
Constant	-4.911^{**}	-5.166^{**}	-0.270^{*}	-4.919^{**}	-5.473^{**}
	(1.000)	(0.732)	(0.154)	(1.001)	(1.007)
Observations	2346	2346	2346	2346	2346

* $p < 0.10$, ** $p < 0.05$
Dependent variable is the log(remittances per capita).
Robust standard errors in parentheses

APPENDIX
Table Two
Determinants of Per Capita Remittances
Error Correction Model

	(1)	(2)	(3)	(4)
	OLS		IV	
Log(Remittances Per Capita) $_{t-1}$	-0.122**	-0.135**	-0.123**	-0.135**
	(0.0100)	(0.0105)	(0.0102)	(0.0107)
ΔDual Citizenship	0.140**	0.108*	0.136*	0.122*
	(0.0623)	(0.0616)	(0.0737)	(0.0729)
Dual Citizenship$_{t-1}$	0.0972**	0.0970**	0.0993**	0.107**
	(0.0339)	(0.0336)	(0.0420)	(0.0416)
Δ(Expatriates/Population)*100	0.00102	0.00102	0.00102	0.00101
	(0.00197)	(0.00206)	(0.00197)	(0.00206)
Expatriates/Population)*100 $_{t-1}$	0.00481**	0.00372*	0.00481**	0.00371*
	(0.00211)	(0.00220)	(0.00211)	(0.00220)
ΔShare of Young Population	-0.0375	0.0287	-0.0372	0.0301
	(0.0354)	(0.0378)	(0.0356)	(0.0380)
Share of Young Population $_{t-1}$	-0.0124**	0.00118	-0.0124**	0.00124
	(0.00427)	(0.00502)	(0.00429)	(0.00502)
ΔLog(GDP Per Capita)	0.278	-0.212	0.279	-0.211
	(0.866)	(0.867)	(0.866)	(0.867)
Log(GDP Per Capita) $_{t-1}$	0.372*	0.688**	0.373*	0.691**
	(0.211)	(0.216)	(0.211)	(0.216)
ΔLog(GDP Per Capita)^2	0.0252	0.0422	0.0251	0.0421
	(0.0597)	(0.0600)	(0.0597)	(0.0600)
Log(GDP Per Capita)^2 $_{t-1}$	-0.0183	-0.0427**	-0.0183	-0.0428**
	(0.0138)	(0.0143)	(0.0138)	(0.0143)
ΔExchange Rate Appreciation	-0.307**	-0.176**	-0.307**	-0.175**
	(0.0545)	(0.0569)	(0.0546)	(0.0569)
Exchange Rate Appreciation $_{t-1}$	-0.382**	-0.221**	-0.382**	-0.219**
	(0.0658)	(0.0698)	(0.0659)	(0.0699)
Log(Cost of Natural Disasters) $_{t-1}$	-0.000177	-0.00194	-0.000176	-0.00195
	(0.00211)	(0.00215)	(0.00211)	(0.00215)
ΔLog(Cost of Natural Disasters)	-0.00179	-0.00262*	-0.00179	-0.00262*
	(0.00150)	(0.00152)	(0.00150)	(0.00152)
ΔDemocracy Score	-0.00589	-0.00665	-0.00588	-0.00660
	(0.00422)	(0.00420)	(0.00422)	(0.00421)
Democracy Score $_{t-1}$	0.000398	-0.00122	0.000407	-0.00121
	(0.00245)	(0.00249)	(0.00245)	(0.00249)
ΔCapital Account Openness	0.0553**	0.0500**	0.0553**	0.0500**
	(0.0172)	(0.0172)	(0.0172)	(0.0172)
Capital Account Openness $_{t-1}$	0.00361	0.00253	0.00360	0.00245
	(0.00883)	(0.00887)	(0.00883)	(0.00887)
Constant	-0.924	-2.458**	-0.930	-2.475**
	(0.875)	(0.900)	(0.877)	(0.901)
Observations	2263	2263	2263	2263
Country Fixed Effects	x	x	x	x
Year Fixed Effects		x		x

Robust standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$
Dependent variable is the Δlog(remittances per capita)

