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The Social and Economic Impact of Philippine International Labor Migration and Remittances

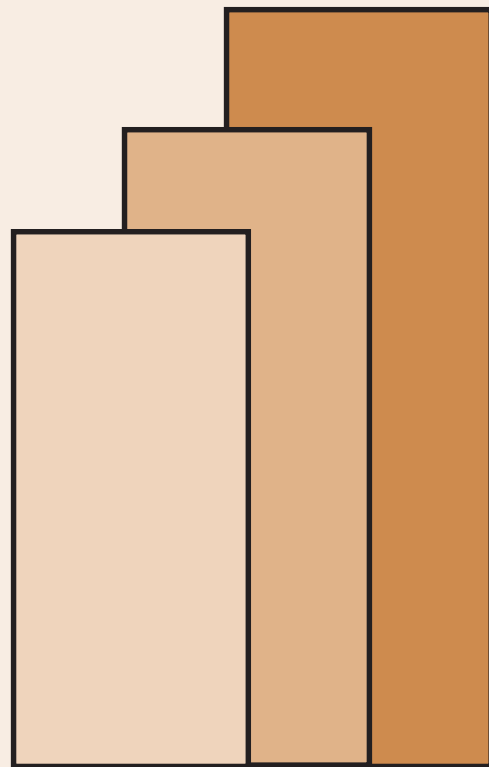
Victorina Zosa and Aniceto Orbeta Jr.

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Philippine International Labour
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Victorina Zosa and Aniceto Orbeta, Jr.
May 2009

Abstract

The purpose of the paper was to summarize studies identifying the causes and effects of Philippine International labour migration and remittances and to highlight research gaps. Literature and reliability of findings that explore the many facets and implications of the social and economic impacts of international labour migration and remittances were assessed and reviewed. Impacts on education, health, family cohesion, fertility and demographic distributions, as well as on consumption and investment, and poverty and inequality, were highlighted. The paper argued that understanding the social and economic impact of international labour migration and remittances is complex and an interdisciplinary research is needed to appropriately define the scope of its impact. To move the our understanding of the issues forward, in depth analyses using better specifications, estimation procedures and data are necessary.

Keywords: social and economic impact, international labor migration, Philippines

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Table of Contents

	Page
1.0. Introduction	1
2.0. Social Impacts of Labour Migration	1
2.1. Migration and Education Linkages	1
2.2. Migration and Health	7
2.3. Migration and Family Cohesion	9
2.4. Migration and Fertility	13
2.5. International Migration and Demographic Distribution	15
2.6. Irregular Migration and Citizenship	17
3.0. Economic Impact of Migration and Remittances	18
3.1. Consumption and Investment	18
3.3. Poverty and Inequality	20
4.0. Summary	23
5.0. References	25

THE SOCIAL AND ECONOMIC IMPACT OF PHILIPPINE LABOUR MIGRATION AND REMITTANCES

Victorina Zosa and Aniceto Orbeta, Jr.¹
May 2009

1.0. Introduction

This paper reviews the literature on the social and economic impacts of Philippine labour migration and remittances. Decades of promoting labour migration has attracted the attention of many scholars, prompting them to explore its many facets and implications. The objective of this paper is to pool together the scholars' findings on the causes and consequences of Philippine labour migration and remittances and to identify research gaps. It also provides a critical assessment of the reliability of findings.

The paper is organized as follows: the next section provides a survey of the social impact; this is followed by a section on the economic impact. The final section provides a summary and research gaps.

2.0. Social Impacts of Labour Migration

This section highlights the migration linkages with education, health, family cohesion, fertility and demographic distribution. In addition, a unique case of politics-induced migration is discussed along with its impact on both sending and receiving regions.

2.1. *Migration and Education Linkages*

Migration and education are closely intertwined. Just as education is an important determinant of labour migration, labour migration, in turn, influences the demand for education of those left behind. Education is an important determinant of migration since the skills, knowledge, credentials and second language gained in school increases the chance of finding a job in the global market, decreases the costs and risks of migration, and expands the migrant's social network. Home enrolment, on the other hand, decreases the propensity to migrate due to the high opportunity cost of quitting school.² Instead, the potential migrant would first finish his degree and obtain a job at home to gain experience before embarking on an Overseas Filipino Worker (OFW) career.

Alburo and Abella (2002)³ showed the positive selectivity of Filipino emigrants: (a) they belong to age-group 25-44, (b) they have more years of schooling, and (c) they have been gainfully employed before migrating abroad. They observed that there has been a steady flow of professionals

¹ Contractor and Senior Research Fellow, Philippine Institute for Development Studies. This is one of three papers on international migration in the Philippines prepared for the ILO, Bangkok. Views expressed herein are of the authors and does not necessarily reflect the views and policies of the ILO or of PIDS.

