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Abstract

This chapter undertook the monumental task of providing a complete outlook about return, repeat, circular and onward migration by bringing together the perspectives of the host and the home country. In this endeavor, it reviewed and evaluated all theories about why people move, when they circulate, where they go, who are the people who migrate, who are the people who return, and how they change the economic and social structures in the home country. In the process, it revealed the new norm of joint decision-making by the family as a unit and underlined the importance of non-economic reasons for return. The chapter further provided a state-of-the-art literature review about empirical evidence regarding the disparate phenomena of return, circular and onward migration. It emphasized commonalities and compared differences in findings, while connecting them to the theories, policies and institutions. Return, repeat, and circular migrants are self-selected and extremely heterogeneous people and cannot conform under one theory or empirical study. Their de facto migration comportment can be understood by several different theories and, in the absence of good data, it can be explained by a variety of studies. The chapter ends with a critical conclusion and hope to inspire new avenues of research on the topic.

JEL-Codes: F220, J150, J180, J200, J610.

Keywords: return, circular, onward, international labor migration, public policy.

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I. Introduction

The latter part of the 20th century provided ample tangible examples of international return, repeat, circular, and onward migration, rendering the axiom of a one-way permanent migration obsolete. In the 21st century, the fluidity of human mobility for employment is accepted as the rule, rather than the exception, so that return, repeat, circular and other variations of human migration are foregrounded. The complexity of modeling human behavior in action has resulted in a fragmentary approach, while paucity of data has kept the literature on the topic thin but increasing since the early 2000s.

Depending on the studies, usually measured from host country data, return rates vary from 20-75% among immigrants within their first five years after arrival in OECD countries (OECD 2008). Fresh estimates using a new method show that, when aggregated across the globe, 26-31% of migration movements in each time period constitute a return to an individual's home country (Azose and Raftery 2019); remarkably large are return migration flows from the U.S. to Central and South America as well as from the Persian Gulf to south Asia. Between 30 and 60% of Eastern Europeans who went abroad, returned to their homeland within 10 years (Ambrosini et al. 2015). In Canada, 40% of skilled immigrants left within ten years after arrival (Aydemir and Robinson 2008), while in the UK, 40% of men and 55% of women left within five years after arrival (Dustmann and Weiss 2007). Similarly, 55% of immigrants left Denmark within five years (Jensen and Pedersen 2007).

Repeat or circular migration rates were over 60% among guestworkers in Germany (Constant and Zimmermann 2011), and around 80% of the migration transitions between Germany and the home countries were about re-returning to Germany (Constant and Zimmermann 2012). While more than 50% of Pakistani immigrants in Norway were repeat migrants, the Vietnamese had onward rates of 66% (Bratsberg et al., 2007). High rates of onward migration (20-28%) also characterized immigrants in Sweden (Nekby, 2006; Monti, 2018), and in Canada where 37% of Canadian immigrants moved onward to the U.S. (King and Newbold 2007). About 15% of the high-skilled immigrants in the U.S. were onward or transit migrants (Artuç and Ozden 2018).

No matter the title or rubric of the migration move, it indicates that people move from a place they call home to a new place they call host, which may later become their new home. What is more, migrants may be involved concurrently in both the home and the new home (host) country, trying to take advantage of the best each country offers without having to choose one over the other. Through migration, individuals virtually connect at least two countries creating new time-space dynamics. They can optimize labor markets between countries, facilitate international trade and the exchange of valued resources.

Traditionally, the topic of return migration has been part of the economic development literature. The idea of brain-drain that dominated the literature in the 1960s is describing a home country depleted of its human capital when its high-educated and high-skilled individuals emigrate. Remittances were later acknowledged to partly compensate for this imbalance although remittances may create a dependency that further prompts emigration or repeat migration. However, return or repeat migration can mitigate brain drain. Beine et al. (2008) showed that because brain-drain raises the return to human capital at home it incentivizes stayers to invest in it. In fact, the return of the skilled reverses the drain (Mayr and Peri 2008). Further, the departure of low-skilled and unemployed emigrants may improve the labor market prospects of the stayers, evidenced by emigration in Mexico that increased wages in high-emigration states (Hanson 2007).

The fact remains that emigration is selective and may create serious demographic and socio-economic imbalances in home countries. While home countries count on the returnees' financial investments, their upgraded skills and knowledge, and their enlarged social capital, they are not always ready to retain their returnees. Knowing why emigrants left in the first place, the characteristics of the returnees, the reasons for return, and the underlying behavioral mechanisms of repeat migration, is of great value to home countries because they can formulate appropriate and effective policies to enable and keep their valued citizens. Understanding the reintegration process of returnees, home countries can leverage their return to stimulate the country's economic growth and social development.

Another strand of the literature is related to immigrant assimilation in the host country. Studies are concerned with the double self-selection of returnees and the non-randomness of the samples. Host countries implementing policies about immigrant recruitment – whether permanent or temporary – bear economic and social cost. Decisions about immigrant retainment have consequences for domestic labor markets (to overcome skill shortages), for economic growth, for demographic challenges, and the education system. It is crucial for host countries to know the characteristics of those immigrants who decide to leave – either to return home, to move on to another country, or to re-return so they can maximize their chances to keep the hard-working, the high-educated, and skilled immigrants who benefit their country.

Repeat, and circular migrants are typically seasonal workers in the agricultural, construction, and other sectors. However, through perpetual guestworker programs, they can turn into "perma-

temp" low-wage labor. Return, repeat, and circular migrants are equally found among the higher-skilled and elite migrants. Exchange visitor programs for academics, researchers, and scientists such as H1B-visa schemes of specialty occupations in the U.S., Blue-Card visas in Europe, or Express Entry visas in Canada are a few. These elites almost always return home because their stint abroad increases their social status; observing the rules allows them to re-migrate with ease.

As more and more populistic governments surface around the world, temporary migration schemes become more appealing and palatable among the anti-migration groups and the public opinion. Circular migration, in particular, has been found to be a triple-win for skilled immigrants in the Netherlands (Kourtit et al. 2017). Circular migration can also counter illegal migration and minimize the negative effects that fall upon families related with irregular migration.

Yet, there are aspects of circular migration that may backfire in practice, as Hugo (2009) discusses the polarization of the debate. Caution against seeing circular migration as the silver bullet in the migration-development context is voiced by Skeldon (2010), although he acknowledges that circular migration is most effective when it is free or internal. Zimmermann (2014) outlines the arguments for and against circular migration, while Constant and Zimmermann (2011) argue for a successful policy agenda of circular migration. Understanding the process of this type of migration enables policymakers to make better informed decisions.

This handbook chapter will not only provide a state-of-the-art literature review, but it will also evaluate research about voluntary return, repeat, circular, and onward migration. The chapter will afford insights into the characteristics of returnees and repeat migrants by answering questions such as: Are returnees the presumed rich, entrepreneurial, worldly people who can transform the lives and livelihoods of their friends and families and rejuvenate the economy with their money? Do they transfer technology and knowledge and can they metamorphose local norms and customs? Can they adjust, reintegrate, and thrive in the new "time-space"?

Moreover, the chapter will discuss the particulars of who are the immigrants who leave the host, where do they go, and why as well as it will examine the specifics of repeat or transnational migrants. In the process it will offer new knowledge and enhance our understanding on the topic, which host countries need in order to design sound immigration policies and effectively implement them. Lastly, the chapter will contribute to comprehending the determinants of the immigrant psyche which can be used to reduce undocumented or irregular migration.

Section II presents the theories of human migration that make predictions about why people migrate, why they return or circulate. The following section describes the forces of self-selection and the theories that predict the type of people who move. A critical review and assessment of the empirical evidence on return and circular migration from the host country's angle is presented in Section IV. Section V tackles the thin literature about the joint decisions couples make and the role of children in return migration. Section VI presents non-economic reasons of why people return or circulate as well as it debates host and home country policies. Section VII reviews studies

about the returnees, their success back home, and their role as social changers. Conclusions and recommendations for new research avenues come at the end.

II. Theories about human migration, return and repeat

II. 1. Definitions at a glance

The decision to undertake the first migration move may or may not be made simultaneously with the decision to stay or to return. And even if it is, the decision to return may change as immigrants face new circumstances and changing realities. Immigrants who planned to stay abroad for a few years may end up staying forever and those with specific intentions to stay abroad permanently may return or move on to a third country. Some may even circulate among countries or move back and forth between home and host in regular or irregular time intervals. The way in which people act or react to particular situations or stimuli through time is complex, producing new alternative decisions and permutations. It is thus challenging to have a universal definition.

A 20th century understanding of return migration has individuals, who have been abroad for short or long-term, moving back to the country of citizenship planning to stay for at least a year (UNSD 1998). A newer definition free from the citizenship clause that also allowes for third countries views return as "the act of going back from a country of presence (transit or destination) to the country of previous transit, or origin" (IOM 2004, p. 11). Alternatively, Constant (2020) defined return as "the relocation of first or higher generations from a country that is the host country of the first generation or one's immigrant ancestors to the birth and citizenship country of the first generation/ancestors planning to stay for more than one year." This definition includes the static return of repatriation as well as re-return to the host country and assumes a voluntary return.