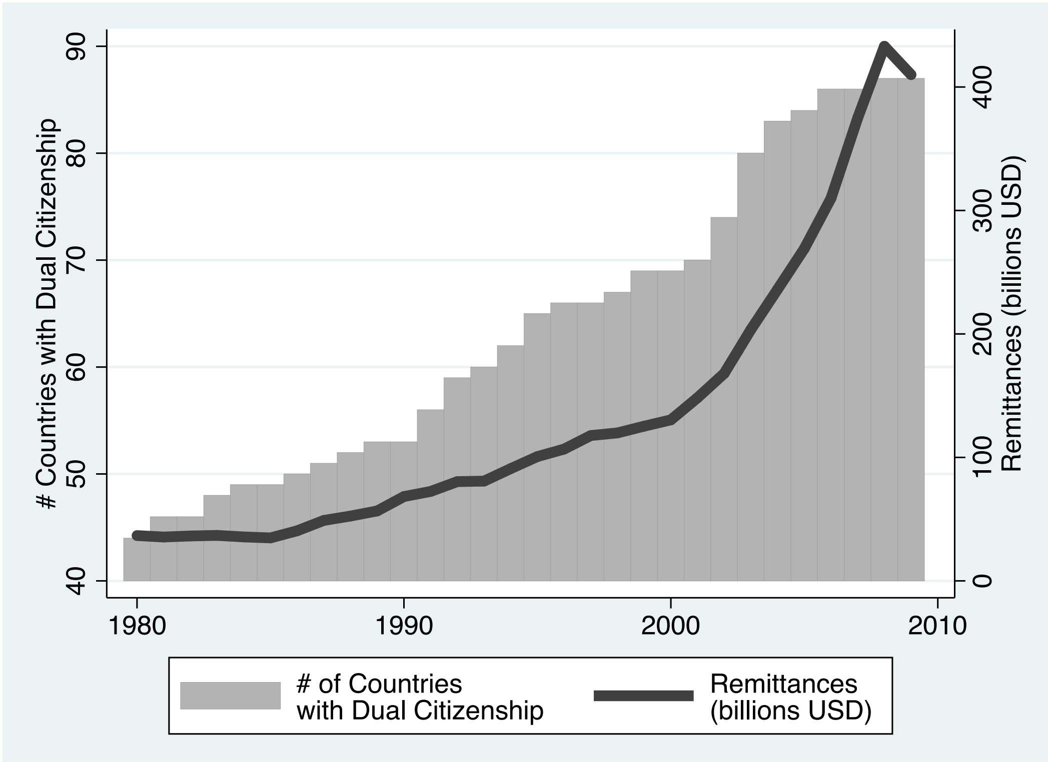

Figure One: Evolution of Dual Citizenship and Remittances

		Dual Citizenship (2000)	
		No	Yes
Expatriate Voting Rights (2000)	No	Bolivia, Chile, China, Gambia, Korea Japan, Pakistan, UAE (n=53)	Ecuador, Egypt, Greece, Italy, Mexico, Morocco, Nigeria, Sri Lanka, Uruguay (n=41)
	Yes	Australia, Austria, Belgium, Estonia, Indonesia, Indonesia, Malaysia, Netherlands, South Africa (n=48)	Argentina, Bangladesh, Brazil, Canada, France, Israel, Peru, New Zealand, Romania, Slovenia, Switzerland, Turkey (n=26)

Figure Two: Comparison of Dual Citizenship and External Voting Rights (2000)