² Williams, Nathalie (2006). "Education, Gender and Migration" (2006).

³ Temporary migrant workers with Middle East destination provide the bulk of OFWs, while permanent migrants chose North America. About 80% of permanent migrants are college-educated. At one period, the outflow of professionals exceeded the net addition to the professional workforce, especially for physicians and IT professionals, which experienced migration rates of 60% and 30% - 50%, respectively. The phenomenon of the educated unemployed and the employers' preference for young emigrant with college degree are observed. Although domestic higher education institutions are responsive to needs of the global labor market, it is expected that brain drain may exacerbate in the future perhaps crippling the Philippine economy. See Alburo, Florian and Danilo Abella (2002), "Skilled Labor Migration from Developing Countries: Study on the Philippines".

in the 1990s, sometimes exceeding the net additions of professionals to the local workforce. This is particularly true for health and IT professionals.

Although data on education selectivity of overseas Filipino workers are scanty, Quinto and Perez (2004) estimates the proportion of college-educated OFWs for the period 1990-2002 (Table 1). The regression-based trend analysis depicted the rise in the proportion of college-educated OFWs from 50 percent in 1990 to 64 percent in 2002, the doubling of the number of OFWs from 519,000 in 1990 to 1.081 million in 2002, and the deskilling of labour. Despite their high education status, OFWs take on production (≈ 37 percent) and service (≈ 41 percent) jobs abroad, which others interpret as the deskilling of labour. As a case in point, in 2002 sixty-four (64) percent of OFWs were college graduates, but only 22 percent of them held professional and technical jobs.

Table 1. OFWs by Educational Attainment and Occupation: 1990 – 2002

Year	Educational Attainment ¹			TOTAL (in 1,000)	Occupation ²			TOTAL (in 1,000)
	Elementary	High School	College		Professional Technical	Service	Production	
1990	12%	36%	50%	519				
1991	10%	36%	53%	709				
1992	8%	35%	55%	785				
1993	10%	35%	54%	918	14%	39%	47%	942
1994	8%	38%	53%	913	13%	43%	44%	939
1995	8%	32%	57%	869	12%	45%	42%	798
1996	7%	32%	58%	954	13%	45%	41%	902
1997	7%	34%	56%	1003	12%	46%	42%	1015
1998	7%	34%	56%	1029	12%	48%	40%	905
1999	6%	34%	57%	1013	16%	44%	40%	1015
2000	5%	33%	59%	1021	15%	44%	41%	980
2001	6%	32%	62%	1085	19%	42%	39%	1031
2002	5%	31%	64%	1081	22%	41%	37%	1056

Sources: ¹Labor Force Survey and ²Survey on Overseas Filipinos, cited in Quinto, Emelyn and Josie Perez (2004), "Trend Analysis of Overseas Filipino Workers Using Regression"

The Quinto and Perez (2004) estimates coupled with the data on higher education approximates the proportion of college-educated OFWs to higher education enrolment and graduates. Table 1a shows that between 1998 and 2002 the outflow of skilled emigrant represented roughly a fourth of higher education enrolment and over half of higher education graduates. These findings imply that the high probability of finding a foreign job could be an important determinant in fuelling the demand for home education, reaching some 2.4 million enrollees in 2002.

Table 1a. College-Educated OFWs and Higher Education Enrolment and Graduates, 1998-2002 (in thousands)

Year	College-Educated	Higher Education ²		Ratio	
	OFWs ¹ (A)	Enrolment (B)	Graduates (C)	A/B x 100	C/A x 100
1998	580	2,279	307	25%	53%
1999	581	2,373	335	24%	58%
2000	603	2,431	351	25%	58%
2001	674	2,466	364	27%	54%
2002	689	2,427	384	28%	56%

Sources: ¹Labor Force Survey, cited in Quinto, Emelyn and Josie Perez (2004), "Trend Analysis of Overseas Filipino Workers Using Regression"

²Commission on Higher Education <<http://www.ched.gov.ph/statistics/index.html>>

Aside from fuelling home education demand, an important question often asked is the impact of the exodus of skilled workers. Stark and Fan (2007) and Docquier and Rapoport (2007) cite the losses and gains from brain drain. Losses from brain drain include: (a) fiscal loss from the departure of the skilled migrant, (b) negative impact on the productivity, wages and inequality of its complement, unskilled labour, (c) slowdown of current and future economic growth from the decrease of skilled human capital, and (d) decline in the home country's competitive edge in attracting foreign direct investment (FDI) and fostering R&D activities.⁴

