

International Migration and Remittances: A Review of Economic Impacts, Issues, and Challenges from the Sending Country's Perspective

Tereso S. Tullao, Jr. and Christopher James R. Cabuay

Globalization, particularly the liberalization of international migration, is facilitating the cultural, financial, and economic integration of economies across the globe. Migration is a means for people to exploit economic opportunities, sidestep undesirable national circumstances, improve human capital, and maximize incomes across time.

Table 1. International Migrants Sending and Receiving Regions 2010 (Thousands)

| Sending Region (Across) Destination Region (Down) | Africa | Americas | Asia | Europe | Oceania | Total Received |
|--|--------|----------|--------|--------|---------|-------------------|
| Africa | 14,478 | 15 | 342 | 254 | 5 | 15,094 |
| Americas | 1,776 | 29,185 | 13,965 | 8,730 | 354 | 54,009 |
| Asia | 3,898 | 796 | 39,467 | 6,837 | 62 | 51,062 |
| Europe | 8,153 | 5,231 | 18,408 | 35,397 | 277 | 67,466 |

Table 1 continued...

| | | | | | | |
|------------|--------|--------|--------|--------|-------|-------|
| Oceania | 384 | 300 | 2,228 | 2,813 | 913 | 6,637 |
| Total Sent | 28,689 | 35,526 | 74,411 | 54,032 | 1,611 | |

Source: Migration Policy Institute (2011); Calculations of the World Bank Development Prospects Group's Bilateral Migration Matrix Data of 2010.

As seen in Table 1, the top three sending regions as of 2010 are Asia with 74.41 million migrants, Europe with 54.03 million, and the Americas with 35.53 million. The principal receiving regions are Europe with 67.47 million, the Americas with 54.01 million, and Asia with 51.06 million. Although interregional flows are considerable from Asia going to Europe (18.41 million) and Asia to the Americas (13.97 million), the largest migration flows are within regions.

Migration is normally coupled with remittances. Migrants send home money and/or goods for reasons including love and mutual understanding and the maintenance of and further investments in their native land. Regardless of the motive, remittances allow individuals to maximize their income over time and/or to smoothen the families' consumption.

Table 2. Worker's Remittances and Income of Nonresident Workers by Host Country (Current Billion US\$), 1990 to 2010

| Country | 1990 | 1995 | 2000 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|------------------------------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| East Asia and Pacific | 8.65 | 16.88 | 25.23 | 62.08 | 69.20 | 86.25 | 105.12 | 103.47 | 112.84 |
| Europe and Central Asia | 34.46 | 43.95 | 51.55 | 89.85 | 102.95 | 130.93 | 148.06 | 132.10 | 132.46 |
| Latin America and Caribbean | 5.74 | 13.42 | 20.35 | 50.06 | 59.11 | 63.30 | 64.65 | 56.84 | 57.53 |
| Middle East and North Africa | 10.48 | 12.81 | 11.94 | 26.09 | 27.58 | 33.40 | 37.75 | 35.18 | 36.43 |
| North America | 1.17 | 2.18 | 4.40 | 4.80 | 6.20 | 6.55 | 6.78 | 6.52 | 6.62 |
| Sub-Saharan Africa | 1.79 | 3.17 | 4.83 | 9.65 | 12.81 | 18.76 | 21.72 | 20.20 | 21.10 |

Source: World Bank (2012).

Table 2 shows that the levels of remittances across regions have grown considerably over time. The largest source of remittances—and the most popular migrant destination—is Europe and Central Asia, amounting to nearly US\$ 132.46 billion in 2010, followed by the East Asian and Pacific region with US\$ 112.84 billion (refer to Table 1).

This paper reviews the motivations of people to migrate and remit as well as the impacts of migration and the effects of remittances on the sending country. Section 2 discusses the various motivations for migration. Section 3 tackles the various motivations for remittances. Section 4 identifies the impacts of migration on the household and national level of the sending country. Section 5 discusses the effects of remittances on the macroeconomy.

Motivations for International Migration

Economic Asymmetries

The primary motivation for people to migrate is to respond to a set of incentives—particularly those that stem from economic and demographic asymmetries between countries—that lead to favorable outcomes. For example, poor economic performance and excess labor supply in a country may push individuals to migrate to economically prosperous nations that are experiencing labor shortages.

“Negative” factors about an economy “push” people to migrate to destinations where better conditions prevail. These push factors may include elements such as economic, social, demographic, and political hardships. Acupan and Agbola (2007) conducted an empirical assessment of some of these determinants of migration in the Philippines. The study confirmed that 1) income inequality and migration are positively and significantly related and 2) middle-income families have the largest motivation to migrate. The poor are unlikely to migrate because of low levels of skills and the prohibitive costs of migration, while the rich may find the net rewards of migration insignificant and marginal. Thus, the middle-income households are the more likely group to migrate.

Indeed, the common causes of emigration are the availability of jobs and higher remunerations (Lall, Selod, & Shalizi, 2006), which become more pronounced given an increasing population and inadequate jobs and accommodation opportunities in sending countries (Martin, 2009). At the macro-level, emigration is fueled by labor surpluses, relatively low wages and per capita GDP, lack of security of tenure and employee benefits, “deteriorating economic conditions, the scarcity of foreign exchange, and institutional policies” (IHPDS, 2005, p. 32). The presence and consistency of economic crises also reinforce emigration tendencies (Asis, 2006).

Political climate, which includes the presence of war and persecution, is also an important push factor (Martin, 2009; Aldaba, 2007). Acupan and Agbola (2007) confirmed that an increase in the restriction of travel decreases the amount of emigration.

Push factors can also be personal and social or nonmonetary in nature. The top reasons for female migration, for instance, are problems with parents and marriages and, more positively, as a quest for personal growth and development—not financial difficulties (IHPDS, 2005). Distortions in the labor market coupled with undesirable working conditions may also push individuals to seek employment abroad (IHPDS, 2005; Aldaba, 2007), particularly healthcare workers who are exposed to the dangers of the HIV/AIDS pandemic. Other factors include relatively undefined land property rights, the absence of a rural credit market (Katz & Stark, 1986), and the concentration of a migrant pool in certain destinations (Mora & Taylor, 2005).

Conversely, pull factors are “positive” features associated with the host country that attract migrants. A good example is the strong demand for nurses—with very attractive compensation packages—in the U.S., UK, and Saudi Arabia that has encouraged the migration of Filipino nurses and stimulated the interest in nursing education investments (Tullao, Conchada, & Rivera, 2010). Most pull factors for international migration are centered on the availability of jobs, higher remunerations and better benefits (Schwartz, 1973; Greenwood, Ladman, & Siegel, 1981), better quality of life, and opportunities for increased personal growth (IHPDS, 2005).

“Positive” features aside, migrants face numerous challenges in the host country. Finding work, for instance, may not be easy due to information asymmetries on the type and quality of job opportunities available to them (Banerjee, 1984). In addition, migrants have difficulty accessing credit and public goods that are available to citizens. They may also have to contend with racial and other forms of discrimination (Assaad, 1997; Meng & Zhang, 2001).

Responses to Demographic Asymmetries

Demographic asymmetries, which arise from differences in the fertility and mortality rates among countries, provide considerable motivations for international migration and enable a more efficient distribution of labor services across the world (Losch, 2008). As some countries experience exponential population growth, the proportion of dependents increases, thereby necessitating the reallocation of resources from employment generating investments to programs that support the needs of these dependents. A larger labor force and limited domestic capacity to absorb manpower keep wages down and encourage workers to migrate and seek employment abroad. In contrast, countries with lower fertility rates may suffer labor market rigidities and, thus, increase wages. The labor shortages in these countries can be addressed by allowing the entry of foreign workers.