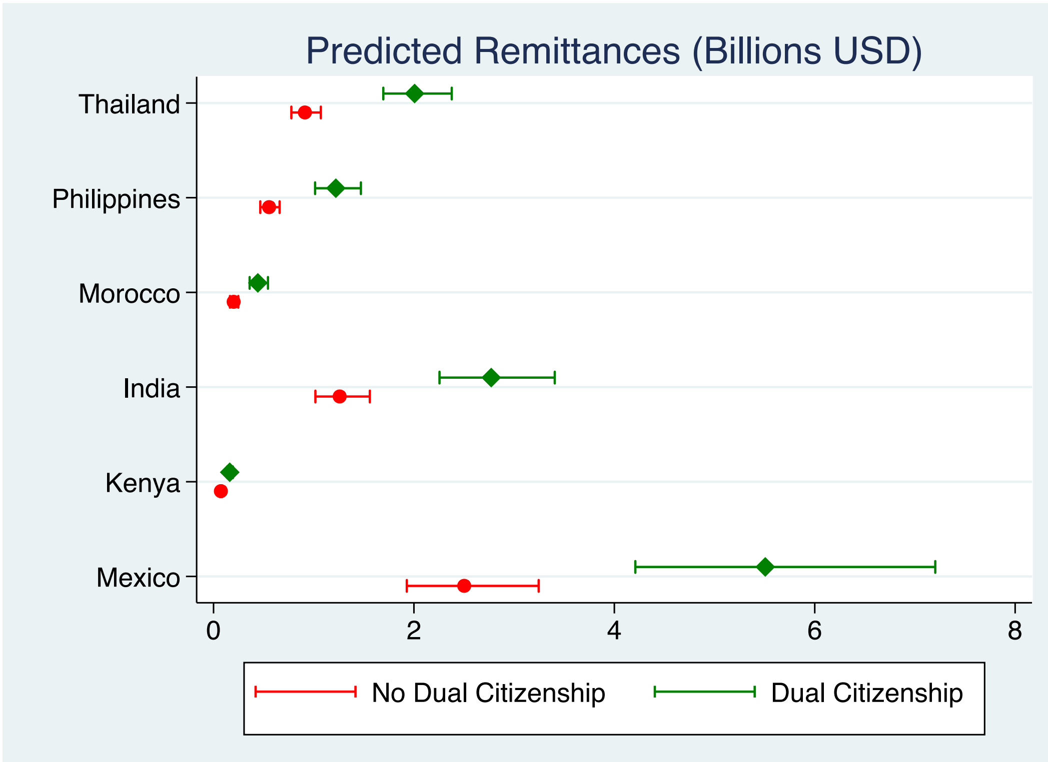

Figure Three: Effect of Dual Citizenship on Predicted Per Capita Remittances (based on estimates in model one of table one)