Likewise, brain drain spawns two undesirable outcomes – the phenomena of the educated unemployed and of over-education.⁵ The educated unemployed is prevalent in countries with English as the second language and where the expected rates of returns from foreign jobs drives up the demand for higher education and increases the supply of educated labour. Due to limited home job opportunities, the educated labour may choose to withdraw from the domestic job market, and instead embark on a protracted job search process to secure a foreign job. In this case, the unemployment of the educated workforce might be temporary (King 1987). Over-education, on the other hand, is the overinvestment in higher education, fuelled by the expectation of a higher return in foreign jobs. Since the objective is to land a foreign job, the investment will be made regardless of the job situation in the domestic economy. This could perhaps explain the often-taunted mismatch between the skills training of higher education graduates and actual skills required by industry.

Table 2 sheds light on the changing demand for Filipino migrant labour.⁶ In 1993, thirty-six (36) percent of OFWs were deployed as production workers and labourers, 35 percent were service workers, while 26 percent were professional, medical and technical workers. The pattern changed slightly in 2006, with 48 percent, 34 percent and 12 percent of Filipino migrant workers finding jobs as service workers, production workers and professionals, respectively. The job shares of managers, clerks, salespeople and agricultural workers remained somewhat stable at close to one (1) percent. The global shift from manufacturing to service underscores two major events in the global economy – (a) the emergence of China as the world's manufacturing powerhouse and (b) the declining importance of professionals, medical and technical workers as jobs are sub-contracted off-site.

Annex 2 details the demand pattern for selected skilled workers, such as nurses, teachers and IT professionals, while Annex 3 traces the demand for selected service workers, such as performing artists, caregivers and domestic helpers.

Table 2. Deployed Land-based OFWs by Skill Category, 1993 to 2006 (New Hires)

Year	All Occupation	Managers	Professionals			Sales Workers	Service Workers	Production, Transport, Laborers	Agricultural Workers	Others
			Medical Technical	Clerks	Medical					
1993	256,227	0.1%	25.5%	1.6%	1.0%	34.8%	36.3%	0.7%	0.0%	
1994	259,011	0.1%	28.6%	1.4%	0.9%	35.0%	33.5%	0.5%	0.0%	
1995	214,188	0.2%	20.5%	1.6%	0.9%	37.8%	38.5%	0.5%	0.0%	
1996	206,047	0.2%	17.9%	1.6%	1.0%	41.2%	37.8%	0.4%	0.0%	
1997	221,403	0.3%	23.3%	1.6%	1.2%	34.6%	38.7%	0.2%	0.0%	
1998	219,724	0.2%	25.4%	1.4%	1.2%	36.7%	34.7%	0.2%	0.2%	
1999	237,414	0.1%	26.3%	1.1%	0.9%	35.6%	33.5%	0.2%	2.3%	
2000	240,620	0.1%	32.7%	1.0%	0.9%	37.9%	24.0%	0.2%	3.2%	
2001	255,601	0.2%	38.1%	1.3%	1.2%	36.1%	22.2%	0.2%	0.6%	
2002	274,702	0.1%	36.3%	1.5%	1.1%	35.4%	25.3%	0.2%	0.0%	
2003	223,422	0.2%	33.7%	1.8%	1.1%	35.6%	27.5%	0.2%	0.0%	
2004	280,475	0.2%	33.2%	2.4%	1.4%	40.2%	22.4%	0.2%	0.0%	
2005	284,285	0.2%	22.5%	2.3%	1.5%	47.1%	25.3%	0.1%	1.1%	

Source: Philippine Overseas Employment Administration, Table 2F. Deployed Land Based OFWs by Skill Category, 1993 to 2006, Tullao, Tereso, Jr. and John Paolo Rivera (2008), "The Impact of Temporary Labor Migration on the Demand for Education: Implications on the Human Resource Development in the Philippines, EADN Working Paper No. 37 (2008).

⁴Docquier, Frédéric and Hillel Rapoport (2007). "Skilled Migration: The Perspective of Developing Countries".

⁵ Stark, Oded and C. Simon Fan (2007). "Losses and Gains to Developing Countries from the Migration of Educated Workers: An Overview of Recent Research, and New Reflections".

⁶ Annex 1 shows the changing global demand for Filipino migrant workers for the period 1975-2007.