Constant and Zimmermann (2003; 2011) and Constant et al. (2013) describe circular migration as the systematic and regular movement of migrants between their home countries and host countries as they look for work. It is a strategy to maximize the benefits from both worlds. The European Commission's succinct definition of circular migration is "a repetition of legal migration by the same person between two or more countries" (https://ec.europa.eu/home-affairs/what-we-do/networks/european_migration_network/glossary_search/circular-migration_en).

Circular migration has been touted as a "win-win-win" situation, in which resources are efficiently allocated. It is a win for host countries by alleviating labor shortages, it guarantees remittances for development in the home countries, and betters the lives of the migrants themselves. Circular migration is an organized operation for regional or national labor markets (Kourtit et al. 2017). GFMD (2007) define circular migration as "the fluid movement of people between countries, including temporary or permanent movement which, when it occurs voluntarily and is linked to labor needs of countries of origin and destination, can be beneficial to all involved".

Repeat migration can be an ex-ante mechanism of corrective migration due to unmet expectations, or a way of optimizing and re-optimizing one's situation at every period as people arrive at different junctures and face different circumstances. Repeat migration – also referred to as shuttle migration, cyclical or rotating – can equally include onward migration – also called secondary, transit, or step-wise. Migrants move to a third country because of miscalculation and disappointment or because they intended to move to the third country from the beginning but could not do it directly.

II. 2. The economics of why people emigrate, return, repeat, or onward migrate

Economists and other social scientists have formulated theories that explain well why migration takes place in the first place. They explain why people move and where they are the most likely to go. It is specific theories about selection that can predict the characteristics of the agents who move. Early theories – micro or macro – applied mostly in internal or domestic migration such as rural-urban migration, or gravity migration in urban movements in regional sciences. Internal migration, whether interstate or intrastate is a more pure and simple form of migration because it faces no external barriers arising from the imposition of laws and regulations of the countries involved (the home and the host).

These theories analyze well the determinants of the initial economic migration and posit causal mechanisms. Regrettably, not all of the theories allow for return, repeat, circular, and onward migration. Neoclassical Economics (NE), for example, do not foresee return migration because such a move would be irrational and a total failure from the part of the migrant. At the micro-level, NE focuses on the labor market in which a rational agent maximizes wealth or utility under perfect information. In a cost-benefit single-period framework the agent compares the present value of lifetime wages in the home and host countries, hence intending to settle abroad permanently. He moves when total benefits outweigh total costs. These agents are willing to endure long family separations until they are able to reunite. Immigrants are supposed to use their earnings to maximize utility in the host country, rendering remittances an anomaly.

Yezer and Thurston (1976) provided the first notable extension to the NE human capital model to include an analytic framework for subsequent remigration, thus increasing the predictive power of the model and explaining return and onward migration. Along with Allen (1979) they relaxed the assumption about perfect information and showed that the propensity of remigration is a decreasing function of the quality of labor market information obtained during a prior move. Later, Dierx (1988) explicated return, repeat, and other permutations of migration through his life-cycle framework that studied the impact of the spatial distribution of a family's stock of human capital on its migration decision.

Over the life-cycle external costs and benefits change and require a rational re-evaluation. Personal considerations, crises, feedbacks and spillovers may equally prompt individuals to re-consider their initial migration decision at different periods in their life. In a Markov-Chain

framework that assesses the costs and benefits in a series of transitions, Constant and Zimmermann (2003a, 2012) explain return and repeat migration for the guestworkers in Germany. Current opportunities owe it to past decisions and future expectations affect current decisions.

Alternatively, by adding non-pecuniary benefits and costs to the equation (Constant and Massey 2002; 2003) NE support the options of return and repeat. Assuming strong preferences for home country location in addition to the number of trips Hill (1987) explained the return migration of Mexicans from the U.S. Similarly, allowing for the marginal cost of being abroad to be greater than the diminishing marginal utility of wealth (Dustmann and Weiss 2007), or letting immigrants' accumulated savings abroad have higher purchasing power at home (Dustmann 2003) researchers were able to accommodate return, repeat and onward migration.

Borjas and Bratsberg's (1996) extension allowed for a planned return migration as part of an optimal life-cycle residential location decision. The migrant returns when "the returns from temporary migration (net from migration costs) exceed the returns both of never moving and of moving permanently to the host country" (Borjas 2014, p. 21). Other advancements to the NE model view couples or the family as the unit of study. In Mincer' (1978) family migration decision framework, for internal migration, the couple will move if the net sum of the couple's gains is positive (thus accommodating conflicting interests). Newer models consider multiple destinations and periods, as outlined in Keenan and Walker (2013).

Involving other markets and the family, the New Economics of Labor Migration (NELM) predict well not only the first move but also return, repeat, circular, and onward migration. In NELM, households not only maximize income, but also minimize risk under uncertainty through diversification of household resources as they try to cope with several market failures (insurance, capital, welfare). People migrate temporarily for limited periods of paid labor to accumulated savings that they can spend home when they return. While abroad, immigrants remit. Returnees are successes, following a pre-established plan.[1] They bring home knowledge and money to improve their absolute income. However, to keep up with the Jones' and the country's development, it is the relative income position that becomes crucial in the migration process. Along with the notion of relative deprivation NELM explains why migration is recurrent or circular even without wage differences.

Away from micro-level decisions of the supply side stands the Segmented or Dual Labor Market Theory (SLM), in which migration stems from structural requirements of modern post-industrial societies. International migration is initiated by recruitment from abroad in order to cover the labor market demands and economic conditions of the host country. It is employers and/or governments in developed societies that drive the demand for immigrant labor. Because of bifurcated occupational markets and a dual pattern of economic organization, they hire migrants with specific characteristics, for specific jobs, in a predetermined temporary framework, expecting

[1] For example, owning a house or business in Senegal is a prerequisite for the return of Senegalese (Flahaux 2017).

that migrants will return home when they are not needed albeit allowing for the possibility of re-return (or repeat/circular migration) if they are needed.[2] Migrants, who are mostly target savers, have not much to say about this scheme. Their return may be cut short due to the demands of the host country and thus it may be necessary to undertake another migration trip to the host country or to a new country. The model explains repeat migration well.

With Wallerstein (1974) and World Systems Theory (WST) sociologists conceived international migration as an inevitable consequence of economic globalization when the world market expands across national boundaries and creates economic development in the periphery regions. When capitalist firms penetrate poor countries in the periphery people often become displaced and they emigrate. At the same time, this leads to transnational movements as material and cultural links between peripheries and core countries become established. WST perceives return, repeat, and circular migration being integral to market globalization. An interesting by-product of the theory is that interventions may occur by the capitalist core governments to support the continuation of the system in the periphery. Unsuccessful interventions create refugees, who are bound to migrate to the core countries (Massey 1999).

Predicting aggregate migration flows from one country to another is the strength of the Gravity Theory of Migration (GTM), an extension of Newton's gravity law. Vanderkamp's (1971) theoretical hypothesis was that migration between two regions is a positive function of the average incomes in the two regions and an inverse function of the distance between them. He distinguished initial from return migration and showed that return migrants are not influenced by the counties' incomes and distance between them the same way initial migrants are. While GTM is consistent with utility maximization, its power is constrained by bilateral flows. Recent studies that consider the influence of potential alternative destinations – beyond the dyadic flows – are big improvements of the theory.

Still, these theories explain mostly initial static moves and their reaction to complete a circle. It is the Networks Theory (NT) that captures the dynamically sustained and repeated movements through time and space, known as cumulative causation. As migrants move they create new social networks, which expand to reach more migrants and reinforce the net, which in turn grows organically and propagates with new migrants. The individual and/or the family are involved in the decision. Networks improve the efficiency of migration by providing information that reduces the costs and risks of migration, thus increasing the probability to migrate – ceteris paribus. In turn, this spurs additional migration and further expansion of the network which reaches more people and continues in self-sustained and self-perpetuating movements (Massey 1990).

[2] Lending support to SLM, Constant and Massey (2005) found a high degree of initial occupational segmentation among recruited guestworkers in Germany, who were relatively less able to translate their human capital into a good first job.

Networking is voluntary, based on commonality of interests, and does not depend on the diaspora or on economic profits (Cassarino, 2004). Wage differentials or employment rates are not as important for prospective migrants when the costs are low and networks can help migrants find jobs (Massey 1990). Migration becomes institutionalized and, as such, it breaks away from the original factors that caused it. Once someone has migrated, they are very likely to migrate again, and the odds of taking an additional trip rise with the number of trips already taken (Massey 1986). Networks are especially beneficial to the less-selected migrants, women, and the undocumented. Networks maintained in the home country can ease the re-integration of returnees and facilitate their establishing of a business.