The population of the Philippines has increased by more than 400% in the past 50 years—from 20 million in 1950 (Arenas, 2006) to nearly 89 million in 2007 (NSO, 2007). Despite decreasing birth rates—still considered to be high relative to the rates in neighboring countries, high population growth rates persist and contribute to an elevated dependency ratio. The data from the National Statistic Office (NSO, 2007) found that a very large portion of the population is relatively young since almost 72% of the population belonged to the 1- to 34-year-old bracket. As of 2000, the highest concentration was in the 5- to 9-year-old age bracket—12.7% of the population.

Impact of Demographic Dividends on the Labor Market

The literature indicates that the demographic dividend can provide room for accelerated growth (Ross, 2004). Fewer resources are required for the youngest age groups as the population shifts toward working ages. Accelerated national income expansions are made possible by financing investments in family welfare and economic development. Mapa, Balisacan, and Briones (2006) highlighted the three phases of demographic transition: 1) phase one is characterized by a declining mortality rates and high fertility rates, resulting in the increase of the young-dependents group, which may corner resources for economic growth; 2) phase two is where the demographic dividend occurs. The young dependents enter the labor market. Resources are reallocated to investments, which fuels economic growth (Ross, 2004); and 3) phase three is when the proportion of the elderly swells. Since the elderly live on their accumulated savings; however, there is no significant depressing effect on the economy (Mapa et al., 2006).

Rooted on the improvements of labor inputs (i.e., quantity and quality of available workers), the demographic dividend contributes to the acceleration of the country's economic growth. Ross (2004) asserted that the main effect of the demographic dividend is to enhance the labor supply. Women have fewer children to rear, enjoy better health, and are available for work. However, this assumes that government policies are in place to accommodate the dividend. Mapa and Balisacan (2004) underscored that a higher population growth—coupled with illiteracy—would decrease the opportunity to achieve the demographic dividend and, therefore, impede economic growth.

The dependency ratios of the Philippines have decreased since the 1960s; thus, the demographic dividend should have been realized in 2010. However, Mapa et al. (2006) have shown that the Philippines has failed to capitalize on the window of opportunity. Comparing the age structures of the Philippines and Thailand from 1970 to 2000, they determined that the

Philippines remained in the first phase of the transition for 30 years. Over the course of the same period, Thailand's per capita GDP grew at 8.8% per year, while the Philippines' grew at only 4.1%. Even in the decade of 2010s, the Philippines is still stuck on the first phase of the transition (U.S. Census Bureau, n.d.).

Rapid Population Growth and Surplus Labor

Despite falling birth and death rates, the Philippine population is still rapidly rising—putting an increasing pressure on the government to continuously create jobs and allocate more resources to housing, schools, hospitals, and other social services (Tullao, 2008). Individuals who cannot find employment in the domestic labor market, evidenced by rising unemployment rates, seek work in the international labor market (Tullao, 2008). Tullao et al. (2010), for instance, confirmed that the Philippine labor market's limited absorptive capacity and poor compensation provide strong incentives for Filipino nurses to work abroad. Indeed, even if they choose to stay in the Philippines, they start their own businesses or seek employment in fields that are completely unrelated to their degrees resulting in underemployment and distortions in the labor market.

Investment in Human Resources

People are motivated to migrate because of their desire to improve their earning capacity. As individuals and households are able to derive returns and, eventually, maximize their income from the endeavor, migration is a means of investing in human resources

Individual Decisions and the Rate of Return to Migration

For any particular individual, the returns to migration consist of a positive (or negative) increment to his earning stream (Sjaastad, 1962). By moving to another place, higher compensations are made possible by differences in prices, nominal earnings, and costs of employment. Another form of return to migration is via the investment in education that improves productive capacity achieved through 1) educated workers or relatively skilled workers relocating abroad due to the higher rates of return and 2) people moving to other countries to invest further in their human capital.

Sjaastad (1962) classified the returns to migration into nonmonetary and monetary returns. The former includes locational advantages determined by an individual's preferences for factors like climate, congestion, and the environment. In contrast, monetary returns primarily consist of interspatial

labor earning differences that arise from occupational composition, investment in human capital, age, and sex. Specifically, Ramcharan (2002) found that migration is greatly affected by the individual's level and growth of educational attainment, which increase the "skill premium" and, therefore, the rate of return to migration. Tullao et al. (2010) provided an example of Ramcharan's (2002) findings by pointing out that the popularity of nursing programs in the Philippines can be explained by the high return to migration that is attributed to considerable wage differentials.

Reaping the full benefits of migration requires high productivity and, thus, significant investments in human capital development. Young people typically invest more in formal education than in training for experience in a specific occupation (Sjaastad, 1962). As the age-income relation within an occupation is, at least, partially due to accumulated experience, complementary investments are required to make migration feasible.

Household Decisions and Maximizing Income Across Time

Most theories of international labor migration imply that migration is a decision made by the household rather than a decision of an individual member. Founded on the household's objective to maximize the prospect of higher wages through migration (Solomon & Eden, n.d.), the Harris-Todaro model is instrumental in analyzing the microfoundation of this phenomenon. Borjas (1989) posited that individuals realize the highest possible utility by choosing a country of residence that maximizes their welfare given certain constraints (i.e., financial resources, migration regulations, non-monetary restrictions, etc.). Clearly, consistent with the income-maximizing behavior, wage differentials provide incentives for people to migrate.

The New Economics of Labor Migration Theory (NELM) views migration as an alternative for households to increase their sources of income and "diversify their portfolio." The NELM assumes that households use remittances to increase their liquidity and investment opportunities in the home country (Wouterse & Taylor, 2006). Consistent with the Harris-Todaro model and Borjas's (1989) conclusions, the relative deprivation theory confirmed that individuals choose to migrate to alleviate poverty (Acupan & Agbola, 2007).

Poirine's (1997) diagrammatic model attributed migration to a contract between adults and the youth. Adults, having no education, provide the youth with improvements in human capital, which will enable them to emigrate. The youth must, therefore, honor the contract—through remittances—or lose their inheritance. Stark and Lucas (1988) supported the idea that the migrant and his family enter a voluntary contractual arrangement because

both will benefit from higher returns in urban labor markets in other countries. Furthermore, because the head of the family holds the migrant's bequest, the migrant will be compelled to remit.

Culture of Migration

Through the length and extent of migration history, a certain degree of "culture" has developed. Ernest Ravenstein (1885) formulated the first seven laws of migration in 1885—later refined by Everett Lee (1966)—namely, 1) the majority migrates short distances and establishes migration currents toward larger centers, 2) the currents of migration develop with the transitions of populations in countries, 3) a certain "stream" of migration is met by a corresponding "counter stream," 4) rural residents have a higher propensity to migrate than urban residents, 5) females migrate short distances more frequently than males, 6) the rate of migration increases with the development of technology and more migrants gravitate towards innovative and commercial centers, and 7) economic motives and the inherent "desire" of individuals to better their material aspects dominate migration motives.

A very popular culture of migration in the Philippines is observed in the nursing field. Choy (2003) claimed that most migration studies in the Philippines find that the migration of Filipino nurses is strongly influenced by the wage differential between the Philippines and the United States' nursing industries and the strong Philippine–U.S. ties. Others contended that this culture of migration accelerated in the 1970s as a consequence of the Marcos regime's labor export policies (Asis, 2006). Indicators of this culture include findings 1) of a 2005 nationwide survey that 33% of Filipinos want to migrate permanently and 2) that 47% of children between 10–12 years desire to work abroad and 60% of these are children of migrants (ECMI/AOS-MANILA, SMC, & OWWA, 2004).