To explain why popular courses such as accountancy, business, information technology, nursing, engineering and education still attract enrolment despite the lack of domestic jobs, Tullao and Rivera (2008) looked into the educational degree of land-based OFWs (Table 2a). While OFW graduates of popular programs only account for 4% of deployed OFWs, the possibility that these academic degrees can help them find a foreign job is sufficient to sustain the demand for these academic programs.⁷ Except for Nursing and Engineering, these popular programs are also supplied at relatively low-costs. In most higher education institutions where cross-subsidization is a common practice, popular low-cost programs subsidize the high-cost, low-enrolment but essential academic programs, such as the natural sciences.

Table 2a. Annual OFW Deployment for Selected Academic Program, 1993 to 2006 (New Hires and Rehires)

Year	Land-Based OFWs	Education	Accountancy	Business	Information Technology	Nursing	Engineering Technology	Selected Programs	Share to Land-Based
1993	550,872	130	502	9,461	646	7,308	8,846	26,893	4.88%
1994	565,226	166	553	8,263	569	7,171	7,575	24,297	4.30%
1995	488,621	119	465	7,501	681	7,954	6,668	23,388	4.79%
1996	484,653	114	468	7,744	704	5,477	6,964	21,471	4.43%
1997	559,227	166	422	9,001	955	5,245	8,446	24,235	4.33%
1998	638,343	132	325	8,260	1,073	5,399	8,363	23,552	3.69%
1999	640,331	128	291	6,757	808	5,972	7,269	21,225	3.31%
2000	643,304	241	271	5,562	470	8,341	5,951	20,836	3.24%
2001	662,648	147	330	5,342	533	7,602	6,918	20,872	3.15%
2002	682,315	623	318	8,895	340	12,290	6,566	29,032	4.25%
2003	651,938	463	274	8,410	225	8,288	5,677	23,337	3.58%
2004	704,586	517	429	10,833	203	8,879	6,536	27,397	3.89%
2005	740,632	780	317	10,289	204	11,392	6,400	29,382	3.97%
2006	788,070	890	586	14,246	325	8,528	10,685	35,260	4.47%
Total	8,800,766	4,616	5,551	120,564	7,736	109,846	102,864	351,177	0
%	100.00%	0.05%	0.06%	1.37%	0.09%	1.25%	1.17%	3.99%	

Source: Table 2F. Deployed Land Based OFWs by Skill Category, 1993 to 2006, Tullao, Tereso, Jr. and John Paolo Rivera (2008), "The Impact of Temporary Labor Migration on the Demand for Education: Implications on the Human Resource Development in the Philippines, EADN Working Paper No. 37 (2008).

Table 3 presents the profile of Filipino emigrants in 50 OECD countries, circa 2000 obtained from the Database on Immigrants in OECD countries (DIOC). As to the duration of the stay, some 65 percent of Filipino emigrants are OECD residents for over 10 years. Annex 4 shows that 70 percent of permanent migrants reside in USA, 12 percent in Canada and 7 percent in Australia. The positive selectivity of Filipino emigrants is evident from these descriptive data: (a) 79 percent of them belong to the economically active age group 25-64 years old, (b) 46 percent of them are college degree holders, (c) 65 percent of them are employed, and (d) among the employed, 53 percent have college degrees. In 2000, the Philippines registered as the country with the second highest skilled migrant stock (1,126,260) next to United Kingdom (1,441,307) in OECD countries.⁸

There are indicators of over-qualification of Filipino emigrants. For instance, 53 percent of employed Filipino emigrants have tertiary education schooled in humanities and social science (40 percent), education and health (30 percent) and engineering (26 percent). But only 14.5 percent are managers and professionals, with 26.6 percent working as technicians and clerks. The bulk of 60 percent are operators defined as service workers, agricultural workers, crafts workers, plant operators and sales. In terms of economic sector, majority (53 percent) of Filipino emigrants are absorbed in the personal and services sector.

⁷ Tan, Edita (2001), "Labor Market Adjustments to Large Scale Emigration: The Philippine Case". Tan cites the Higher Education Task Force finding that most schools offer low-cost and poor-quality programs; incidence of the educated unemployed especially among teachers, business graduates and engineers; the limited potential of high-quality higher education institutions to respond to global market opportunities; and the tendency of students and schools to choose and offer low-cost academic programs.

⁸ Docquier, Frédéric and Abdeslam Marfouk (2006), "International Migration by Education Attainment, 1990-2000".

To gauge whether Filipino emigration to OECD countries has resulted in brain drain, data from the home country is obtained. Only 3.9 percent of the Filipinos and 7.4 percent of college graduates immigrate to OECD countries. Unlike the other countries with high emigration rates for the tertiary educated like Guyana (77 percent), Jamaica (73 percent), Haiti (68 percent), and Tunisia (66 percent), the Philippine emigration rate is quite small, and depending on the individual and social calculation of costs and benefits, this might not pose much of a brain drain problem.