It is the next two theories – presented and evaluated in Cassarino (2004) – that explain re-return and repeat migration based on the realities returnees face upon return home. First, is the Structuralist Theory (ST) with the fundamental premise that while structural relations within the political economy cause initial migration, immigrants return because of nostalgia. The coveted homeland they return to, however, is not the same as the land they left. It lacks the time-space dimension. The homeland appears especially different and foreign when migrants have been abroad for a long time without recurrent visits. Returnees are not the same as when they first emigrated either. Thus, a mere willingness to return without preparedness can backfire. Their return becomes a social issue as they clash with their compatriots who see them as a threat. Neither the returnees or the stayers are ready for a symbiosis, which causes a social rupture leading to a re-return and/or repeat migration.

Second, transnationalism offers a framework for return and repeat migration. Referring to settled immigrants abroad, the theory identifies family bonds and ideological reasons as causes of return. It provides for the preparedness of returnees, achieved through systematic visits home. Migrants return as winners when the time and circumstances are right. They can utilize their acquired human capital from abroad to move on up at home. Most importantly, they prefer to negotiate their place in society and be marketable by preserving networks in both countries. Transnationals live in dual spaces that extend across the nation-state, while the involved communities exert considerable social, economic, and political power (Cassarino, 2004 in Constant 2020).

Although ideology is not formulated as a theory for return, it is a de facto one. The Jewish diaspora and Israel are such a paragon. Triggered by the emergence of the Zionist Movement in Eastern and Central Europe in the last quarter of the nineteenth century, the early immigrants were motivated by a commitment to resettle and rebuild the land of Israel (Constant et al. 2018). In this case, return is the end result. There is no provision for repeat migration.

In practice, as evidenced by empirical studies, immigrants contemplating return or repeat may adopt different strategies utilizing a synthesis of the theories. Caution against over-reliance on single theories is voiced by Constant and Massey (2002) because the process of return migration is not unitary.

III. The principles and forces of self-selection

The foregoing theories can predict the size of the flows of migrants and answer the question of why, how many, and where will people migrate. But they cannot predict the type of migrants who will migrate nor can they predict if it will be the highly skilled, the rich, or the risk lovers who will move. They cannot forecast if there will always be the same type of people who return, either. This section will provide the answers to these questions.

Prospective international migrants between sovereign nations that require pre-approved permits and visas are subject to changing migration policies by different governments, they have to meet additional health regulations, learn the host country language, and understand the new currency. All these external obstacles amplify, and can even reverse, selection predictions and challenge the rules of internal migration. Host country migration policies affect both the inflows and outflows of migrants and thus adversely affect the allocative efficiency of migration. In addition, policies trigger unintended self-selection responses by the migrants.

For example, several studies by Massey have documented that the erection of the wall at the Southern U.S. border and increasing security has altered the traditional behavior of undocumented Mexican immigrants in the U.S., who until the 1990s, used to systematically circulate between Mexico and the U.S. Between 1965 and 1985, 85% of Mexicans who entered the U.S. undocumented were cancelled out by departures (Massey and Singer 1995). Tougher immigration policies in the recent years raised the probability of apprehension and deportation deterring Mexicans from return or repeat migrating. In the 21st century, they stay "fenced inside the U.S." and bring their families in.

Self-selection describes the particularity, uniqueness, and idiosyncrasy of those individuals who decide to undertake the move. By definition, self-selected people are not randomly drawn from a distribution and self-selected migrants do not necessarily represent their home country. What is more, self-selection in the first move is only amplified in the subsequent move. Within NE, Human Capital Theory (HCT) has been applied to the analysis of labor migration and makes accurate predictions about who is more likely to migrate. Under the premise that migration is a human capital investment, the young, the single, males, the more able, and those of good health and high education will migrate first. The idea is that they have the most to gain and the least to lose from the move. There are no predictions about the characteristics of the migrants who return, or repeat/circulate.

Typically, economic agents move to areas of high earnings, where human capital is rewarded. It is important to note, however, that selection in human capital is a function of the transferability of the skills or abilities of the migrant.[3] Transferability in turn, depends on the socioeconomic

[3] Constant (2017) reviews selection issues with regards to the health of migrants within the health immigrant paradox.

conditions and laws specific to the host countries, adding another dimension of complexity to the theory of selection.

According to the postulates of NELM – as described in Constant and Massey (2002) – returnees are self-selected in the following way: First, they are positively selected with respect to earnings because they return when they achieve high earnings as preplanned. They are, on the other hand, negatively selected with respect to work effort because if immigrants work less, they earn less and it will take them longer to achieve their income target. By the same token, they return when they are unemployed. Second, holding a job is only one aspect of employment. Jobs confer different levels of status and prestige, which are irrelevant in the return decision. What matters is the status returnees can enjoy back home with their higher income. Equally irrelevant to the return decision in this theory is human capital.

Selection issues regarding return migration were brought up in the earnings assimilation literature that compares the earnings of immigrants to comparable natives. In census studies, while natives may be a random sample of the population immigrants are not. They are a doubly-selected sample of their compatriots in the home country. Namely, they are those selected individuals who decided to emigrate and those who decided not to return. Ignoring these selections can lead to severely biased conclusions.

Borjas (1991) brought selection à la Roy (1951) and unobservable variables in the economics of migration. The Roy model of occupational choice can explain which types of people will move under certain assumptions in a partial equilibrium framework.[4] It accounts for skill differences among immigrants who are positively selected if the home country offers relatively lower returns to skill. They are negatively selected when the host country taxes the high-skilled and subsidizes the low-skilled.[5] As explained in Borjas (2014), the host country can appeal to persons who are relatively poor at home but can do very well once they are in the host country, called inverse sorting. The model accommodates multiple destinations.

Selection in the initial migration (whether positive or negative) is essential in this model because it affects the direction of selectivity in ensuing migration moves. If the initial selection was positive, meaning that the best and brightest migrants arrived in the host country, then returnees are the worst of the best. And vice versa, when the initial selection was negative, returnees are the best of the worst. Borjas and Bratsberg (1996), who also assumed portability of skills and constant gains from migration on the wages of the returnees back in the home country, confirmed this type of double selection for immigrants in the U.S.

The theory, further, predicts the direction of selection in unobservables such as ability, affability, perspicacity, perseverance, or savviness in keeping relationships. Selection in unobservable

[4] Borjas (2014) recognizes that if immigration is large and can influence the wage structure of the countries involved in migration the partial equilibrium approach to self-selection disintegrates.
[5] Dustmann et al. (2011) used similar Roy-models in a two-skills setting.

characteristics depends on the magnitude of the correlation coefficient measuring how home and host countries value these types of skills, assuming unobservables are transferable (Borjas et al. 2019). Migrants are negatively selected in unobservables when the home country has a wider income distribution than the host country or the correlation coefficient is negative. Conversely, they are positively selected when the home country has a narrower distribution.

Taking advantage of the free mobility between Puerto Rico and mainland U.S., Ramos (1992) analyzed the skill composition of Puerto Ricans who returned to the island after living in the U.S. for a brief time. Using census data and Roy's unequal skill distribution model, he indeed found that –relative to their compatriots in the island – the Puerto Ricans who emigrated to the U.S. were less-skilled. And, it was the most-skilled among them who returned to the island, or the best from the worst. Similarly, Rooth and Saarela (2007) tested selection in education among the Finnish returnees from Sweden, who also enjoy free mobility. Based on registered data, they found evidence about the best from the worst. Namely, while the Finnish who migrated to Sweden were less educated than the Finnish who did not migrate and stayed behind, the Finnish returnees had two more years of education than other Finnish immigrants who stayed in Sweden. The authors could not confirm selection with respect to unobservables.[6]

Borjas et al. (2019), based on the Roy model and Danish data, were able to test the conditions that result in positive or negative expected earnings and imply a stochastic dominance association between the earnings distributions of migrants and non-migrants. An important finding is that unobserved abilities play the dominant role in emigration. There was positive selection in unobservables. Among the Danes who did not move to the Nordic countries. The authors argued that even strict immigration policies by host countries may not address the unobservables issue, and question the effectiveness of point systems that are based on observable characteristics by design.

Grogger and Hanson (2011) developed an alternative selection model in which they assume two countries and different skills workers (low or high) who contemplate whether to migrate. Accordingly, if the differenced wage gap between high and low skilled workers is positive then selection will be positive. In turn, this calls for the absolute wage gap between host and home to be greater for the high-skilled. In an income maximization model of international migration to OECD countries, they found that both selection in education and sorting into host countries was positive, as individuals with more education immigrate to host countries that offer high rewards to education.