Migration Network

In the development of a culture of migration, migrant networks are formed especially in popular migrant destinations. Migrant networks are the bases for collective action. They can provide financial, informative, and emotional resources and support to migrants. These networks are often based on kinship/communal ties or organizational ties.

From a sociological and network perspective, Massey (1988) and Martin (2009) hypothesized that the chances of migration would increase if individuals are related to someone in the destination country or have extensive experience in international travel. Massey (1988) further theorized

that an individual who has migrated internationally is likely to do so again, causing repeated movements over time. The literature also suggests that “mass migration” is explained by the presence of social ties and international migratory experience—spreading migratory patterns from the middle to lower segments of the socioeconomic hierarchy. For example, Filipino migrant networks around the world and prosperous Filipino communities in different countries have started Filipino-culture-based commercial centers. Tullao’s (2008) research, for example, verified that in the top five destinations of Filipino migrants—Saudi Arabia, United Arab Emirates, Hong Kong, Kuwait, and Qatar—overseas Filipino workers are engaged in social migrant networks where there is collective action and purchase of communal resources.

Migration Costs

Migration costs may be classified into either private or social costs. Sjaastad (1962) broke down the private cost of migration into monetary and non-monetary costs. Monetary costs increase with distances traveled and the number of dependents in the case of family migration (i.e., expenditures on food, lodging, and transportation). Nonmonetary costs, meanwhile, include forgone costs and “psychic” costs (Sjaastad, 1962). Forgone costs are opportunity costs (i.e., travel, learning a new job, etc.), which can be attributed to the distance and time spent in finding a new job. The psychic costs of migration, on the other hand, are influenced by the migrant’s tastes and preferences (i.e., leaving familiar surroundings, family, and friends) (Sjaastad, 1962).

Opiniano (2008) further stated that the returns to migration are coupled with challenges in the short run, such as inequality, the loss of manpower, risks of travel overseas, emotional and familial issues centered on the absence of a family member, and the thought of identifying migrants and workers as “putting the image of the country in a bad light.”

Trade in Services and the Movement of Natural Persons

The expansion of trade in services has contributed to migration flows through the movement of natural persons (MNP) or the provision of services through the temporary movement of a service provider to the territory of the service consumer. From a trade and negotiations perspective, MNP focuses on initiatives that facilitate intracorporate transfers of professionals, managers, technical, and support staff, whereas from the labor market perspective, MNP is a legitimate response to labor market disparities between countries. For

example, Japan's main demographic problem is its aging population, which requires more health service providers. The Philippines with its labor surplus can meet Japan's needs (Tullao & Cortez, 2003). However, for Filipinos to maximize their income through migration and for Japan to satisfy its health professionals' shortage, facilitation measures are needed for the movement of natural persons.

Motivations to Send Remittances

Motivations to remit include considerations pertaining to the income portfolio diversification of migrants, precautionary savings of the migrants' families, increasing the migrants' bequest or inheritance, altruism, and enhancement of the migrants' standard of living (Stark, 2009). For the sake of discussion, this study will classify the motivations to remit under two general categories: 1) altruism and 2) self-interest.

Altruistic Motives

Altruism is the expression of one's unselfish concern and dedication towards the well-being of others (Dictionary.com, n.d.). Hence, the driving force for sending remittances is the mutual care individuals experience (Alba & Orbeta, n.d.), which results in migrants deriving utility or happiness from the consumption of his immediate family (Zanker & Siegel, 2007).

If indeed remittances are determined by altruism, then a higher earning capacity and a tighter solidarity among household members should increase the migrant's remittances (Lucas & Stark, 1985; Chami, Fullenkamp, & Jahjah, 2003; Rapoport & Docquier, 2006; Alba & Sugui, n.d.). Similar to the concept of self-sacrifice, this phenomenon is classified as an act of "unrequited love where the migrant considers the pain of the household and the feedback effect when he remits" (Alba, 2008, p.3). Funkhouser (1995) added that under the motivation of pure altruism, remittances increase with proximity, the number of household members left behind, and the probability of the migrant's return to the home country. Transfers, on the other hand, decrease when the number of emigrants in the household rises. Alba and Sugui (n.d.) and Rapoport and Docquier (2005) also discovered that remittances decrease when the recipient household's income increases.

Under this motivation, remittances are counter-cyclical (Reside, 2009) and, therefore, rise when the home country is hit with adverse income shocks. This motivation is actually very prominent in the Philippines. Surveys revealed that it is for this reason that individuals initially decide to migrate.

Insurance Motives

Insurance motives are prevalent in less developed country households living in rural areas or those engaged in agricultural businesses. Migration and, ultimately, remittances serve as insurance and protection from the absence of credit and insurance markets in rural areas (Rapoport & Docquier, 2005; Stark, 2009; Alba & Sugui, n.d.).

This framework is rooted on the perspective that household incomes are subject to risks. Thus, households will choose to lessen the degree of risk or variance in their annual income by sending members to another country (urban area). Accordingly, even if an adverse shock hits the home country—but not the host country—and income levels drop, households with at least one migrant will still have a steady inflow of income (through remittances). “Having a migrant means that the household has a form of insurance against agricultural shocks” (Sugui, Alba, Abdon, & Garde, 2007, p. 5; Hoddinott, 1994), but at the same time, the migrant himself is also being supported by the household as he establishes a foothold in the host country.

Osili (2007) and Reside (2009) postulated that migrants send remittances to serve as precautionary savings in case of bad economic conditions or simply to smoothen consumption. Alba and Orbeta (n.d.) summarized how remittances are affected under this model: 1) households initially pay a premium consisting of migration costs and remittances serve as returns to the investment, 2) the likelihood of remittances goes up when there are income shocks or relative increases in income volatility, 3) remittances are not affected by distance or time away from the home country, and 4) remittances do not drop when the number of family members that engage in contracted services abroad rises. The predictions of this model include the possibility of moral hazard and dependency problems, which occur when households end up depending entirely on remittances (Alba & Orbeta, n.d.).

Exchange Motives

In contrast to the altruistic motive, the motive of exchange does not bind the migrant by mutual ties but, rather, by contractual agreement. Similar to the self-interest motives, exchange motives do not consider the migrant’s care for the recipient household. Instead, remittances serve as payments for the services rendered by those who are left in the motherland (Alba & Sugui, n.d.). Migrants remit for their own interests, particularly the maintenance of their own assets in the home country. Accordingly, those left behind are tasked to tend to the assets as intermediaries or agents (Lucas & Stark, 1985; Osili, 2007) and may be able to bargain with the migrant on the amount of transfers (Rapoport & Docquier, 2005).

Consequently, remittances increase as the migrant's income in the host country increases. Migrant income, in turn, is derived from his contracted services in the host country. As the number, quality, diversity, and intensity of Pareto-improving contracted services rise, so do the transfers from the migrant to the household (Rapoport & Docquier, 2005; Alba & Sugui, n.d.). Unlike in the altruistic model, there appears to be no clear relationship between pretransfer income and the amount or the propensity to remit. Rapoport & Docquier (2005) discovered that if there is complementarity between the migrant's service and the household's income, then remittances decrease, but if they are independent of each other, remittances go up due to what can be considered as the household's opportunity cost of tending to the migrant's assets (Alba & Sugui, n.d.). Additionally, the magnitude of transfers varies with the fluctuations in the performance of the home country's economy (Alba & Sugui, n.d.). If the unemployment rate is high or there are unfavorable economic fluctuations, then the recipient household's opportunity cost decreases. Consequently, the migrant is less likely to remit or reduce the magnitude of remittances under the exchange motive (Alba & Sugui, n.d.).