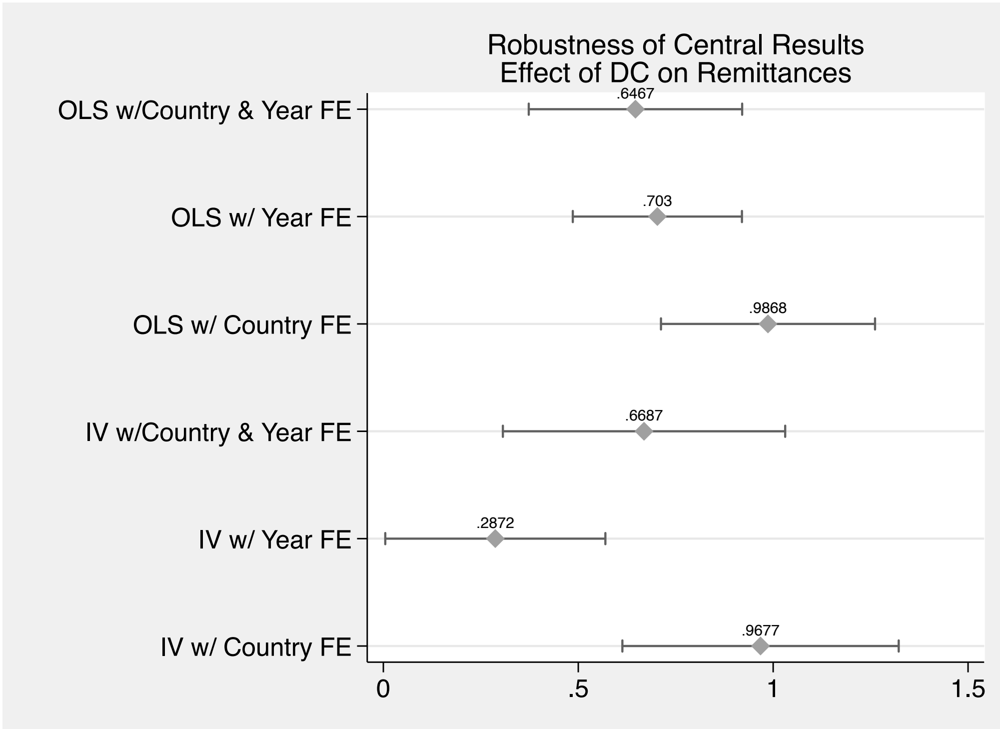

Figure Four: Robustness of Central Results

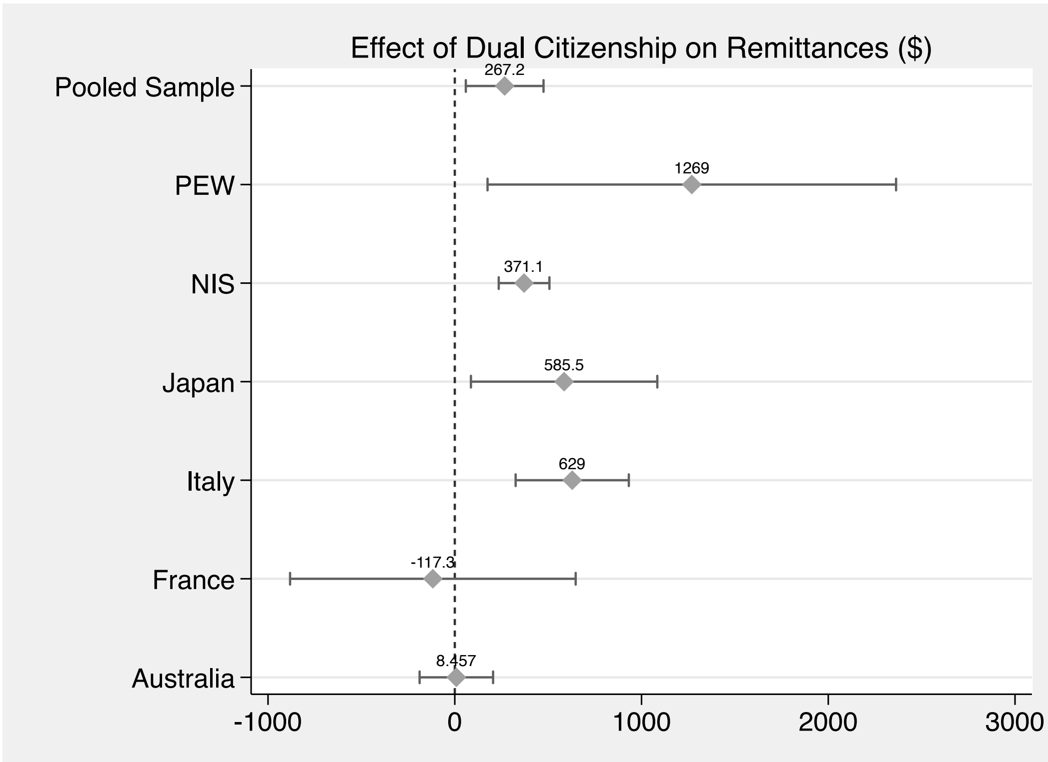

Figure Five: Effect of Dual Citizenship on Remittances (based on Table three)