The self-selection of migrants is also predicted by the NT. In the beginning of their migrating career, before networks take over, immigrants are drawn from the middle and upper distribution. Theorized and proven by Massey, initial migrants have resources, capital, information and

[6] Positive selection in education was also found by Barrett and Trace (1998) in their study on Irish returnees, who had higher education than the Irish who stayed abroad.

knowledge to make the trip and to establish social capital. But as migration continues with the aid of networks, it becomes less and less selective in these observables. People rely more on networks and less on their own abilities. At the same time, repeat or circular migrants are positively selected in unobservables such as having the talent to maintain key contacts and keep the network alive. This lead Garip (2012) to point out that migrant selectivity varies over the different stages of individuals' migration careers.

Selection in return and repeat/circular migration is further amplified by several other factors, including if migration was only temporary,[7] or it was for the long-term, if immigrants had migrated only once, or returnees were second generation immigrants, etc. Selection with regards to earnings, education, health, skills, etc. is easier to capture and quantify. It is more involved and often not possible to capture selection in unobservables such as ability, risk aversion, grit, and perseverance.

Borjas and Bratsberg (1996) assert that because family unification immigrants or chain immigrants differ from economic immigrants selection issues are not as relevant.[8] It should also be noted that if migrants return, repeat or circulate because of economic shocks, then selection in skills is irrelevant, as by definition, economic shocks and skills are statistically independent (Constant 2020).

Another exception to the self-selection rules is the return migration of the Jewish diaspora to Israel. These people return mainly because of ideological reasons, Israel perceives return as homecoming, and the Law of Return grants returnees automatic rights and citizenship. Within the healthy immigrant literature, Constant et al. (2018) show that the Jews who return to Israel have a lower self-reported health status than comparable natives and consume more prescription drugs than natives. Their compromised health persists for two decades.

IV. Empirical evidence on return and repeat

IV. 1. Return from the host country

Free democratic countries allow their citizens to exit at liberty and do not gather any data on the characteristics of their emigrants. The exception are the Scandinavian countries that require de-registration upon exit, although it is not always observed. Host countries do not record the characteristics of their immigrant arrivals at the border, either; And they do not keep records of the immigrants or others who leave. Therefore, in general, valuable data that can answer burning questions about return, repeat, and onward migration do not exist. The literature has relied on the best available data – often inadequate – and tried countervailing with advanced econometric

[7] See Dustmann and Görlach (2016) for a complete survey on temporary migration.
[8] The self-selection of family returnees is not clear-cut either.

techniques and compensating by controlling for a variety of observed and unobserved characteristics. Some of the empirical findings of the last twenty-five years are in line with theories, while others provide interesting insights albeit only for specific countries.

Furthermore, because selection depends on context and data some findings differ even though they pertain to the same countries. For example, Lindstrom and Massey (1994) found that Mexican returnees from the U.S. were negatively selected with respect to both human capital and wages, but Carrion-Flores (2006) found that Mexican returnees were highly-educated. In contrast, Kaestner and Malamud (2014) were not able to find selection in observables, but they found negative selection in terms of residuals among Mexican returnees. The paucity and non-comparability of data are the major culprits of the limitations of empirical studies, which in turn has made researchers focus on self-reported intentions and expected durations of stay abroad as proxies (Steiner and Velling 1994; Dustmann and colleagues) rather than on actual behavior.

One of the first studies to measure selection biases in earnings assimilation studies due to return migration was conducted by Borjas (1989). It investigated the high-skilled immigrants in the U.S., based on the longitudinal Survey of Natural and Social Scientists and Engineers. It calculated return migration from sample attrition. The study found that immigrants who left the U.S. were negatively self-selected in earnings compared to immigrant stayers, thus biasing cross-sectional results. Returnees also had lower starting wages and lower wage growth. Using the National Survey of College Graduates in the U.S., Kaushal (2011) confirmed negative selection in earnings among first-generation scientists and engineers who left the U.S.[9]

Regarding skills, Jasso and Rosenzweig (1988) found that skilled immigrants were most likely to leave the U.S.. Yet, Reagan and Olsen (2000) found no evidence of a skill bias in return migration – although immigrants with a college degree were more likely to exit the U.S.. On the other hand, the authors found that the odds of leaving the U.S. were much lower for those with higher potential wages, as were for those who arrived at younger ages, had more years in the U.S., and had participated in social welfare programs. There was no gender differential in return; Mexicans were more likely to leave.

When Gaule (2014) studied the return migration of foreign-born academics in the U.S. in chemistry, chemical engineering or biochemistry, he found that only a small percentage of academics returned. Among them, there was no self-selection in education. Instead, these scientists were positively self-selected in ability. When the conditions in the home country ameliorated (relative to the U.S.), return probabilities increased. They decreased for women and those over 50.

[9] See Constant (2020) for a comprehensive review about the return, repeat and other forms of migration for the highly-skilled in the context of knowledge societies.

A negative selection in earnings was found again in the Depew et al. (2017) study that estimated return probabilities among high-skilled Indian immigrants in the U.S. who were working under temporary skilled visas (H-1B and L-1). Furthermore, returnees were much affected by the downswing of the business cycle, as they tried to adjust their labor supply. The authors speculated that return migration can be an automatic counter-cyclical stabilizer of labor supply. Other policy instruments such as visa quotas are inferior to return.

A decreased probability to return among high-skilled women was equally found by Grigoleit-Richter (2017) for Germany. His study on immigrant women in STEM occupations revealed that they would rather stay in Germany even though they face barriers in the highly gender-segregated German technology industry. Their coping mechanism is cultivating strong bonds with their communities. In another study, the high-skilled immigrants in Germany, had a higher probability to return when compared to the medium-skilled from other EU-states (Kuhlenkasper and Steinhardt 2017). The authors could not find any skill selection among returnees from the "other" immigrant group or for Turks.

Constant and Massey (2002) calculated return probabilities for immigrants in Germany from the guestworker population, based on the German Socio-Economic Panel (GSOEP), information about their death, their exit from Germany, and attrition of the panel. With return migration being a negative time-dependence, returnees will be negatively selected in unobservables such as ability or fortitude. While they found no statistically significant relationship between wages or occupational prestige and return migration, having a stable job in Germany significantly reduced the probability of return. So did a longer stay in Germany albeit at a low linear rate. Other circumstances related to a range and social attachments to the host and home countries such as family ties in the home country, citizenship and feeling German had a strong effect on the probability to return. Immigrants from EU-states were more likely to return than ex-Yugoslavs and Turks. A quarter of respondents sent money home and the probability to return significantly increased with remittances. The authors cautioned that remittances are crucial in the analysis of return migration and creates serious omitted variable bias if not included in the regressions.

Similarly, Constant and Massey (2003), investigated life-cycle events and assimilation biases for immigrants in Germany. They found no statistically significant relationship between earnings and return, and no self-selection in education or gender among returnees either. Return immigrants were more likely to be unemployed, with a low occupational prestige, who remitted, did not speak German, had family in the home country, and were either in their first five years since arrival or in retirement[10]. On the other hand, the likelihood to return significantly decreased when immigrants had family and owned a home in Germany, were identifying as Germans, and had naturalized. Other things equal, Turks and immigrants from ex-Yugoslavia had the lowest probability of leaving

[10] These results are consistent with Duleep (1994), who demonstrated a bimodal pattern of out-migration among immigrants in the U.S. Accordingly, immigrants either leave soon after they arrive or after they withdraw from the labor market upon retirement.

Germany compared to immigrants from other EU-states. The authors did not find that selective return biased cross-sectional estimates of earnings assimilation in a relevant way.

For the UK, Dustmann and Weiss (2007) found that the probability to return is significantly high among the immigrants in high-skilled occupations. Comunian et al. (2017) showed that the earnings of UK universities graduates vary according to whether they were repeat migrants, late migrants, or stayers when studied three and a half years after graduation. Repeat migrants earned the most, followed by the late migrants; at the bottom were those who never moved. Repeat migration was a large premium for men probably because they are better at asking for higher wages when they negotiate every time they change jobs.

The following studies deal with the selection of returnees who originate from the same home country but sorted themselves as immigrants in several different host countries. They corroborate the Roy/Borjas predictions. Ambrosini et al. (2015) studied Romanians who migrated to different host countries to maximize their lifetime income. Their initial selection in education was a function of the returns to education in the prospective host country, so that, the most educated Romanians went to the U.S. and the least educated to Spain; the in-between went to Austria. The returnees, on the other hand, were positively selected in education, compared to non-migrants, and negatively selected in unobservables. Other studies about the return migration of Eastern Europeans concur with such findings (De Coulon and Piracha, 2005; Hazans, 2008).

Using data from the New Immigrant Survey, Massey and Akresh (2006) modeled the return migration behavior and attitudes of recent immigrants to the U.S., who had just received legal permanent residence; although, about one third of the sample included people who were living illegally in the U.S. before receiving their green card. The authors argued that the probability to stay or return depends on social and material connections to people and places in the U.S. and abroad. Leaving the U.S. was strongly predicted by citizenship intentions, with those who planned to naturalize being less likely to leave for an extended period. Leaving the U.S. was also linked to the existence and location of the spouse, the number of children, prior foreign trips, and owning foreign property, but not to remitting, satisfaction with life in the U.S., or the intention to settle permanently. The authors' admonition is that satisfaction with life in the U.S. and naturalization plans provide the key answer to the question of who plans to stay in the U.S. permanently.