The exchange motive is also associated with loan repayment, particularly the reimbursement of the "initial investment undertaken by the family to support migration" (Sugui, Alba, Abdon, & Garde, 2007, p. 5; Poirine, 1997). Lucas and Stark's (1985) study, for instance, showed that migrants with greater educational investments prior to migration are expected to give greater compensation to their families and, therefore, remit larger amounts (Lucas & Stark, 1985).

Strategic Motives

Stark (1995) suggested that there may be a strategic endogeneity between remittances and the selection of the migrant; that is, remittances serve as the purpose for migration (potentially due to higher wages) and are the result of it as well. Quoting Rapoport and Docquier (2005) regarding the rationale for this motive:

...when migrants are heterogeneous in skills and individual productivity is not perfectly observable on the labor market of the host country (at least for a given period of time), employers apply statistical discrimination so that migrant workers are paid the average productivity of the minority group to which they belong. (p. 16)

Given the discrepancy in skills and, thus, wages, skilled workers can opt to act cohesively and "bribe" unskilled workers—through transfers—to stay

in the home country (Alba & Orbeta, n.d.; Rapoport & Docquier, 2005) and prevent the “contamination” of the wages of skilled workers (Stark, 2009). In fact, Rapoport and Docquier’s (2005) game-theoretic framework shows that remittances provide the motivation for migration and vice versa. The result of their analysis implied that there is incentive for skilled migrant workers to induce unskilled workers to stay at home. The nature of the motivation is clearly non-altruistic and is based on self-interest.

Another strategy is for agents, specifically the eldest child, to remit for the purpose of securing a larger inheritance from their parents. Studies in different countries confirmed that migrant remittances are larger when parents have greater capabilities of bequeathing land, cattle, or other assets to their children (Stark & Lucas, 1988; Hoddinott, 1994; Sugui et al., 2007). Consistent with the self-interest motive, the approach contributes to the development of assets in the home country, assets that migrants will eventually inherit. On the part of the parents, the behavior creates incentives for migrant children to honor their “contractual obligations” and demonstrate their care and concern for the household.

Investment Motives

The investment motive and the concept of having purchasing power differentials across countries are two complementary concepts where the latter enhances the effects and the objectives of the former. As the term suggests, families send migrants for the purpose of increasing their wealth (Alba & Sugui, n.d.). The motivation stems from the perception that families use interspatial differences in wages to enhance their income potentials. Migration is costly; thus, the strategy is deemed as an investment (Rapoport & Docquier, 2005).

The investments prior to migration, usually accounted for by requirements for migration, constitute a significant share of the migration costs. These prior investments include resources that enhance educational attainment and experience in specific occupations that, in turn, generally increase an individual’s employability (Alba & Sugui, n.d.).

The investment motive also adheres to portfolio investment conventions such as spreading risks or diversifying the portfolio. In maximizing income, the main assets in the investment motive would be the supply of labor or, more specifically, the amount and level of human capital development (Rapoport & Docquier, 2005; Alba & Orbeta, n.d.). What is unique about this motive is that it adopts a long-term view of migration that involves “a series of preparatory activities and related decisions, such as choice of school, years of schooling, and educational attainment, occupation, career, and work experience” (Alba & Sugui, n.d., p. 13).

Economic Impacts of International Migration

Household Level

Determining the impacts of migration on the economy has centered on remittances as the main avenue through which the effects of migration are felt. At the household level, migration and remittances are integrated in determining the impacts on the recipient households.

As explored in the earlier portions of the paper, migrants almost always send remittances to their households in the home country. It is apparent that this is the first and foremost impact of migration on households (Asian Development Bank, 2005; Opiniano, 2008). Remittances are expected to alter the household's total consumption expenditure and the allocation of household resources to the different expenditure items (i.e., food versus luxury goods) (Orbeta, 2008). In general, remittance income is mostly spent on consumption and not on investment (Orbeta, 2008). However, Yang (2008) found that remittance-receiving households make riskier investments and that migrants' children were sent to better schools accompanied by other education-related investments. Also, Asis (2006) discovered that remittances were used for land purchases, renovation of houses, increases in educational investments, entrepreneurial activities, consumer durables, and savings.

Other positive impacts of migration include the skills and knowledge transfers as well as wisdom and experience that migrants take home with them, which, as the new methods are imparted to others, can improve local services (Guellec & Cervantes, 2001). This type of benefit stems from the development of migration networks (Baptise-Meyer, 2001) that facilitates the exchange of expertise and information.

However, Opiniano (2008) determined that households tend to develop a dependency on remittances—resulting in the misuse of transfers (Asis, 2006) and lower productivity and earnings of non-migrant relatives (Rodriguez & Tiongson, 2001). Indeed, case studies showed that migrant households have a hard time saving (Burgos & De Vera, 2005; Idang & Yap, 2002; Antonio & Perez, 2000).

Asis (2006) explained that migration induces separation of family members, which may, in turn, destabilize the family unit. The feminization of migration (that is, women in the labor force) is also alarming from a sociocultural perspective given the risks to their safety and well-being as overseas workers. In addition, employment abroad prevents mothers from looking after their children, leading to the erosion of family values and the reduction in the acquisition of human capital investment (Asis, 2006).

At the national level, there are significant discrepancies between the effects of migration and remittances. The former affects three economic components: income distribution, human resource development, and the labor market.

Human Resource Development and Investments in Human Capital

As investments in human capital bring about improvements in labor productivity, which in turn enhance individual income (Mankiw, Romer, & Weil, 1992), it is an important component of poverty alleviation.

In general, expenditure shares in education and health are larger among households with migrants vis-à-vis households without migrants (Orbeta, 2008). Tullao, Cortez, and See (2007) and Tabuga (2007) determined that education-expenditure elasticities are greater in remittance-receiving households and that they react positively to changes in income. Moreover, richer households spend more on education and health, thus raising inequality in human capital expenditures, which may be attributed to remittances (Tabuga, 2007). Yang (2008) confirmed that transfers through favorable exchange rate shocks increase education expenditures and child schooling and decrease child labor incidence.

As laborers cannot be immediately replaced, Cattaneo (2008) posited that the departure of skilled laborers can 1) decrease the productivity of other resources, 2) hinder growth owing to the loss of skilled labor, and 3) result in the deterioration of the investment climate given that educated workers take on critical roles in managing foreign-owned institutions.

The Brain Drain and the Labor Force Participation

The concern regarding brain drain is rooted on the contention that remittances increase the demand for the consumption of normal goods and leisure, which, eventually, would result in drops in output and growth. Other than being the outward transfer of skill and knowledge, it is implied that brain drain may induce the migrant's remaining family members to work less (Orbeta, 2008).

Using simple comparative analysis, Tullao et al. (2007) confirmed that labor participation and employment rates are lower in remittance-receiving households as compared to non-remittance-receiving households. A follow up on Tullao et al.'s (2007) work, Ducanes and Abella (2008) discovered that labor force participation does not differ across the two household classifications. Attributing the finding to a back-bending supply curve that occurs at higher income levels, Ducanes and Abella (2008) rejected the notion that migration decreases the labor force participation of the remaining

family. However, Rodriguez and Tiongson's (2001) study contradicted these results and concluded that increased remittances decrease full-time work hours. Cabegin (2006) further showed that the response varied with the gender of the migrant's spouse/remaining family members and on whether or not children are involved. Her findings were as follows: 1) the presence or number of children in the household has no significant effect on the labor participation of husbands, but the presence of school-age children decreases the wives' labor participation; 2) the presence of working-age children decreases full-time labor participation but increases work hours for self-employment; 3) the presence of preschool children have no significant effect; and 4) remittances decrease participation for both genders, but the magnitude differs for males and females. Despite shocks to the economy, particularly during the Asian Financial Crisis, Yang (2008) ascertained that remittances do not affect the number of work hours but raise the number of hours in entrepreneurship or self-employment.