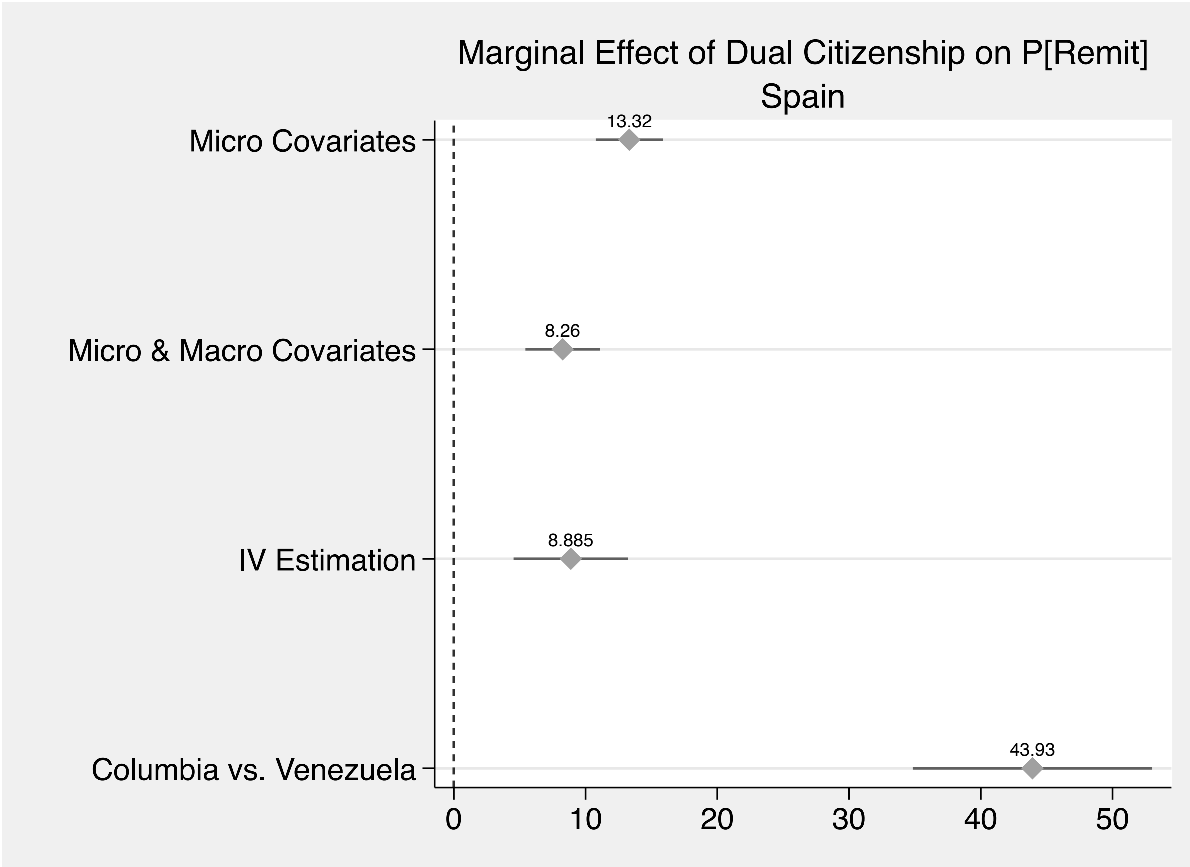

Figure Six: Marginal Effect of Dual Citizenship on P[Remit], Spanish Sample (based on Table four)