Recent literature on brain drain or skilled worker migration sells the idea that migration prospects fuels domestic enrolment in developing countries⁹, which in turn fosters the phenomenon of the “educated unemployed”.¹⁰ In response to the expectation of finding an overseas job, the local residents build up their human capital by investing in higher education, with preference for low-cost academic programs due to their budget constraints.

Table 3. Profile of Filipino Emigrants in OECD Countries

Variable	Male	Female	Total	Variable	Number
Age Distribution¹				Occupation⁶	
15 - 24 (%)	13.9	9.7	11.3	Professionals (%)	14.5
25 - 64 (%)	75.6	80.4	78.6	Technicians (%)	26.6
65+ (%)	10.5	9.9	10.1	Operators (%)	58.9
Total (000)	745	1,187	1,193	Total (000)	332
Education²				Economic sector⁷	
Primary (%)	16.3	18.6	17.7	Agriculture and industry (%)	17.4
Secondary (%)	39.6	33.1	35.7	Producer Services (%)	13.3
Tertiary (%)	44.1	48.3	46.7	Distributive Services (%)	16.8
Total (000)	745	1,187	1,193	Personal & Social (%)	52.5
Duration of Stay³				Total (000)	1,208
0 - 5 years (%)	15.1	15.9	15.6	Field of study⁸	
6 - 10 years (%)	19.2	20.1	19.8	Education and health (%)	30.6
10+ years (%)	65.6	64.0	64.7	Humanities and social science (%)	40.1
Total (000)			1,819	Engineering and technology (%)	26.1
Labour Force Status⁴				Other (%)	3.2
Employed (%)	69.4	62.5	65.3	Total (000)	173
Unemployed (%)	4.0	3.0	3.4	Emigrant Population (000)⁹	1,932
Inactive (%)	26.4	34.4	31.3	Primary Education (%)	2.8
Total (000)	744	1,184	1,927	Tertiary Education (%)	17.7
Education of Employed⁵				Total Emigration Rate (%)	3.9
Primary (%)			12	Emigration Rate of	7.4
Secondary (%)			35	College Graduates (%)	
Tertiary (%)			53		
Total (000)			1,245		

¹Table 2.3. Age distribution of the foreign-born population in the OECD area, by gender

²Table 3.3. Educational attainment of the foreign-born population in the OECD area, by gender

³Table 4.5. Duration of stay of the foreign-born population in OECD area (excluding Japan, Mexico, Poland, Slovak Republic and Turkey)

⁴Table 5.9. Labour force status of the foreign-born population in the OECD area, by gender

⁵Table 5.11. Labour force stats of the foreign-born population in the OECD area, by education level

⁶Table 6.3. Occupations of the foreign-born population in the OECD area (excluding Japan, Turkey and US)

⁷Table 7.3. Sectors of activity of the foreign-born population in the OECD area (excluding Germany and Japan)

⁸Table 8.3. Fields of study of the foreign-born population in selected OECD countries

⁹Table 9.1. Expatriates by country of origin

Source: Database on Immigrants in OECD Countries (DIOC), cited in Organisation for Economic Cooperation and Development (2008), A Profile of Immigrant Populations in the 21st Century: Data from OECD Countries

⁹Discussed in Docquier, Frédéric and Hillel Rapoport (2007). “Skilled Migration: The Perspective of Developing Countries”

¹⁰Fan, C. Simon and Oded Stark (2006), “International Migration and Educated Unemployed”.

Stark and Fan (2007)¹¹ further argues that, in the long run, brain drain can be translated to brain gain through at least three channels. First, over-education might be dynamically efficient due to the intergenerational externality effect of human capital. As highly educated parents impart the value of education to their children and provide a nurturing learning environment, over-education, perceived as costly by the present generation, yield a social benefit to the next generation. Second, the increasing incidence of the “educated unemployed” tends to benefit the economy in the long run. In response to the probability of working abroad, the worker spends more time in job search, whether in the local or global labour market. This ensures proper matching of skills with job requirement and the improvement of the economy’s industrial structure. And third, the global demand for certain skills could influence the type of educational programs offered by developing countries. For instance, at the height of the IT bubble, there was mounting pressure for schools and training institutions to offer programming courses, whether as a formal tertiary program or as a short-term course. Training institutions then tie up with ready global employers to absorb their graduates.