On the other hand, cross-country comparisons showed that brain drain results in a 0.025% annual GDP per capita net loss in the Philippines (Beine, Docquier, & Rapoport, 2003). Danila and Ortigas (2000) asserted that decreases in a country's GNP triggers labor migration. Furthermore, the data indicated that whenever migration increases, labor force and unemployment figures also rise (Opiniano, 2008).

The Participation Rate and the Impacts of Migration on Wages

Economic theory shows that labor participation is significantly affected by wage levels. Lewis (1954), in fact, claimed that urban-sector expansion requires a high fixed real wage to encourage the migration of surplus labor in the rural sector. Todaro (1969) asserted that imperfections in urban labor markets, particularly the urban-rural wage differentials, promote migration. Hence, the studies concluded that for as long as the expected urban wage exceeds rural wages, there would be a continuous movement of labor from the rural to the urban sectors.

Brucker and Jahn's (2010) reassessment of international migration and the wage-setting framework yielded the following: 1) simulation results indicated that wages decrease by 0.18% and unemployment increases by 0.31% when 1% of the labor force is externally sourced. Likewise, the foreign labor force bears a larger burden as wages decline by 1.11% and unemployment increases by nearly 2%, and 2) there are limited spillovers of education and experience of foreign workers on local workers. They attributed the differences in the adjustments to the wide disparity between the two labor markets that leave unskilled workers to manage in the home country.

Economic Impacts of Remittances

The most apparent effect of remittances on the macroeconomy is on the real exchange rate. The Keynesian school of thought posits that remittance inflow increases the supply of foreign currency, which will cause a real exchange rate appreciation, a decrease in exports, and an increase in imports.

An offshoot of the theory, known as the “Dutch disease,” cautions against expansions in a country’s income brought about by an influx of foreign currency as it may result in increases in imports and reductions in the price competitiveness of exported goods and the amount of exports.

Lartey, Mandelman, and Acosta (2008) showed that the non-tradable sectors benefit at the expense of tradable sectors because of the spending effects and factor movements in developing countries brought about by increases in remittances. Their results supported the claim of real exchange rate appreciations and provided evidence that countries shift from manufacturing towards the service industry, which is a notable characteristic of the Dutch disease that is amplified in fixed exchange rate regimes. In their study of El Salvador, Acosta, Lartey, and Mandelman (2007) suggested that the economy’s inability to absorb and facilitate remittances gives rise to the Dutch disease because increases in remittances raise household incomes and the demand for the consumption of non-tradable goods. Consequently, the appreciation of real exchange rate brings about an expansion of the non-tradable sectors coupled with the contraction of the tradable sectors.

The relationship between remittances and inflation is yet to be established. Balderas and Nath’s (2005) study of Mexico revealed that there is little significant evidence on whether or not remittances have an impact on inflation and relative price variability. The literature shows that remittances respond very strongly to prices, thus implying that remittances are used for consumption. However, as the supply of the non-tradable sector does not immediately expand when consumption rises, prices go up.

Such is the case in Indonesia, where a significant portion of remittances is used for food consumption and the purchase of non-durable household items (IOM, 2010). Indonesia faced double-digit inflation in the late 90s, and although inflation has been reduced significantly in recent years, transfers still cause inflationary pressure.

Similarly, there are conflicting views and scant information about the economic impacts of migration and remittances on growth (Jongwanich, 2007). Barajas, Chami, Fullenkamp, Gapen, and Montiel (2009) suggested a two-way causality: 1) domestic economy performance drives remittance inflows through the promotion of emigration or through the altruistic behavior of migrants and 2) growth and remittance flows are influenced by

other determinants such as poor domestic governance or high economic growth in major trading partners of countries with high emigration. Ultimately, Barajas et al. (2009) concluded that remittances may not even contribute to economic growth and may even prove detrimental to the economy.

Jongwanich (2007) identified the following channels through which remittances can positively affect economic growth: 1) reduce credit constraints of recipient households and increase entrepreneurial activities and private investments (Yang, 2008; Woodruff & Zenteno, 2004); 2) increase the international reserves of a country, which improves credit, and the households' access to capital markets; and 3) enhance growth through the multiplier-effect mechanisms and positive externalities from remittance-receiving households' spillovers to non-receiving households.

Stark and Levhari (1982) and Ahlburg (1991), however, underscored the downside of remittances, particularly, that transfers 1) are primarily used for consumption and very little is allocated to investments and other productive or economic activities, 2) induce moral hazard (i.e., reduction of the local labor participation of recipient-households), and 3) result in the Dutch disease.

Meanwhile, the researches on the effects of remittances on poverty and inequality provide evidence that remittances reduce the incidence of poverty by increasing the income of recipients (Jongwanich, 2007). Various studies likewise concur with the poverty-dampening, consumption-smoothing effect of migration and remittances and their role in raising the levels of living standards (Adams & Page, 2005; Yang & Martinez, 2005; Sawada & Estudillo, 2006; Ducanes & Abella, 2008), particularly in the Philippines.

Regarding income inequality, Cattaneo (2008) posited that at low levels, migration—hence, remittances—worsens income distribution and does not decrease the level of poverty due to the high risks and costs of migration investments. Adams (1989) and Rodriguez (1998) confirmed that the bottom income quintile households receive smaller remittances compared to top income quintile households. However, a more long-term migration experience may provide a wider range of benefits of migration, thereby creating and equalizing its impact. Empirical literature suggests that, in the long run, migration and inequality exhibit an inverted-U relationship (Stark, Taylor, & Yitzhaki, 1986), which implies that greater levels of migration enable households to better cope with its risks and costs owing to increased compensation and migrant productivity.

In sum, despite the poverty-reducing effects of migration and remittances, inequality increases due to the high migration costs. Low-income households cannot afford to migrate, whereas high-income households have no incentive

to migrate. Since the middle-income households have sufficient resources to shoulder migration costs and exploit opportunities derived from interspatial wage, they have the greatest incentive to seek better opportunities abroad (Acupan & Agbola, 2007).

Studies on how households use the remittances they receive concluded that transfers are primarily spent on consumption—not investment. Remittance-receiving households depending on the migrant's motivation to remit, were found to have a harder time saving (Opiniano, 2008; Burgos & De Vera, 2005; Idang & Yap, 2002; Antonio & Perez, 2000). Thus, it may be the case that remittances have no significant impact on investments.

Conversely, Cabegin (2006) confirmed that remittances increase the hours of self-employment and entrepreneurial activities, particularly in capital-intensive activities such as transportation, communication, and manufacturing (Orbeta, 2008). Yang (2008), despite establishing that transfers have no clear impact on existing entrepreneurial activity and income, supported the finding that the number of new entrepreneurial activities increases with remittances.

The relationship between financial development, remittances, and growth may go in either direction: transfers can aid financial development, and financial development can aid market expansions and augment the benefits of remittances. In fact, the broad impacts of remittances on capital investment are suggesting that "...the lack of financial market development had been an impediment that the remittances had helped overcome" (Goldberg & Levi, 2008, p. 12).

In terms of human capital, studies on the Philippines found that, relative to non-remittance-receiving households, remittance receiving households have 1) larger expenditures (Orbeta, 2008; Tullao et al., 2007; Tabuga, 2007); 2) "higher expenditure elasticities in remittance-receiving households in housing, education, health care, durables, transportation, and communications; and 3) lower elasticities for food regularly eaten outside the home" (Orbeta, 2008, p. 4). Thus, remittances increase the demand for education, healthcare, and housing opportunities.