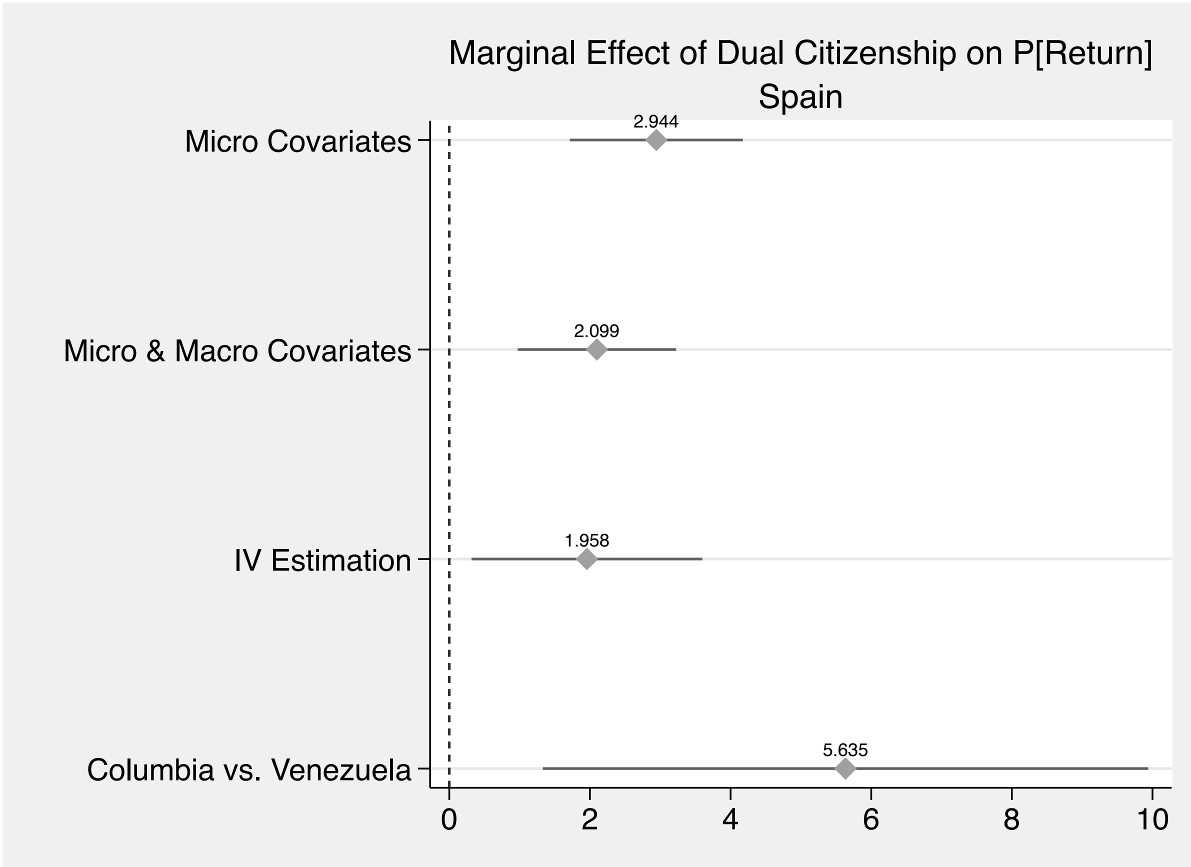

Figure Seven: Marginal Effect of Dual Citizenship on P[Return], Spanish Sample (based on Table five)

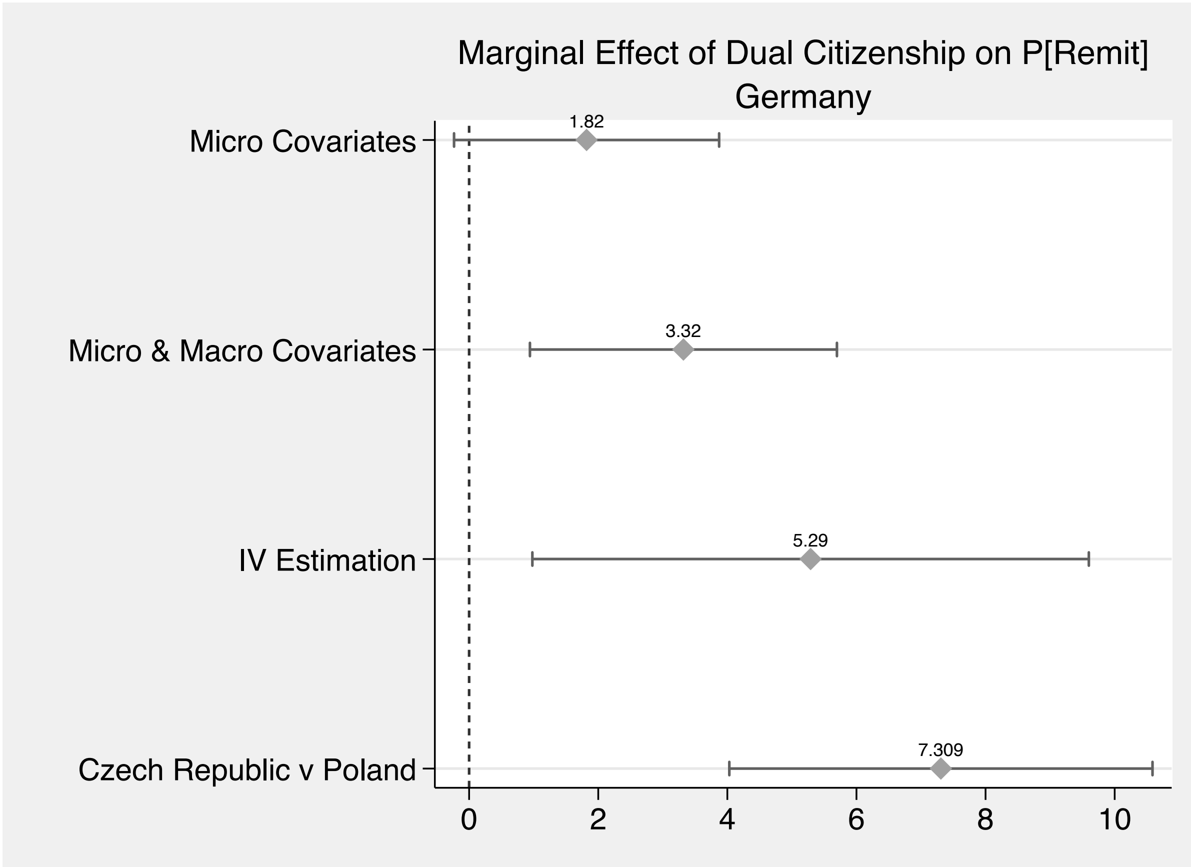

Figure Eight: Marginal Effect of Dual Citizenship on P[Remit], German Sample (based on Table six)

