Labor market outcomes, savings accumulation, and return migration

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ABSTRACT

In this paper, I examine the determinants of return migration from Germany for immigrants from four different source countries, and test the savings accumulation conjecture that is used to rationalize return migration decisions using both cross-country and time variation in purchasing power parity. The empirical results confirm the savings accumulation conjecture. Therefore, return migration can be seen as part of optimal life-cycle location choices in this context. I also examine how labor market outcomes influence return decisions. A key finding here is that unlike previous studies, which find a positive impact of unemployment on return migration, I find that the direction of the impact of unemployment changes by the spell length.

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1. Introduction

The level of return migration has been high both in North America and in Europe. Jasso and Rosenzweig (1982) report that of the 1971 cohort of immigrants in the U.S., the fraction that returned by 1979 could be as high as 50%.[2] According to the German Federal Statistics Office, while almost eight hundred thousand immigrants entered Germany on average annually between 1962 and 2005, more than 560 thousand left each year on average.[3] Moreover, many of these immigrants return to countries where wages are lower than those in the host countries.

The question, then, is why so many immigrants return despite higher earnings in the host country. Borjas (1994) explains return migration as part of optimal life-cycle location decisions. At the time they immigrate, immigrants realize that after they acquire physical or human capital in the host country, it may be optimal for them to return because the returns to that type of capital are higher in the home country. The savings that immigrants accumulate in Germany have higher purchasing power in their home country due to the lower prices there. Djajic (1989), Dustmann (1997, 2003), and Stark et al. (1997) use this fact as a motivation for return migration. Mesnard (2004) examines a model of joint optimal migration duration and occupational choice after return where migrants accumulate savings in the host country to overcome liquidity constraints in their home country. In optimal location decisions over the life-cycle, it may also be the higher returns in the home country to the human capital acquired in the host country that rationalize the return migration decision. Return migration may also be the result of unexpected events, either in the host or home country (Berninghaus and Siefer-Vogt, 1993; Tunalı, 2000). Even when it is optimal to immigrate ex-ante, it may be optimal to return after the realization of negative shocks in the host country like unemployment. Another explanation used in a number of studies (Hill, 1987; Djajic and Milbourne, 1988) is that migrants prefer to live in their home country. According to this, in a model where immigrants choose lifetime consumption and time in the home country given the wages in the home and host countries, the remaining worklife and the cost of migration, it may be optimal to immigrate and then return depending on the preferences of the potential immigrant.

The findings of the empirical literature on immigrants in Germany, in fact, suggest a savings accumulation motivation for immigrants in this country. Using a survey of Turkish emigrants from Germany in Turkey, Dustmann and Kirchkamp (2002) report that only 6% worked as salaried workers after return whereas 51% of the returners were

[2] Borjas and Bratsberg (1996) find that 17.5% of all immigrants who entered the U.S. between January 1, 1975 and April 1, 1980 returned by the end of the same period. For working-age male immigrants in Canada, Aydemir and Robinson (2008) find an out-migration rate of 35% by 20 years of residence.
[3] Dustmann (1996) reports high return migration levels for other European countries like Belgium, France, the Netherlands and Switzerland.

self-employed. The other 43% were retired. The facts that half of these migrants engaged in entrepreneurial activities after return and that most of the rest lived as rentiers suggest a savings motive for immigrating to Germany. If the goal of immigrants was to accumulate savings, we would expect their saving rates to be high. Based on an empirical investigation of Turkish immigrants—the largest immigrant group in Germany—Kumcu (1989), in fact, finds evidence for very high savings rates. On the other hand, McLean Petras and Kousis (1986) find that labor market opportunities are very limited for Greek immigrants after they return from Germany. Most are forced to choose from unemployment, informal sector, and scatter jobs. This makes it unlikely that their return was motivated by the higher returns to the human capital they acquired in Germany. Therefore, I focus on the savings accumulation conjecture as the potential explanation for return migration from Germany and test this conjecture in this paper.

In order to test the savings accumulation conjecture, we need a source of variation in the purchasing power of immigrants' savings. One such source of variation across immigrants would be their earnings. In fact, a number of studies examine the relationship between immigrants' earnings and their return propensity. Borjas (1989) finds a positive association between earnings and return migration for immigrants in the U.S. On the other hand, Klinthall (1999) finds a negative relationship between income and return migration for Greek migrants in Sweden. For immigrants in Germany, Dustmann (2003) reports a negative relationship whereas Constant and Massey (2002) find no statistically significant relationship between these two variables. However, the problem with this approach is that earnings are likely to be jointly determined with the return migration decision because immigrants who are more willing to return would work more to save faster. (Dustmann (2003) addresses this endogeneity issue, though, by instrumenting earnings using parental education.)