Based on data on patents and inventors in the U.S., Breschi et al. (2018) estimated the return probability of Indian inventors based on whether they arrived for employment or education. Among the Indians who arrived for employment, return was directly linked to their propensity to patent while in the U.S. (with age and education from India). On the other hand, among those who arrived for education, return was negatively associated with education obtained in the U.S. More importantly, the authors found strong evidence of negative time-dependence in the return hazard ratios of the Indian returnees who came to the U.S. for employment, meaning that there is negative self-selection in unobservables acquired in the U.S.

Considerable variation in return by country of origin was found by Jensen and Pedersen (2007). Comparing Turks and other Nordic immigrants in Denmark, they found that 80% of Turks were still in the country 10 years after arrival; only 20% of the Nordic immigrants were left in Denmark. Out-migration from Denmark strongly increased with higher educational attainment among immigrants.

Selection in observables among returnees was recorded by Bijwaard and Wahba (2014). Using Dutch data and a competing risks model, they found a U-shaped relationship between income and return migration, among LDC immigrants in the Netherlands, with the highest return intensity being among the lowest-income group. Return rates varied by duration in the host and home country. Klinthäll's (2013) study confirmed that findings about the U-shaped relationship between return migration and income or education also hold for older immigrants in Sweden. Namely, immigrant men and women over 55 who returned, were associated with the lowest and the highest income and education categories. The less integrated in socioeconomic terms had higher return rates as did the high-earners. Target saving practices and returning for retirement explain these findings.

The determinants of return migration among sub-Saharan Africans in Europe and the extent to which their return decisions are linked to the initial migration reasons and circumstances were investigated by Gonzalez-Ferrer et al. (2014). They utilized retrospective history data collected by the MAFE Project in three home countries (Senegal, Ghana, and DR Congo) and six host countries (France, Italy, Spain, Belgium, the UK, and the Netherlands). They find that sub-Saharan Africans in Europe stay for longer periods in order to be able to settle, recover the initial investment, and achieve their savings target. Differences in return rates among the three African groups reflect different macro-economic and political conditions at home, immigration policies in the host countries, and the interaction between the two. Congolese are less likely to return, while Ghanaians return regularly. Immigrants with a partner or with children in Europe are significantly more likely to return; more likely than single and childless people, and more likely than those who left families back home.

In sum, as Constant and Massey (2002) argued, return migration is hardly a random process. Return migration is an intricate socio-economic, cultural, and psychological process. Its degree and nature of selectivity varies from group to group and is affected by the strong heterogeneity of immigrants abroad. They depend on selectivity of the original in-migration to the host country, conditions in the home and host countries, other unknowns, and definitely on unobservable factors (Constant and Massey 2002).

IV. 2. Repeat or circular and onward migration

Massey's pioneering research on the behavior of Mexican immigrants in the U.S. established early on that Mexican migration followed a circular pattern that was routine and more prevalent than return or onward migration (Massey and Espinosa 1997). They showed that circular migration

intensified with the acquisition of migration-specific social capital, prior experience in the U.S., occupational achievements in the U.S., and the number of prior trips in the U.S. Specifically for the undocumented, the authors found that the probability to undertake an additional trip to the U.S. increased if a family member received amnesty.

Garip (2012) discovered different migration patterns among Mexicans in the U.S., depending on whether they repeat migrate, are first-time migrants or non-migrants. Repeat migrants were negatively selected in education, but positively selected in wealth. They were, in fact, wealthier than first-time migrants and non-migrants. Most interesting was the finding that there were different levels of wealth among repeats and wealth was a function of the number of trips, suggesting that migrants who repeat amass wealth though trips.

Constant and Zimmermann (2003a, 2003b, 2011, 2012) were the first to model international circular migration in economics and propose solid determinants to explain it. Based on the GSOEP and count data models, Constant and Zimmermann (2011) documented that over 60% of the immigrants in Germany were repeat or circular migrants. These immigrants had gone to Germany under temporary labor schemes, but they became permanent sojourners and using Germany as their base they were moving back and forth between Germany and their home countries repeatedly. More likely to engage in repeat migration and to stay out of Germany for longer periods were the younger and the older, those not owning a house in Germany and those from other EU-States. The naturalized exit more frequently, confirming the idea that when immigrants have the freedom to re-return to the host country, they are more likely to leave the host (Massey and Espinosa, 1997; Massey and Pren, 2012; Constant and Zimmermann, 2012; Flahaux 2017). In contrast, Turk and ex-Yugoslav nationals, who do not enjoy free and unfettered mobility, are less likely to exit frequently and to stay outside Germany for more years. While males and the single exit more frequently, those with higher education exit less frequently. Family back in the home county held immigrants outside Germany for longer, while attachment to the German labor market was a strong deterrent of repeat migration.

Assuming that immigrants decide at each period whether to stay in the host country or return and when they return they decide again whether to stay home or re-return Constant and Zimmermann (2012) estimated transition probabilities for single migration moves, circular migration, and absorption states. Their dynamic Markov Chain model was applied to immigrants in Germany assuming the immigrant status is a random process in time. They identified three groups of economic and behavioral factors that generate migration moves. First was the absorption factors to stay in the host or the home country that included family characteristics, host country political restrictions, and integration indicators. Second, it was pull/push factors that generated a one-way outflow. Remittances, the location of young children, and marriage plans by returning single men dominated these factors. Last, they identified factors that cause and foster repeated circular moves. Repeat migrants are more likely to leave Germany in the beginning of their migration career, when they had left family and friends back home, when they had acquired vocational

training in Germany, and were older. Being married, employed, and speaking German well decreased the odds of leaving Germany, which was high among men. The odds of re-immigrating back to Germany, on the other hand, depended on remittances and having family in Germany. German citizenship is a strong determinant of staying home after return. Turks and ex-Yugoslavs were less likely to return or repeat migration compared to immigrants from other EU-states.

Conversely, the Lee et al. (2011) study compared circular migrants to first-time migrants. They found that immigrants from Thailand who circulate to Brunei, Hong Kong, Israel, Taiwan, Singapore, and Korea were more likely to be men. Strong selection in repeat was also evidenced in saving, but not in remitting. Drawing upon comprehensive data in Australia, Hugo (2009) showed that there is considerable circular migration among skilled Indian and Chinese immigrants to Australia. Similarly, Hugo (2008) found a complex migration system with strong bi-directional flows as well as circularity, reciprocity and remigration and concluded that this is not migration of the 'South-North' type.

Intensive return and repeat migration patterns were documented by Lidgard and Gilson (2002) for New Zealand. Migration of New Zealanders in the 1970s was exchange-oriented and return was a sizeable part of this migration. But more recently migrants to New Zealand are of the transnational type. The authors evaluate these flows as 'brain exchange' or 'brain circulation.'

Vadean and Piracha (2009), who compared return to circular migrants from the home country's perspective, find that return and circular migrants are different people with dissimilar socio-economic characteristics. The authors define return migration as the permanent return home after a single migration episode, and circular migration as the undertaking of multiple trips. Utilizing Albanian data, they show that circular migrants are more likely to be male, have primary education, and originate from rural and less developed areas. Interestingly, they find that circular migration intensified the initial negative selection further, making circular migrants significantly less skilled compared to returnees. On the other hand, return migration to Albania was decided by family reasons and a failed migration attempt as well as by the fulfilment of a savings target. There was significant negative selection in the return migration of Albanians.

The following studies employed Scandinavian registered data that contain information on return, repeat and onward migration. Aradhya et al. (2017) compared first generation repeat immigrants in Sweden to immigrant stayers in Sweden. They showed that repeats had roughly 40% lower incomes and this varied by the definition of years-since-migration (YSM). When YSM was calculated as time in Sweden since first entry, repeats had the lowest incomes. A refined YSM denoting the actual time immigrants were physically living in Sweden showed that repeats had higher incomes than the previous group, although still lower that the non-movers. An alternate definition of YSM as time since the last entry in Sweden showed that repeats had the highest incomes. The log-income trajectories of these groups of repeat immigrants revealed unique assimilation processes. For example, the profiles of the first two groups were flatter, suggesting

less-skilled workers and a slow earnings assimilation. The profile of the higher income group was very concave indicating different workers and higher returns. Their results are in sharp contrast to Garip (2012) and Comunian et al. (2017).