Orbeta (2008) emphasized that transfers raise the demand for human resource development. However, as suggested by Sjaastad (1962), investments in human capital prior to migration facilitate migration given that higher education and good health increase one's chances of being employed abroad. Hence, an individual will endeavor to train as hard as possible in the home country to enhance his prospects for migration (Ang, 2006).

The implications of these outcomes, particularly in the Philippines are twofold: 1) higher demand for higher education, which already suffers from problems in the areas of scale efficiency, student flows, budget and

performance articulation, and adherence to international standards (Tullao & Rivera, 2009) and 2) possible threats to the healthcare system owing to the considerable emigration of Filipino nurses that distorts the healthcare system and the labor market (IHPDS, 2005; Tullao et al., 2010).

Conclusion

The motivations of people to migrate vary, but they can be summarized in terms of push and pull factors, namely, the economic, demographic, political, and social features of the sending and destination countries.

Empirically, it is worthwhile to conduct studies that examine family decisions to migrate, the culture of migration, migration networks, and the extent to which these elements, relative to other economic factors, shape the motivations of people to move spatially. Additionally, solid references on a general theory of remittances are necessary to supplement the findings of 1) Stark's (2009) work on the motivations for remittances and their corresponding intuitions, 2) Rapoport and Docquier's (2005) theoretical and mathematical analyses of the different motivations for remittances, and 3) Alba and Sugui's (n.d.) analyses of Rapoport and Docquier's (2005) framework as applied to the Philippine setup.

Furthermore, an important gap in the current literature pertains to the disaggregation of remittances according to the corresponding theoretical motivations. Given that data are available, isolating the various motivations for sending remittances would allow researchers and policymakers to understand the impact of remittances on households and the macroeconomy.

Similarly, studies that link education, migration, and remittances can be used to investigate how the investment motive is enhanced by differences in interspatial purchasing power. A starting point may be the integration of the altruistic and investment motives of sending remittances through the interspatial differences in the purchasing power of remittances. Indeed, depending on the migrant's utility function, findings may either provide another reason for altruism or negate it altogether.

The sheer magnitude of Philippine remittance inflows warrants its inclusion in any future macroeconometric model for the Philippines. The model can then factor in the impact of remittances on the real exchange rate, inflation, and the labor market. In the process, future researches can also verify the relationships between remittances, inflation, the Dutch disease, reservation wage, labor participation rate, and economic growth. Causation among these variables must be accurately established to enable governments to efficiently manage remittances (i.e., channel the funds to priority sectors like services and nontradable).

In the end, this study embarked on a journey to understand the migration and remittances phenomena. There is no doubt that they have positive and negative outcomes. Future work in this field must, therefore, concentrate on enhancing their benefits while mitigating migration and remittances costs to the individual, the household, and society.

References

- Acosta, P. A., Lartey, E. K., & Mandelman, F. S. (2007). *Remittances and the Dutch disease* (Working Paper Series 2007-8). Federal Reserve Bank of Atlanta, 1000 Peachtree Street NE, Atlanta. Retrieved from <https://www.frbatlanta.org/-/media/Documents/filelegacydocs/wp0708.pdf>
- Acupan, A. B., & Agbola, F. W. (2007). *On the determinants of international labor migration in the Philippines*. A paper presented at the Singapore Economics Review Conference, Meritus Mandarin Singapore, 2–4 August 2007.
- Adams, R. H. (1989). Workers remittances and inequality in rural Egypt. *Economic Development and Cultural Change*, 38(1), 45–71.
- Adams, R. H., & Page, J. (2005). Do international migration and remittances reduce poverty in developing countries? *World Development*, 33(10), 1645–69.
- Ahlburg, D. (1991). *Remittances and their impact: A study of Tonga and Western Samoa* (Pacific Policy Paper No.7). Canberra: Australian National University.
- Alba, M.M., (2008). *Economic models on the motives behind migrant workers' remittances* (UP School of Economics Discussion Paper No. 0807). UP School of Economics, UP Diliman, Quezon City, Retrieved from https://www.google.com.ph/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCMQFjABahUKEwihoPONGv3HAhWkPKYKHXR6Cfo&url=http%3A%2F%2Fwww.econ.upd.edu.ph%2Fdp%2Findex.php%2Fdp%2Farticle%2Fdownload%2F94%2F86&usq=AFQjCNEsx2eC_6Bl9dR_1oMoyziYUaeEdw&sig2=cenYCwDvcuxW3xBB4jSBNw&cad=rja
- Alba, M. M., & Orbeta, A. (n.d.). *The determinants of overseas Filipinos' remittances: Some preliminary findings* [Powerpoint slides]. Manila: Economics Department, De La Salle University–Manila, Philippines. Retrieved from <https://phileconsoc.files.wordpress.com/2013/03/>
- Alba, M. M., & Sugui, J. C. (n.d.). *Exploring the correlates of the remittance motives of overseas Filipino workers and their recipient households* (Draft paper). Retrieved from http://aer.ph/pdf/papers/Remittance_Alba.pdf
- Aldaba, F. (2007). *Key social, political, and economic issues in the Philippines: For consideration by migrant donors*. Paper presented at the forum Pursuing Efficiency and meaning by “Changemakers”: The Second National Conference on Filipino Migrant Philanthropy, Manila, Philippines (organized by the Institute for Migration and Development Issues), 1–2 August 2007.

- Ang, A. P. (2006). *Workers' remittances and economic growth in the Philippines*. Paper presented at 2nd Development Conference of the GRES (Theme: "Which Financing for Which Development?"), held at University of Bordeaux, France, on 23–24 November 2006.
- Antonio, M., & Perez, L. (2000). *Significance of OFW remittances on personal savings (1982–1996)* (Undergraduate thesis). Philippines: University of the Philippines–Diliman.
- Arenas, M. L. (2006). *Population growth and Philippine development*. Retrieved from http://www.ey.com/GLOBAL/content.nsf/Philippines/Population_growth_and_Philippine_development
- Asian Development Bank. (2005). *Enhancing the efficiency of overseas Filipino workers' remittances*. Manila, Philippines: Asian Development Bank.
- Asis, M. M. B. (2006). *How international migration can support development: A challenge for the Philippines*. Philippines: Scalabrini Migration Center.
- Assaad, R. (1997). Kinship ties, social networks, and segmented labor markets: Evidence from the construction sector in Egypt. *Journal of Development Economics*, 52(1), 1–30.
- Balderas, J. U., & Nath, H. K. (2005). *Remittances, relative price variability and inflation in Mexico*. Preliminary working version presented at the 75th Annual Meeting of Southern Economics Association, Washington, DC, 18–25 November 2005.
- Banerjee, B. (1984). Information flow, expectations and job search: Rural-to-urban migration process in India. *Journal of Development Economics*, 15(1–3), 239–257.
- Baptise-Meyer, J. (2001, July–August). The brain drain: New aspects of the South/North exodus. *The Courier*, 187, 46–47.
- Barajas, A., Chami, R., Fullenkamp, C., Gapen, M., & Montiel, P. (2009). *Do workers' remittances promote economic growth?* (Working Paper No. 09/153). International Monetary Fund, Washington, D.C.. Retrieved from <https://www.imf.org/external/pubs/cat/longres.aspx?sk=23108.0>
- Beine, M., Docquier, F., & Rappoport, H. (2003). *Brain drain and LDCs' growth: Winners and losers* (Discussion Paper No. 819). Bonn, Germany: Institute for the Study of Labour.
- Borjas, G. J. (1989). Economic theory and international migration. *International Migration Review*, 23(3), 457–485.
- Brucker, H., & Jahn, E. (2010). *Migration and wage-setting: Reassessing the labor market effects of migration*. Transnationality of Migrants (TOM) Marie Curie Research Training Network "International Migration: Transnational Links, Effects and Policies," 16–18 September 2010 Venice International University. Center for Economic Policy Research (CEPR).
- Burgos, V. F., & De Vera, C. R. (2005). *The saving behavior and consumption pattern of remittance-receiving households in the Philippines* (Undergraduate thesis). Philippines: University of the Philippines–Diliman.