The positive effect of overseas employment and OFW remittances on domestic enrolment is empirically tested by Tullao and Rivera (2008). OFW families increase their human-capital-enhancing expenditures, like tertiary education, in response to the income effect and the culture of migration. Since the income elasticity for education is more elastic for OFW families, further income increases then will lead to more education expenditure for OFW families vis-à-vis their non-OFW counterparts. Given the success of their OFW kin, the OFW family tends to invest in education to increase their chance of finding a foreign job. Their regression results show that the level of average real remittances exerts a positive and statistically significant impact on the tertiary enrolment.

Various studies reveal that, while the level of education increases the chance of a potential migrant to land a foreign job, the OFW status likewise encourages the OFW household to invest more in human capital formation. A major concern in the exodus of skilled OFWs is the depletion of high-valued human resources. Initial data reveal that brain drain might not have an adverse impact on home countries since only 7.4 percent of Filipino college graduates immigrate to OECD countries. On the other hand, temporary migrants continue to rake in dollars for their family at home. Their hard-earned dollars are invested wisely when they send their children to higher education, thereby increasing their children’s expectation of finding a foreign job.

Turning now to evidences on the impacts at the household level, research comparing the expenditure shares on education and health shows higher expenditure shares for remittance-receiving households compared to non-receiving ones. Expenditure elasticities are also found to be higher for remittance-receiving households. These indicate that migration and remittances redound to higher human capital investments. The reliability of these results, of course, depends on the estimation methodologies used. Orbeta (2008) provides a methodological assessment of these studies.

Comparing the share of education to total household expenditures, Tullao, Cortez and See, (2007) using Family Income and Expenditure Survey (FIES) data, find that households receiving remittances have higher education expenditure shares compared to those without any remittance income. They also computed expenditure elasticities using Engle curve estimates relating expenditure shares on education and total expenditures plus controls for other household characteristics for remittance-receiving and remittance non-receiving households separately. They likewise found higher education expenditure elasticities in remittance-receiving households compared to those who have none. This indicates larger responses on education expenditures to changes in income among remittance-receiving households.

Tabuga (2007), likewise using FIES data, finds that remittances have a positive impact on expenditure elasticities on education using Engle curve estimates with controls for other household

¹¹ Stark, Oded and C. Simon Fan (2007), “Losses and Gains to Developing Countries from the Migration of Educated Workers: An Overview of Recent Research and New Reflections”.

characteristics. In addition, her quantile regression estimates show increasing education expenditure elasticities with higher share of education on household expenditures. Since richer households are known to spend more on education, this result indicates that remittances may be contributing to rising inequality on human capital expenditure across households.

Using an entirely different approach and merged FIES, Labour Force Survey (LFS), Survey on Overseas Filipinos (SOF) and Annual Poverty Indicators Survey (APIS) data between 1997-1998, Yang (2008) also finds positive impact of remittances (indicated by favourable exchange rate shock) on education investments. He particularly finds a positive impact on education expenditures with an elasticity of 0.55. Furthermore, his analysis shows that remittances increase the likelihood of being a student as the main activity and decrease the hours worked in the past week for children 10-17 years. Gender differences also surfaced. The increase in likelihood of being a student is significant only for girls, while the decline in hours worked is significant only for boys.

As argued in Orbeta (2008) the comparison of mean expenditures in Tullao, Cortez and See (2007) assumes that migrant and non-migrant households are identical except for their migration status. To the extent that this is not so will bias the result of the comparisons. The expenditure elasticities computed from the Engle curve estimates both in the studies of Tullao, Cortez and See (2007) and Tabuga (2007) will be also affected by the endogeneity of migration/remittance-receipt to the same variables affecting expenditure shares, e.g. total expenditures. OLS estimation in the presence of endogeneity will thus yield inconsistent estimates. Only Yang's (2008) results are free from these problems.

2.2. Migration and Health

The literature on migration-health interaction covers the economic dimension of the migration of health professionals, as well as the health dimensions of labour migration. The former focuses on the issue of nurse brain drain, while the latter differentiates the health benefits available to legal (permanent and temporary) and illegal (irregular) migrants.

Unlike the migration of other skilled workers, which tend to be permanent in nature, nurse migration exhibits the characteristics of contract labour migration for temporary migrants. The Philippines has consistently been the main global source of English speaking nurses. In the 1960s, nurse brain drain consisted of permanent migration towards the United States. From the 1970s onwards, the demand for Filipino nurses as temporary contract workers expanded numerically and geographically. Table 4 indicates the deployment of Filipino nurses from 1993-2007¹², with the bulk servicing Saudi Arabia. To the extent that same nurses signed new contracts, the total deployment figures may be over-stated. The decreased demand in the United States was picked up by the high demand in the United Kingdom and Ireland from 1999 to 2004. The steady supply of Filipino nurses abroad is assured by the sustained enrolment in nursing programs, the opening of more nursing schools, and the local nursing labour market which serves as training ground for future overseas employers.¹³

¹²POEA data are understated since it only includes OFWs who were issued work permits by the agency. It precludes permanent migrants and those who did not secure POEA work permits (ESCAP 2008) such as direct hires by US-based hospitals.