Yang (2006) uses an exchange rate shock for immigrants from the Philippines as a source of exogenous variation in the purchasing power of their savings in order to distinguish between target-earnings motivation, where immigrants stay in the home country until their accumulated savings reach a threshold, and savings accumulation conjecture (called life-cycle considerations in his paper), where immigrants stay in the host country as long as the marginal benefit of higher savings there exceeds the marginal cost of staying. He concludes that overall the evidence supports the savings accumulation conjecture. In a similar approach, I use the exogenous variation in purchasing power parity between various source countries and Germany to test the savings accumulation conjecture. The quasi-experiment that Yang utilizes is the exchange rate crisis in the Philippines in 1997; as a result, there is only cross-country variation in the exchange rate shock whereas in my paper I use the variation in ppp over a long time period (16 years) as well as a cross-section of source countries. The immigrant pool in my sample is also different from that of Yang in the way that while the immigrants in Yang' analysis are mostly temporary migrants on short-term work contracts, the immigrants in my sample are longer-term immigrants.[4] Another key difference in my analysis is that, unlike Yang, I allow the impact of ppp on the return rate to vary according to immigrants' age, which turns out to be very important empirically.

Both micro and macro data are used in the estimation. The micro level data I use come from the German Socioeconomic Panel, which contains rich information on demographic as well as labor market outcomes of immigrants in Germany from various source countries. The sample is restricted to first-generation male immigrants. In addition, I employ macro data pertaining to immigrants' return decision. These macro data display variation both at the country level and over time.

A key issue with the micro level data set utilized in this study is that it is a stock-sample of immigrants in Germany in 1984 from

certain source countries. Like all stock-sample data, they are more likely to include immigrants with longer duration of residence. Not accounting for this would clearly result in biased estimates. However, my estimation strategy, which is based on duration analysis, accounts for the fact that the immigrants in the sample are those who survived long enough to be in the sample in 1984.

The estimation results indicate that purchasing power parity is, in fact, an important factor that influences return migration behavior. A higher purchasing power parity decreases the return propensity of younger immigrants while increasing it for the older ones. When ppp increases by 10% from an initial level of one, the odds of returning for an 18-year-old immigrants fall by 37% while the odds of returning for a 50-year-old immigrants increase by 7%. These findings confirm the savings accumulation framework. Therefore, return migration in this context can be seen part of optimal life-cycle decisions, in which immigrants are in Germany to save.

Yang (2006) finds that an increase in the purchasing power of immigrants' savings decreases their return rate. He does not distinguish among different age groups with regard to the impact of ppp on the return rate. However, his sample includes immigrants who are on average young: the mean age of the overseas workers in his sample is 34.4. Therefore, my finding that the impact of an increase in ppp on younger immigrants is negative is consistent with his finding.

I also find that labor market outcomes are important determinants of return migration behavior. Bellemare (2003) as well as Constant and Massey (2003) report negative selection in terms of employment outcomes in return migration from Germany. However, my findings indicate that selection in return migration in terms of employment outcomes cannot be characterized independent of the length of unemployment spells. For immigrants who have been unemployed for less than 3 years, unemployment increases the return propensity. On the other hand, older working-age immigrants with longer unemployment spells are more likely to stay in Germany. That long-term unemployed immigrants are more likely to stay suggests that return policies targeting this group of immigrants such as financial bonuses conditional on return could be less of a burden on the German unemployment insurance system than the unemployment benefits that will be paid for many coming years in the generous German benefit system with relatively high replacement rates and long durations of entitlement. In fact, the estimation results indicate that a similar return policy implemented by the German government in 1984 brought about a major increase in the return rates of Turkish immigrants at that year.

Next section discusses the conceptual framework. The data are described in section 3 and the estimation method is described in section 4. Section 5 presents the results and section 6 concludes.

2. Conceptual framework

In this section, I briefly discuss the basic framework of the savings accumulation conjecture, which is tested in this paper as the underlying reason for return migration in the context of immigrants in Germany.

According to the savings accumulation conjecture, return migration of immigrants is rationalized by the higher purchasing of savings accumulated in the host country after returning to the home country due to lower prices there. According to this, when workers in their home countries make their in-migration decision to the host country, they realize that it might be optimal for them to return after some time once they accumulate a certain amount of savings in the host country. In other words, return migration is part of optimal life-cycle location decisions.

In this framework, a higher ppp would have two competing effects: on one hand, it increases the value of savings already accumulated in the host country after returning to the home country, thereby increasing the return probability. On the other hand, it also increases the opportunity cost of returning because the purchasing power of extra savings that could be accumulated by staying longer also

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[4] While more than half of the immigrants in Yang's sample have been overseas for less than 2 years, the average duration of residence in my sample is about 20 years.