- Cabegin, E. (2006). *The effect of Filipino overseas migration on the non-migrant spouse's market participation and labor supply behavior* (IZA DP No. 2240). Retrieved from anon-ftp.iza.org/dp2240.pdf
- Cattaneo, C. (2008). *International migration, the brain drain and poverty: A cross country analysis* (Working Paper No. 212). Centro di Ricerca sui Processi di Innovazione e Internazionalizzazione, Milan. Retrieved from <https://ideas.repec.org/p/cri/cespri/wp212.html>
- Chami, R., Fullenkamp, C., & Jahjah, S. (2003). *Are immigrant remittance flows a source of capital for development?* (Working Paper 03/189). Washington, DC: International Monetary Fund.
- Choy, C. C. (2003). *Empire of care: Nursing and migration in Filipino American history*. Durham, NC: Duke University Press.
- Danila, M. C., & Ortigas, K. S. (2000). *Labor emigration as it affects the demand for higher education, productivity, employment and income in the Philippines* (Undergraduate thesis). Philippines: University of the Philippines–Manila.
- Dictionary.com*. (n.d.). Retrieved from dictionary.reference.com/browse/altruism
- Ducanes, G., & Abella, M. (2008). *Overseas Filipino workers and their impact on household employment decisions* (Working Paper No. 5). International Labour Organization Asian Regional Programme on Governance of Labour Migration, Bangkok, Thailand. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_160330.pdf
- Episcopal Commission on Migrants and Itinerant People/Apostleship of the Sea–Manila, Scalabrini Migration Center, and Overseas Workers Welfare Administration. [ECM/AOS-Manila. SMC, OWWA] (2004). *Hearts apart: Migration in the eyes of Filipino children*. Retrieved from www.smc.org/ph/heartsapart.html
- Funkhouser, E. (1995). Remittances from international migration: A comparison of El Salvador and Nicaragua. *Review of Economics and Statistics*, 77(1), 137–146.
- Goldberg, M. A., & Levi, M. D. (2008). *The impact of remittances on economic growth*. Knowledge Leadership, Master Card Worldwide Insights, Toronto, Canada. Retrieved from http://www.mastercard.com/us/company/en/insights/pdfs/2008/KL_Brochure_Remittances.pdf
- Greenwood, M., Ladman, J., & Siegel, B. (1981). Long-term trends in migratory behavior in a developing country: the case of Mexico. *Demography*, 18(3), 369–388.
- Guellec, D., & Cervantes, M. (2001). International mobility of highly skilled workers: From statistical analysis to policy formulation. In *International mobility of the highly skilled* (pp. 71–98). Organization for Economic Cooperation and Development, Paris, France. Retrieved from http://www.keepeek.com/Digital-Asset-Management/oecd/employment/international-mobility-of-the-highly-skilled_9789264196087-en#page6

- Hoddinott, J. (1994). A model of migration and remittances applied to Western Kenya. *Oxford Economic Papers New Series*, 46(3), 459–476.
- Idang, R., & Yap, C. (2002). *Determinants of the saving behavior of Filipino households*. (Undergraduate thesis). Philippines [IHPDS]: University of the Philippines–Diliman.
- Institute of Health Policy and Development Studies. (2005). *Migration of health workers: Country case study Philippines* (ILO Working Paper 236). Manila: International Labor Organization. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_161163.pdf
- International Organization for Migration. (2010). *International migration and migrant workers' remittances in Indonesia*. Makati City, Philippines: International Organization for Migration.
- Jongwanich, J. (2007). *Workers' remittances, economic growth and poverty in developing Asia and the Pacific countries* (MPDD Working Paper Series WP/07/01). United Nations Economic and Social Commission for Asia and the Pacific, Rajadamnern Nok Avenue, Bangkok, Thailand. Retrieved from <https://ideas.repec.org/p/unt/wmpdd/wp-07-01.html>
- Katz, E., & Stark, O. (1986). Labor migration and risk aversion in less developed countries. *Journal of Labor Economics*, 4(1), 134–149.
- Lall, S. V., Selod, H., & Shalizi, Z. (2006). *Rural–urban migration in developing countries: A survey of theoretical predictions and empirical findings* (Policy Research Working Paper 2915). Washington, DC: World Bank. Retrieved from <https://openknowledge.worldbank.org/handle/10986/8669>
- Lartey, E. K., Mandelman, F. S., & Acosta, P. A. (2008). *Remittances, exchange rate regimes and the Dutch disease: A panel data analysis*. Paper presented at BSP International Research Conference on Remittances: “The Macroeconomic Consequences of Remittances: Implications for Monetary and Financial Policies in Asia,” 30–31 March 2009, Mandaluyong City, Philippines.
- Lee, E. S. (1966). A theory of migration. *Demography*, 3(1), 47–57.
- Lewis, A. W. (1954). Economic development with unlimited supplies of labor. *Manchester School of Economic and Social Studies*, 22(2), 139–191.
- Losch, B. (2008). *Migrations and the challenge of demographic and economic transitions in the new globalization era*. Paper presented at Social Science Research Council, Panel 4: Migration and Economic Globalization, New York, on 28 February to 1 March 2008.
- Lucas, R., & Stark, O. (1985). Motivations to remit: Evidence from Botswana. *Journal of Political Economy*, 93(5), 901–918.
- Mankiw, G., Romer, D., & Weil, D. (1992). A contribution to the empirics of economic growth. *The Quarterly Journal of Economics*, 107(2), 407–437.
- Mapa, D., & Balisacan, A. (2004). *Quantifying the impact of population on economic growth and poverty: The Philippines in an East Asian context*. Paper presented at the 9th Convention of the East Asian Economic Association, 13–14 November 2003, Hong Kong.

- Mapa, D. S., Balisacan, A. M., & Briones, K. J. (2006). Robust determinants of income growth in the Philippines. *Philippine Journal of Development*, 32(1 & 2), 45–76.
- Martin, P. (2009). *Migration in the Asia-Pacific region: Trends, factors, impacts* (Human Development Research Paper Series, Vol. 32). United Nations Development Programme, One United Nations Plaza, New York, USA. Retrieved from <http://mpira.uibk.ac.at/handle/document/19215/>
- Massey, D. (1988). Economic development and international migration in comparative perspective. *Population and Development Review*, 14(3), 383–413. Retrieved from <http://worldroom.tamu.edu/Workshops/Migration06/EuropeanUnion/EU%20articles/Economic%20Development%20and%20International%20Migration.pdf>
- Meng, X., & Zhang, J. (2001). The two-tier labor market in urban China: Occupational segregation and wage differentials between urban residents and rural migrants in Shanghai. *Journal of Comparative Economics*, 29(3), 485–504.
- Migration Policy Institute. (2011). *Calculations of the World Bank Development Prospects Group's bilateral migration matrix data of 2010* [Data file]. Retrieved from <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,ContentMDK:21352016~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>
- Mora, J., & Taylor, J. (2005). Determinants of migration, destination, and sector choice: Disentangling individual, household, and community effects. In C. Ozden & M. Schiff (Eds.), *International migration, remittances and the brain drain* (pp. 21–51). Washington, DC: World Bank and Palgrave Macmillan. Retrieved from <https://openknowledge.worldbank.org/handle/10986/6929>
- National Statistics Office. (2007). *Population and annual growth rates for region, provinces and highly urbanized cities based on censuses 1995, 2000 and 2007* [Data file]. Retrieved from <https://psa.gov.ph/old/data/pressrelease/2008/pr0830tx.html>
- Opiniano, J. M. (2008). The panorama and drama of international migration and development in the Philippines. In R. Stojanov, J. Novosak, J. Opiniano, F. Gemenne, and T. Siwek, *Development, environment and migration: Analysis of linkages and consequences*, pp. 105-120. Olomouc, Czech Republic: Palacky University.
- Orbeta, A. (2008). *Economic impact of international migration and remittances on Philippine households: What we thought we knew, what we need to know* (Development Economics Working Papers 22673). East Asian Bureau of Economic Research, Crawford School of Public Policy, Australian National University, Canberra, Australia.
- Osili, U. O. (2007). Remittances and savings from international migration: Theory and evidence using a matched sample. *Journal of Development Economics*, 83(2), 446–465.