When Bratsberg et al. (2007) estimated the determinants of repeat or re-return and onward moves among immigrants in Norway they found that conditions in the home country were very important and could explain variations in return rates well.[11] Using a Roy-type framework the authors found that while 84% of U.S. immigrants left Norway, only 9% of the Vietnamese did. Immigrants from poorer countries than Norway were more likely to re-migrate to Norway after they had return home, which the authors attribute to differences in consumption cost levels. Moreover, conflicts or political unrest in the home countries pushed return migrants to re-return to Norway. Poorer home countries at a longer distance that may also be at war increase the probability of onward migration among immigrants to Norway as well. While the majority of Nordic immigrants returned to their home countries, 66% among the Vietnamese, 40% among the Iranians, and 30% among the Somalians moved onward to another host country. Finally, variations in return migration by home country were closely related to the class of admission in Norway.

Nekby (2006) distinguished immigrants in Sweden into Western Europeans, North Americans, and non-Western. She found that the first two groups had the highest return rates, also suggesting an important role by the home country. Returnees were positively selected in education. Among those who left Sweden, 28% moved on to another country. Onward immigrants had lower incomes but higher education than return migrants. Africans were the most likely to migrate onwards, while Asians were least likely. Later, Monti (2019), revisited the issue and showed that the main form of remigration among first generation economic immigrants in Sweden was return migration. Among forced migrants, on the other hand, onward migration was a more prominent phenomenon. The probability to move onward was also higher for those immigrants in Sweden who had tertiary education and previous migration experience. Attachment to Sweden in terms of employment or social benefits, decreased the chances of return or onward migration markedly. The author argued that return and onward migration are distinct phenomena and should be treated as such.

King and Newbold (2007) also documented that onward migrants are a specific and selective group of migrants. When they evaluated the characteristics of Canadian immigrants who moved onwards to the U.S. between 1995 and 2000, comparing them to native-born Canadians who emigrate to the U.S. and to other immigrants in Canada who remained in Canada, they found that onward migrants are repeat or chronic migrants and differ from both the Canadian born emigrants and the immigrant stayers. They were primarily young and married, possess a bachelor's degree, earn incomes of over $100,000 USD, and reside in large immigrant-receiving states and

[11] The significance of the country of origin as an explanatory variable in return migration variations has been confirmed by Borjas and Bratsberg (1996) for the U.S. and by Dustmann and Weiss (2007) for the UK.

metropolitan areas. Overall, 37% of immigrants moved onward to the U.S. Rates varied by country of origin. Namely, 42.5% were Asians, 27.6% Europeans, 16.6% had Middle Eastern origins, 14.5% were South Americans, 9.8% Africans, and 9.7% Central Americans.

In sum, there are no unanimous findings regarding the return, repeat, or onward behavior about high or low-skilled immigrants, about men or women. The reference group used for comparison or reference adds another level of complication to disparate results. The human behavior of immigrants who leave the host country is complex and depends on a variety of circumstances.

V. The joint decision-making: The role of spouses and children for return

Many studies have included the presence of spouse and children when modeling the decision to stay in the host country, return, or repeat. NE predict that when the immigrant is together with their spouse abroad, this decreases the costs of staying in the host country and thus the probability of return. The same idea applies to the presence of children abroad. In contrast, under the NELM, the spouse is viewed as a second worker who helps accumulate more income faster, resulting in shorter trips and higher probabilities of return. However, the presence of children is viewed as a detraction from the mother's work effort and lowers the probability of return (Constant and Massey 2002).

Few studies have modeled the return decision of the family jointly. Mincer (1978) was the first to do so for internal migration when a couple maximizes its joint income. He showed that couples migrate when the sum of the partner's gains exceeds the sum of the migration costs. More recently, Junge et al. (2019) developed a theoretical model regarding the migration decision of dual-earner male-female couples, who worked at least 60% of the full working time during the previous year. Using Danish registered data, they predict that the probability of a couple emigrating increases with the primary-earner's income, regardless of whether the primary-earner is male or female. Compared to singles, primary-earners in couples are more strongly self-selected in income. The secondary-earner's income, though, is weaker and may operate in either direction. Regarding the return migration decision, the authors find that the effect of the primary-earner's gross earnings on returning is always negative. Power couples that have university education are more likely to return.

The presence of children complicates the family decision to return. For example, children may have a saying in the migration decision, especially as they grow older and assimilate in the host country. Alternatively, immigrant parents who come from traditional cultures and want to preserve their distinct culture may decide to return home when the children are young so that they grow up in the same culture as them. While children may not voice their preference, it is their mere existence that prompts migration.

Assuming that parents care for the future welfare of their children, but have paternalistic views, Dustmann (2003) developed a model of family return migration decisions in the presence of children. Using the GSOEP, he finds evidence that parents' return plans differ depending on the sex of their children. Parents who have a daughter may be concerned about preserving the home country traditions and decide to return. But parents who have a son may be more concerned about future economic career and prosperity of the son and decide to stay. Dustmann (2003) established a negative relationship between return migration and the presence and number of children in the immigrant household. Return was significantly lower in absolute value in all-girl households.

The joint migration decisions of families with children using administrative data on immigrants in Denmark, is analyzed by Nikolka (2018). His study investigated couples/partners who had immigrated together and jointly decide whether to return home. His results, first, show that immigrants' return probabilities depend on the country of origin, with those from Nordic countries, whether they are couples or single, being the most likely to return. Immigrants from other Western countries are less likely to return, and those from non-Western countries (especially Turks) are the least likely to return. Second, having children as well as how many decreases the likelihood of return for families from non-Western countries. Interestingly, the probability to return decreases when children are born in Denmark – as opposed to being born in the home country – independent of the parents' origin. But when the oldest child is born outside Denmark, then families return before the child reaches school age. Moreover, couples from non-Western countries have a higher probability to return when their first-born child in Denmark is a girl, although rates vary considerably by home country. Lastly, return probabilities are higher for couples with young children when the home country has higher average in PISA test scores and higher GDP per capita. Third, there is a strong positive self-selection between couples' return and the primary earner's income. Self-selection is the strongest for non-Western immigrants whose countries of origin have more dispersed income distributions than Denmark. However, the probability to return decreases among dual-earner couples who work more than 60% of full working time. It also decreases among couples when both partners are closely attached to the labor market. Lastly, self-selection on primary earner's income weakens among couples with children from non-Western countries.

Djajić (2008) analyzes the decisions of immigrant parents with one child to stay or return by interacting expected earnings in both countries, the intensity of the parents' preferences for a location, and the desires of parents and children not to be separated. His theoretical model identifies the determinants of family return, under certain assumptions. Low transportation and communications costs reduce the importance of settling together as a family in one location. A short proximity between the host and home countries increases the proportion of parents returning with the child, or leaving the child in the host country. When the countries of origin have different traditions than the host country or have customs and traditions that afford parents a

dominant role over their children, then the entire family returns. But when the home countries are poor, families tend to stay in the host. When the child has a saying on the return decision, a bargaining takes place.

VI. Non-pecuniary reasons for return

Responding to spatial wage differentials and other economic outcomes holds true when the direction is from home to host. However, once immigrants are in the host country and contemplate to return or repeat migrate they appear to equally value other non-economic or non-monetary aspects. To improve insufficient explanations of return and repeat behavior, researchers turned to other socio-cultural settings. Gibson and McKenzie (2011) confirmed the limited role of income maximization and liquidity constraints in return migration among highly-skilled Pacific Islanders. Remarkably, 40% of the returnees gave reasons strongly associated with family and lifestyle. Other important reasons were improving career opportunities, boosting poor academic research environments, having better funding for scientific laboratories, the removal of regulations, more transparency in government, and more democracy.

Similarly, scientists and engineers who returned to Morocco from Europe primarily cited idealistic reasons such as helping their country to economic growth and a desire to be part of this development (Gaillard and Gaillard 2015). Strong reasons for return among highly-skilled Italians living outside Italy were a desire to contribute to science in Italy (Constant and D'Agosto 2010). It is for ideological reasons that thousands of people of Jewish ancestry around the world migrate to Israel, the land of return.

Using data from returnees in the home country, several studies emphasize the role of family reasons. Based on Mexican government's ENADID survey data, PEW (2015) analyzed the return migration of Mexican immigrants who left the U.S. between 2009 and 2014. The study discovered that the primary engine of return of Mexicans was family reunification; 61% of returnees said that they wanted to unify with family or to start a family. Family reunification was also the reason for Albanian returnees (Vadean and Piracha 2009). Further familial reasons for return were documented in the Piotrowski and Tong (2010) study in rural Thailand. Marriage, parenthood, and obligations to ageing parents strongly motivated Thai emigrants to return home.

The relationship between return or repeat migration and knowledge circulation, knowledge transfers and virtual research collaboration was investigated by Andújar et al. (2015). The authors investigated Spanish scientists living outside Spain and the role of co-publications and collaboration through formal participation on the return migration. They showed that Spanish scientists who go abroad remain in close contacts with scientists who stay in Spain and these ties persist over time. Return probabilities decrease the longer they stay abroad and especially with ongoing co-authorships. On the other hand, formal participation in research projects, increases

the probability to return, compared to no collaboration. Remarkably, the most important reason for the return of the brainy Spanish researchers was receiving financial support for reintegration.