¹³ The household decision for daughters to enroll in the nursing program targets foreign employment. Since this investment in human capital is mainly privately-financed, households expect to reap higher returns on their educational investment. The increased demand for nursing education is largely met by private higher education institution, when the number of nursing schools grew from 40 in the 1970s to 470 in 2006 (Galvez Tan 2006, cited in Buchan 2008). The labor market completes the training for nurses. For the opportunity to train, registered nurses are willing to accept low wages, serve in far-flung rural areas, and even pay hospitals for its apprenticeship program (Ball 2008). This investment in nursing education cycle is completed when the potential migrant eventually lands in a foreign job.

The literature cites mixed brain drain effects of the migration of nurses. Some studies point out that the systematic exodus of OFW nurses compromised the quality of the health service delivery in the Philippines. The Philippine health care system is characterized by the high turnover rate of nursing personnel, acute shortage of skilled nurses, declining standards in nursing education and health care, and under-remuneration of nurses and nursing educators.¹⁴ Based on their qualitative analysis, these same scholars claim that nurse migration could exert a negative impact on the economy with the Philippines bearing the cost of training nurses but unable to recoup its investments as the more skilled nurses opt for foreign jobs, leaving behind the less qualified nurses to man the health care system.

Table 4. Deployment of Filipino Nurses by Country of Destination, 1993-2007

Year	Deployed	Saudi Arabia	United States	UK and Ireland	United Arab Emirates	Kuwait	Rest of the World
1993	6,744	3,762	1,987	0	19	121	855
1994	6,699	3,032	2,833	0	127	454	253
1995	7,584	3,015	3,690	1	46	59	773
1996	4,734	2,711	270	0	50	269	1,434
1997	4,242	3,171	11	0	189	25	846
1998	4,591	3,473	5	63	268	143	639
1999	5,413	3,567	53	934	367	53	439
2000	8,341	4,386	91	2,755	305	133	671
2001	13,822	5,275	304	6,949	249	192	853
2002	12,335	6,068	322	4,035	424	108	1,378
2003	9,270	5,996	197	1,754	267	51	1,005
2004	8,879	5,926	373	991	250	408	931
2005	7,768	4,886	229	843	703	193	914
2006	8,528	5,753	202	394	796	354	1,029
2007	9,004	6,633	186	165	616	393	1,011
Total	117,954	67,654	10,753	18,884	4,676	2,956	13,031
<i>Percent</i>	<i>100%</i>	<i>57%</i>	<i>9%</i>	<i>16%</i>	<i>4%</i>	<i>3%</i>	<i>11%</i>

Note: ¹ 1993-1999 data source is Table 2.1. Deployment of Filipino Nurses by Country of Destination, 1993-2003, Ball, Rochelle (2007), "Globalised Labour Markets and the Trade of Filipino Nurses: Implications for International Regulatory Governance".

² 2000 - 2007 data source is 2007 Overseas Employment Statistics, Philippine Overseas Employment Agency, <<http://www.poea.gov.ph/stats/stats2007.pdf>>

Source: Philippine Overseas Employment Agency

Recent studies refute the claim of health professional shortage. For large origin countries such as India (the main source for doctors), China, and the Philippines (the main source for nurses), the number of health professionals working overseas, although high in absolute value, is low relative to the domestic supply (Martin et al. 2006). The Philippine experience, in fact, shows an over-supply of nurses.¹⁵ The surplus of nurses is expected to continue in the near future with the rise of nurse medics (professional doctors enrolling in nursing programs in preparation for emigration as nurses) and the forecast of huge nursing deficit in developed countries (ESCAP 2008).

Likewise, the phenomenon of step migration for nurses is observed. Filipino nurses first target Middle East countries, where entry requirement is not so stringent, or the United Kingdom, which has a bilateral agreement with the Philippines. Once nurses have been trained in a modern

¹⁴ Discussed in Ball (2008). It is estimated that 70% - 80% of trained nurses left for a foreign job and half of the hospitals are understaffed with nurse-to-patient ratio reaching as high as 1:120. The decline in the national passing rate for licensure examination from 80% - 90% in the 1980s to 42% in 2006 coupled with the 2006 Nursing Licensure leakage scam cast doubt on the quality of registered nurses (Galvez Tan cited in Buchan 2008). "The average salary of nurses in the Philippines amounts to just almost P10,000 (US\$215) per month, compared to the basic monthly salaries of Singapore (US\$900), the United Kingdom (US\$2600), and the United States (US\$4600)" (Ball 2008: 37).