- Poirine, B. (1997). A theory of remittances as an implicit family loan arrangement. *World Development*, 25(5), 589–611.
- Ramcharan, R. (2002). *Migration and human capital formation: Theory and evidence from U.S. high school movement* (IMF Working Paper No. 02/123). International Monetary Fund, Washington, D.C. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=879881
- Rapoport, H., & Docquier, F. (2005). *The economics of migrants' remittances* (IZA DP No. 1531). Bonn: Institute for the Study of Labor. Retrieved from <http://ftp.iza.org/dp1531.pdf>
- Rapoport, H., & Docquier, F. (2006). The economics of migrants' remittances. In S. Kolm & J. Ythier (Eds.), *Handbook on the economics of giving, reciprocity and altruism* (Volume 2: Applications, pp. 1136–1195). Amsterdam: Elsevier.
- Ravenstein, E. G., (1885). The laws of migration. *Journal of Statistical Society of London*, 48(2), 167–235. Retrieved from http://www.jstor.org/stable/2979181?seq=1#page_scan_tab_contents
- Reside, R. E. (2009). *Determinants of overseas Filipino worker (OFW) remittances* [Draft] (Discussion Paper No. 2009-11). Philippines: University of the Philippines, School of Economics.
- Rodriguez, E. R. (1998). International migration and income distribution in the Philippines. *Economic Development and Cultural Change*, 46(2), 329–350.
- Rodriguez, E. R., & Tiongson, E. (2001). Temporary migration overseas and household labor supply: Evidence from urban Philippines. *International Migration Review*, 35(3), 709–725.
- Ross, J. (2004). *Understanding the demographic dividend*. Washington, DC: POLICY Project.
- Sawada, Y., & Estudillo, J. (2006). *Trade migration and poverty reduction in the globalizing economy* (Working Paper Series RP2006/58). United Nations University–World Institute for Development Economic Research, Helsinki, Finland. Retrieved from <https://ideas.repec.org/p/unu/wpaper/rp2006-58.html>
- Schwartz, A. (1973). Interpreting the effect of distance on migration. *Journal of Political Economy*, 81(5), 1153–1169.
- Sjaastad, L. A. (1962). The costs and returns of human migration. *The Journal of Political Economy*, 70(5), 80–93.
- Solomon, M. S., & Eden, A. (n.d.). *Beyond “push and pull”: Rethinking medical migration from the Philippines* (Draft). University of South Florida, Interdisciplinary Initiative on Sustainable Communities, Fowler Avenue, Tampa, Florida. Retrieved from http://www.umdcipe.org/conferences/Maastricht/conf_papers/Papers/Rethinking_Medical_Migration_from_the_Philippines.pdf
- Stark, O. (1995). *Altruism and beyond*. Oxford and Cambridge: Basil Blackwell.
- Stark, O. (2009). Reasons for remitting. *World Economics*, 10(3), 147–157.
- Stark, O., & Levhari, D. (1982). On migration and risk in LDCs. *Economic Development and Cultural Change*, 31(1), 191–196.

- Stark, O., & Lucas, R. (1988). Migration, remittances, and the family. *Economic Development and Cultural Change*, 36(3), 465–481.
- Stark, O., Taylor, E., & Yitzhaki, S. (1986). Remittances and inequality. *The Economic Journal* 96(383), 722–740.
- Sugui, J. S., Alba, M. M., Abdon, A. M., & Garde, M. M. (2007). *Overseas workers, remittances, and household welfare in the Philippines*. Paper presented at 6th Poverty and Economic Policy Research Network General Meeting, Lima, Peru, 14–16 June 2007. Retrieve from http://www.pep-net.org/sites/pep-net.org/files/typo3doc/pdf/files_events/soraya-pa.pdf
- Tabuga, A. (2007). *International remittances and household expenditures: The Philippine case* (Discussion Paper No. 2007-18). Philippine Institute for Development Studies, Makati, Philippines. Retrieved from <http://www.pids.gov.ph/dp.php?id=4225&pubyear=2007>
- Todaro, M. P. (1969). A model of migration and urban unemployment in less-developed countries. *The American Economic Review*, 59(1), 138–148.
- Tullao, T. S. (2008). *Demographic changes and international labor mobility in the Philippines: Implications for business and cooperation*. A paper presented to the Philippine Pacific Economic Cooperation Committee. Manila, Philippines: De La Salle University.
- Tullao, T. S., Conchada, M. P., & Rivera, J. R. (2010). *Distortions in the international migration of Filipino nurses*. Manila, Philippines: Angelo King Institute, School of Economics, De La Salle University.
- Tullao, T. S., & Cortez, M. A. (2003). *Movement of natural persons between Philippines and Japan: Issues and prospects*. Manila, Philippines: Center for Business and Economics Research and Development, De La Salle University.
- Tullao, T. S., Cortez, M. A., & See, E. (2007). *The economic impacts of international migration: A case study on the Philippines*. Report submitted to East Asia Development Network.
- Tullao, T. S., & Rivera, J. R. (2009). *The impact of temporary labor migration on the demand for higher education and its implications on the human resource development in the Philippines*. Manila, Philippines: De La Salle University, Angelo King Institute.
- U.S. Census Bureau. (n.d.). *Philippine population pyramids*. Retrieved from www.nationmaster.com/country/rp-philippines/Age-distribution
- Woodruff, C., & Zenteno, R. (2004). *Remittances and micro enterprises in Mexico*. (Unpublished manuscript). San Diego, CA: University of California, San Diego, and ITESM.
- World Bank. (2012). *Global migration database* [Data file]. Retrieved from data.worldbank.org.
- Wouterse, F., & Taylor, J. (2006). *Migration and income diversification: Evidence from Burkina Faso* (Paper No. 25379). A paper presented at the International Association of Agricultural Economists 2006 Annual Meeting, 12–18 August 2006, Queensland, Australia.

- Yang, D. (2008). International migration, remittances, and household investment: Evidence from Philippine migrants' exchange rate shocks. *Economic Journal*, 118(528), 591–630.
- Yang, D., & Martinez, C. (2005). Remittances and poverty in migrants' home areas: Evidence from the Philippines. In C. Ozden & M. Schiff (Eds.), *International migration, remittances, and the brain drain*. Washington, DC: World Bank and Palgrave Macmillan.
- Zanker, J. H., & Siegel, M. (2007). *The determinants of remittances: A review of the literature* (MGSoG/2007/WP003). Maastricht, Netherlands: Maastricht Graduate School of Governance, Maastricht University.