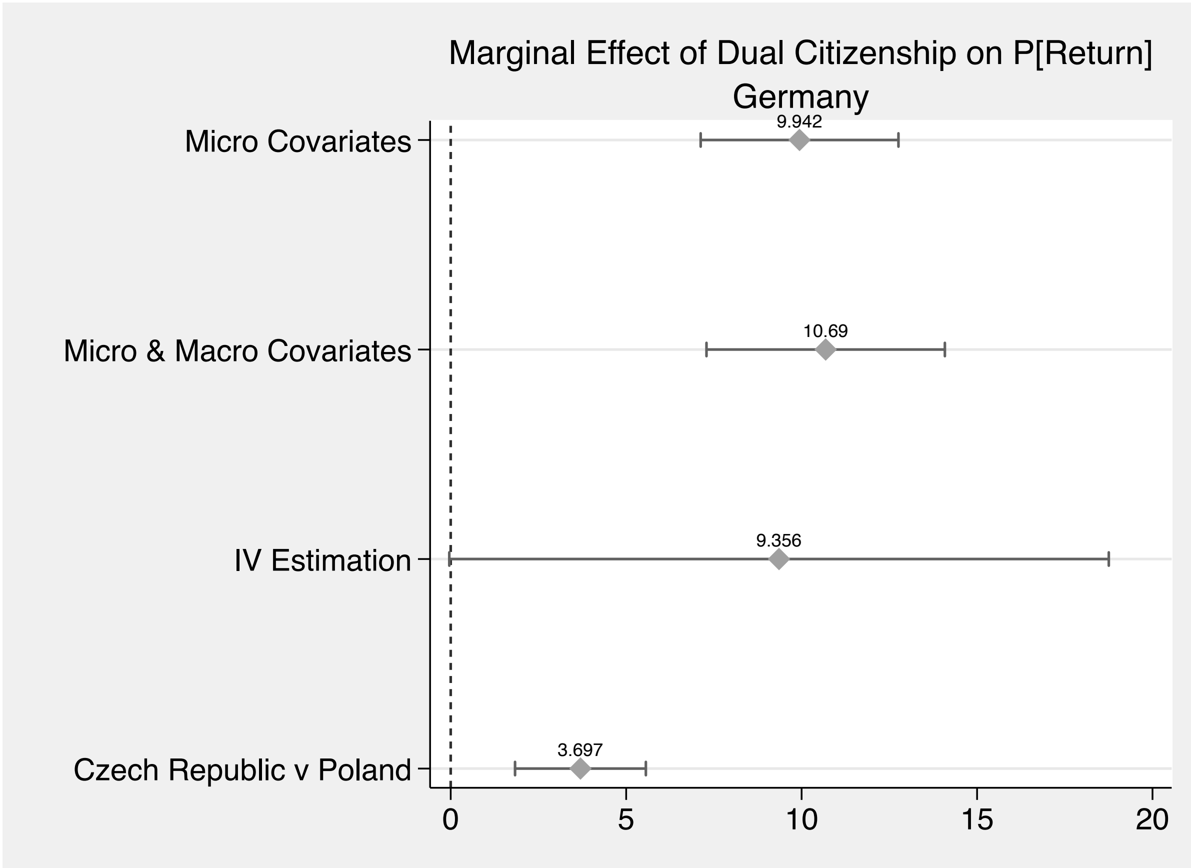

Figure Nine: Marginal Effect of Dual Citizenship on P[Return], German Sample (based on Table seven)

We find that migrant remittances significantly and positively enhance both general capital and more specific venture capital access in developing countries. We also find that important diaspora characteristics moderate this positive relationship.Â We also document evidence consistent with the proposition that remittances from the â€œrightâ€ host countries of the diaspora have a significant and positive impact on business norms in the home country. More specifically, we find that one business norm, how well management cooperates with labor in the workplace, increases in developing countries with more remittances from migrants living in host countries with higher rates of labor cooperation. Political Science Advising, Computer Lab, and Smith 220/221 offices will be accessible by stairs only. Please contact faculty or staff members directly to arrange alternative meeting locations, if needed. Contact Advising for assistance: polsadvc@uw.edu or 206-543-1824. You are here. Home â€º. News & Events â€º. Upcoming Events â€º. Harnessing the Diaspora: The Political Economy of Migrant Dual Citizenship. David Leblang (UVA).