Saarela and Scott (2017) also argued that variations in return migration among labor migrants is not solely a result of earnings differentials. Based on cross-country registered data in Finland and Sweden, they focus on variations in labor migrants' integration by mother tongue and how this affects the likelihood of return migration through its impact on network formation. Specifically, they distinguish first-time Finnish immigrants to Sweden by Finnish-speaking versus Swedish-speaking. During the first-five years since arrival, Swedish-speaking Finns were at a much lower risk to return. After five years, 42% of the Swedish-speaking men, and 30% of the Swedish-speaking women had returned, a low share compared to 61% of the Finnish-speaking men and to 48% of the Finnish-speaking women. Controlling for earnings and socio-demographic differences, Swedish-speaking Finns had an even much lower return migration risk (about 35%) than the Finnish-speakers. Similar to other studies, the authors find a U-shaped relationship between earnings and return migration risk, that is, immigrants with extremely low and extremely high earnings are more likely to return.

The role of host and home country policies vis-à-vis returnees

This section debates host and home country policies vis-à-vis the returnees such as new push factors for re-return, the role of the diaspora, and virtual return via technological advancements. Immigrants may be prompted to return because of policy interventions by the home or host countries.

Host countries regulate migration by forcibly deporting immigrants, by giving monetary incentives to guestworkers to leave, and by restricting entry. Besides deportations, which are very expensive, the other policy instruments do not work or backfire. Providing monetary incentives to Turks in Germany resulted in the Turks staying and bringing their families. Restricting entry also resulted in Mexican immigrants staying in the U.S. and bringing their family when they can.

Echoing a dozen previous studies in the U.S., Germany and elsewhere, Flahaux (2017) showed that when France, Italy and Spain tightened entry restrictions more Senegalese stayed in. Using transnational and biographic data from the Migration between Africa and Europe (MAFE) survey as well as the DEMIG POLICY and TRAVEL VISA databases, the author found that Senegalese who want to return do not like to spend money by visiting Senegal; they prefer working and saving money for their reintegration after return. Restrictive entry policies discourage Senegalese from returning. Instead they push them into a longer settlement in France, Italy and Spain. The author concluded that immigrants are not more likely to return when measures are implemented to encourage or force them to leave, than when these measures are inexistent or less developed.

What immigrants want is to be able to re-return to the host when they need more money. Temporary programs that do that and give credit to migrants who leave according to contract –

as Spain did during its economic boom in the 2000s – have much better success. However, when Amuedo-Dorantes and Pozo (2018) evaluated such "pay-to-go" programs in Spain during the economic recession, found that the policy has been mildly effective only for a particular subset of eligible immigrants. The authors speculate that perhaps conditions at home for the non-Latin American immigrants were not better than in Spain. Thus the incentive provided by the program to return home might not have been enough.

For immigrants to return, it is crucial to have the possibility of legally re-returning and circulating for economic reasons. A combination of incentives to exit and support in reintegration back home have also shown successful results.

Home countries can formulate successful policies if they take into consideration the types of returnees and the needs of returnees and country-specific factors. For home country policies fostering and promoting return migration for their respective diasporas see Constant and Zimmermann (2016). Over time, many developing economics have instituted liberal reforms and opened up to business activities that are beneficial not only for the stayers, but for the migrants, and the returnees which may be endogenous to the efforts by the diaspora, the returnees and repeat migrants. China is a successful paradigm of leveraging its diaspora and offering an environment conducive to their professional and socio-economic development (Constant et al. 2013). With its 'One Thousand Talents Scheme' aimed at attracting the most talented Chinese diaspora China enhanced its knowledge society (Constant and Zimmermann, 2016).

VII. What do returnees bring back home and can they survive their return?

Previous sections emphasized the significance of self-selection in the performance of immigrants in the host country, their decision-making dynamics and behavior regarding their ensuing migration moves. This section reiterates the importance of self-selection among returnees but is concerned with the performance of returnees in the home country, their role in the economic growth of home, and their impact on culture, customs and norms. The time dimension has a paramount role in this.

Returnees have been through at least two types of self-selections. They are bound to be different than their compatriots in the home country who never left. First, they self-selected themselves when they initially left the home country. Second, when they left the host country to return they self-selected themselves from their cohort with whom they migrated together. Third, they have changed through time as they have been exposed to other cultures, norms, laws, and circumstances. Further, even when immigrants visit home at regular intervals they cannot be prepared for the irregularities, singularities, situational dynamics, and institutional factors that arise when they configure permanent settlement. Lastly, returnees do not necessarily return to

their native village or town, but tend to settle into larger cities. Thus they constitute an exceptionally heterogeneous group of agents.

On the other hand, native stayers who did not leave the home country have not remained the same through time and are different than who they were when their compatriots left to migrate abroad. While in the homeland, they may have experienced significant institutional, and economic changes as well as political transformations. Under this reality, it is more likely that returnees will clash with their compatriots rather than they will face a smooth re-integration in the homeland. Both returnees and stayers may have different expectations about each other. Power relations and traditional vested interests create clashes. Heterogeneity has a pulverizing role.

Theoretical predictions about returnees

Cassarino's (2004) typology of returnees under ST, provides a rather pessimistic view of the possible outcomes and endeavors returnees undertake after they are back home. First, immigrants who return according to their initial plan are more conservative; they only care about their family's and their own needs. They do not aim at altering the social milieu. Instead, they help preserving the status quo. Second, immigrants who decide to return after they retire in the host country are more likely to buy land and build a home that will allow them to have a good old age. Their human capital acquired abroad may not be useful and their old age discourages them from working again. Third, when immigrants return because they could not survive in the host country are ashamed and do not have the motivation or the drive to innovate and contribute to economic growth. Besides, they may have never improved their skills while abroad, or their specific capital may not be transferable.

Yet, Cassarino (2004) identifies a dynamic category of returnees who are determined to make use of their skills, education, other knowledge, and savings they acquired abroad in order to contribute to innovation and better themselves, their compatriots and the homeland. There are also the transnational returnees whose process of reintegration at home does not necessitate the rejection of the identities they acquired abroad. Of course, diaspora, as the connective link between host and home has been emblematic in contributing to the political, social, and economic empowerment of the home countries (Constant and Zimmermann 2016). In reality, the diverse reasons of return may also change upon return and returnees mobilize tangible and intangible resources to make their stay a success.

In a few countries one can find some representative surveys and/or censuses that have information on previous country of residence five years prior to census and other limited information about returnees or expats. Such is the U.S., Mexican, or Greek census, the Mexican Migration Project, and case studies. While not perfect, they can offer some insights.

Returnees as promoters of economic expansion

One question is whether returnees go into self-employment and create new businesses. The tenuous existing evidence to date corroborates that. Business ownership and self-employment are not only a dream and a pride or a way to climb up the economic ladder. They are also a way out of employment discrimination. When immigrants return they find it easier to start their own business and fill a niche rather than having to apply for jobs in the government and deal with red tape or the private sector.

Piracha and Vadean (2010) who investigated the occupational choice of Albanian returnees differentiated between self-employment and entrepreneurship. They find that those who opened their own business have lower education levels and resemble non-participants in the labor market. But the entrepreneurs were positively selected in schooling, foreign language proficiency, and savings accumulated abroad. When juxtaposed to the stayers, return Albanians were significantly more likely to be entrepreneurs. This suggests that there is a positive impact on job-creating activities in Albania due to returnees. Using Albanian national data, Kilic et al. (2007) also find a strong link between Albanian returnees and small businesses. Their explanation is that these Albanian returnees possess both start-up capital and know-how, which are lacking in the country.

For the Maghreb region, Gubert and Nordman (2011) confirm the relationship between returnees and the creation of small enterprises. One-third of returnees in Algeria, Morocco, and Tunisia invested in businesses. Using data from Egypt, Wahba and Zenou (2012) confirm that return migrants are more likely to become entrepreneurs than non-migrants. These examples are more in line with the NELM, in which returnees are content with their migration experience abroad and ready to put their savings and experience to good use at home.

Likewise, Dustmann and Kirchkamp (2002) found that over half of the Turks who returned to Turkey from Germany participated in the labor market as entrepreneurs. Based on the MAFE-Senegal survey of 2008, Kveder and Flahaux (2013) also found that those who returned in the city of Dakar were overrepresented in self-employment. However, their type of self-employment does not appear to be the result of a successful migration experience abroad, but rather a “last resort” for those returnees who were not able to accumulate capital or properly prepare their return.

Another question is whether returnees command higher wages upon return in the home country. De Coulon and Piracha (2005) used the Roy model and Albanian data to analyze returnees’ earnings. Comparing the earnings of returnees to the earnings of stayers they concluded that return migrants were negatively self-selected, but earned increased hourly wages due to their spell abroad. Through a counterfactual analysis, the authors found that if the stayers had decided to emigrate and then return, they would have earned more than twice the wages of the actual returnees. According to theory, high-skilled Albanians did not leave Albania because their earnings in the host countries the others went to would have been lower than in Albania.

Co et al. (2000) examined the labor market earnings of returning Hungarians to Hungary. Using the Hungarian Household Panel Survey, they addressed selection bias due to emigration and due to the decision to work. They found an earnings premium of 40% but only for returnee women who had experience from abroad. That returnees enjoy a wage premium has been recognized by Mayr and Peri (2008) for middle-income home countries, by De Vreyer et al. (2010) for returnees from OECD host countries to seven capitals in west Africa, and by Reinhold and Thom (2013) for Mexicans who return home from the U.S.

Returnees as catalysts of knowledge and social norms diffusion

Current theories and evidence show that there are other tangible and intangible factors that can shape the home country above and beyond monetary remittances. Dos Santos and Postel-Vinay (2003) set up a theoretical model of migratory dynamics to test the role of knowledge diffusion under certain assumptions. They show that return migration is beneficial to the home economy and a source of growth. By acquiring knowledge in the host country, returnees contribute to the public stock of knowledge in their home country, which closes the technological gap between the host (developed) and home (less developed) countries. In fact, in the long-run, as the home country advances, fewer natives are likely to emigrate and more expats are likely to return.

Through an overlapping generations model of agents with heterogeneous abilities, Mayr and Peri (2008) show that the return migration channel combined with the incentive channel reverses the brain drain of selective emigration and render it into a substantial brain gain for Eastern Europe or middle-income home countries. Even if it is not always the high-skilled who return, all returnees possess some enhanced human capital. OECD (2008) cites several cases of return migration to Brazil, Chile, and Costa Rica in which returnees had a strong prevalence in highly-skilled occupations and were underrepresented in low-skilled trades.

Jonkers (2008) finds that Argentinian scientists who returned started working for government research institutes, contributing to the country's research background. He also credits the highly-skilled Indians who returned home for the country's IT booming industry. These Indian returnees are IT professionals who used their skills and entrepreneurship to found businesses in India. It is also with the help of networks that they have maintained, that returnees can easily reintegrate and be socially accepted by their compatriots so that they can delve into other ventures such as technology transfers, innovation dissemination, and foreign investment (OECD 2008).

Besides knowledge, return expats can bring back political ideologies irrespective of whether they return permanently or not (IOM 2020) and raise awareness for political accountability. Rother's (2009) case study serves as an example. He studied Filipino return migrants who had migrated to host countries with different political regimes: Japan (a democracy), Hong Kong (semi-democratic), and Saudi Arabia (autocracy). He showed that "political remittances" exist with those Filipino returnees from Hong Kong who exhibited a higher commitment to democracy. But returnees from Saudi Arabia expressed more ambivalence towards democracy. Overall, returnees

showed the most distinctive numbers in support of democracy when compared to first-time emigrant Filipinos heading for that destination.

A more recent study, among the growing research on the topic, examined whether returnees can shape political attitudes and preferences for Morocco. Tuccio et al. (2019) found that indeed, return migration boosts the demand for political and social change. Their results are driven by Moroccans who returned from the West and who have been exposed to more democratic norms. In contrast, households with a current migrant were less willing to ask for change than non-migrant families. This finding was driven by migrants to non-Western countries, where the quality of political and social institutions is lower. Furthermore, they show that return migration is associated with a greater turnout to the 2011 political elections.

Evidence that returnees induce changes in the norms of the home countries is provided by several studies on fertility choices. Beine et al. (2013), through rigorous econometric analysis and data on bilateral migration stocks for 208 countries and territories in 2000, find that there is a significant and robust transfer of fertility norms from host to home countries. Namely, fertility at home increases (decreases) if it is lower (higher) than that of the host country such that a 1% decrease (increase) in the fertility norm to which migrants are exposed reduces (raises) home country fertility by about 0.3%. That fertility and other behavioral norms are diffused into the home society is corroborated by Bertoli and Marchetta (2015), whose study showed that Egyptian returnees adjust their fertility choices to the norms of the host country they have been in.

The impact of returnees on the home country culture is further evidenced in shifting gender norms. Tuccio and Wahba (2018) studied women in Jordan with a returnee family member from other Arab countries. They find that these women are more likely to abide by traditional gender norms than women in households with no migration experience. Their results are driven by returnees from more conservative Arab countries than Jordan. Similarly for Egypt, Samari (2019), analyzed how gender norms and household gender dynamics are modified in Egypt when men, who migrated to other Arab countries, return home. She finds that women whose spouses returned from an Arab country value more traditional gender norms and make fewer household decisions compared to women in non-migrant households. In this case, return migration is associated with less egalitarian beliefs and more restrictive gender norms for women.

A study on diaspora shows that diaspora and returnees can become agents of change in their home country such as in peacebuilding, building social cohesion and infrastructure especially post-conflict through the flow of ideas and social capital among countries (Constant and Zimmermann 2016).

VIII. Summary and conclusions

This handbook chapter presented a review of migration theories that predict why people move and where they go, allowing for time-space dynamics. By assessing and comparing these theories, the chapter revealed their power regarding return, repeat, circular and onward migration. Next, it critically reviewed theories about the selection of migrants. These theories reveal who are the people who emigrate, return, or repeat migrate. Along with some definitions, the chapter further presented and appraised the theories about the reintegration of migrants when they return home, about their contributing to the economic development of the home country, and their role as transformers of social and cultural norms. All together, this chapter provided a thorough review of the status quo about the topic.

A novelty of this chapter is that it incorporated neglected albeit de facto crucial drivers of return or repeat migration. Such are non-economic motives, ideology, and migration policies. The chapter emphasized families as units of decision-making in contemporary migration. It also revealed that women are no longer "tied-movers" but play an active role in a couple's decision to return or circulate, depending on their earnings and experience. Within the family unit, the chapter heightened the importance of the presence, sex, and number of children in the return or repeat migration decision. It showed that children cause migration deliberately or unwittingly.

The validation of theories comes through empirics. To move the conversation and build new concepts, this chapter provided a state-of-the-art literature review of empirical studies on return, repeat, circular, and onward migration in the 21st century. It first covered empirical studies from the host country perspective. Because return and circular migration are disparate phenomena, these studies were grouped into who is more likely to exit the host country and return and who is more likely to re-return, repeat, circulate, or onward move.

However, current knowledge about return and repeat migration is not complete without a review of the evidence about returnees from the home country angle. For example, while studies may find that the high-skilled return, this does not guarantee that they can survive their return and contribute to economic growth. The added value of this chapter is that it brought together empirical studies about who made it back home, how returnees fare, and what they do for their home country when they return. The chapter also goes beyond economics to assess social and cultural changes due to return or repeat migration, which are not always progressive.

Overall, there are no stylized facts about return, repeat or circular economic migrants. Studies do not agree on specific characteristics. Human migration is complex, depends on circumstances, and host/home country contexts. There are two hurdles in the advancement of the empirical literature. The first is that there are no universally accepted definitions of the terms return, repeat, or circular migration. The second hurdle is the non-existence of good, adequate data that afford comparisons and replications.

Yet, some conclusions can be drawn. Repeat or circular migrants are less likely to be undocumented and more willing to adjust to the temporary needs of the host economy. This makes them very attractive to policymakers and employers. The more unfettered migration between countries is, the more likely are migrants to engage in repeat or circular migration. Naturalization is a determinant of repeat migration and induces out-migration because it guarantees a legal re-entry to the host country. Family left behind in the home country equally provides an incentive to repeat migrate.

In general, high-education, labor market attachment, and home or land ownership in the host country are characteristics that deter repeat migration and induce a permanent stay. Restrictive policy measures appear to be counter-productive. They increase the immigrant population in the host country through family reunification and lengthen the stay indefinitely. Circular migration tends to be more successful if the labor markets filter migration. Having the opportunity to re-return to the host country without legal restrictions should be the basic principle of circular migration. Schemes that allow immigrants to preserve pension rights, have minimum work contract standards, facilitate remittances, and enable family members' reunion result in well-behaved circular migration.

Among other things, globalization has made it easier for economic migrants to return, repeat, circulate or move on. At the same time, host countries in many parts of the world are seeking for ways to regulate and curtail migration. Policymakers are more likely to embrace temporary immigrant programs because they appear to be less threatening to voters and can prevent a political fallout. Temporary labor migration enchants host communities that they can enjoy the benefits from inexpensive labor without having to deal with entrenched immigrant neighborhoods and the integration of immigrants and their families. However, temporary migration cannot be a permanent solution to labor shortages, demographic imbalances, knowledge building, and economic growth.

Circular migration has been found to conform to the natural preferences of many migrants (Newland et al. 2008). This is especially true when there are open border. This is the case between Australia and New Zealand, or between Hong Kong and Canada where circular flows are encouraged by flexible long-term permits and dual nationalities. Circular migration can contribute to a more efficient allocation of available resources and to economic growth.

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