¹⁵ Lorenzo et al. estimated the total number of nurses in the Philippines at 332,206, with 193,223 employed (57%) and 139,023 unemployed. Of those employed, 85% found foreign jobs, while 15% were local hires. The 139,023 unemployed represents surplus labor. Discussion is cited in ESCAP (2008), "Looking into Pandora's Box: The Social Implications of International Migration in Asia".

hospital environment, they prepare for their final homerun – the United States. The Buchan survey data (2008) revealed that most of the nurses in the United Kingdom were the main breadwinners; they remitted regularly, intended to stay in the UK for at least 5 years, and hoped to take the US-based Commission on Graduates of Foreign Nursing Schools (CFGNS) examination in London for their final move to the United States.

The literature on the health dimension of labour migration points to health disparities between the migrant and native population in the host country. Although migrants are generally healthy at the time of arrival, their health condition might deteriorate for several reasons. “Migrant populations often live in rented dwellings that lack the necessary safety and sanitary equipment, and where children are exposed to a higher risk of accidents and lead poisoning (World Migration Report 2005:). Studies show the higher vulnerability of migrants to health risks compared to natives working in the same occupation, with a higher incidence of accidents, illness and injuries. In the workplace, migrants are exposed to longer working hours, less rest days, inadequate health coverage and safety measures (ESCAP 2008). When separated from their spouse and family, migrant workers are more vulnerable to risk behaviour such as poor dietary habits, smoking, drinking and unhealthy lifestyle.

Among the migrant population, permanent migrants are the most-privileged group since they enjoy the same access to available health and social services as the local population. Depending on the host country, temporary migrants may have the same access as permanent migrants, or at the very least, they are guaranteed access to basic health services. The most vulnerable are the irregular migrants. Due to their low wages, they are not guaranteed a healthy diet and can afford to rent only crowded and unsanitary shelters. This lifestyle further increases their health risks. Their illegal status deters them from gaining access to the host country’s health care system. For instance, Filipino irregular migrants in Sabah assume responsibility for their health care for fear of being visible to Malaysian authorities. When sick, they rely on private health providers, self-medication, traditional healers and their security blanket of friends, relatives and supervisors (Asis 2005).

Migration of skilled health workers impacts on the delivery of health services increases the social cost of training health workers, and other socio-political-cultural factors (Connell 2008). Anecdotes abound on the closure of a health unit in provincial hospitals during week-ends when doctors and other medical personnel attend classes designed to fast track the completion of a nursing degree. A migration outcome is the deskilling of health workers as Filipino nurses accept jobs as nannies or caregivers in Vancouver to satisfy the two-year residence requirement. Nurses can be recipients of discrimination, whether racial or the practice of deploying them to far-flung and remote health centres, which are unattractive to the locals. Children of overseas nurses might experience “care deficit”, as their child-rearing is entrusted either to the father or relatives.

There are very limited analyses done on the impact of migration and remittances on health at the household level. Research comparing the expenditure shares on health (e.g. Tullao, Cortez, and See, 2007) shows higher expenditure shares for remittance-receiving households compared to non-receiving ones. Expenditure elasticities are likewise found to be higher for remittance-receiving households (e.g. Tullao, Cortez, and See, 2007; Tabuga, 2007). These indicate that migration and remittances redound to higher health outcomes. However, the comments on the reliability of these estimates described earlier in the case of education also apply here.

2.3. Migration and Family Cohesion

Notwithstanding the motivation, international migration inevitably affects the family. The strands of the migration-family literature follow the classification status of migrants. Permanent migrants confront the issue of family migration, while temporary migrants contend with the family left-behind. The four family migration variants are family reunification, entire family migration, sponsored family migration and marriage migrations. Family reunification remains the most important reason for emigration to developed countries, specifically for traditional migration countries like the United

States, Canada and Australia (World Migration Report 2008; Battistella 1995). The right to family reunification is guaranteed in the 1989 UN Convention on the Rights of the Child (Article 9) and the 1990 International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families (Article 44).

The Philippines ranks second, in terms of countries which availed of the family reunification provisions of the United States immigration laws in 2001 (Table 5). A preliminary assessment on the impact of family migrants points to the following: (a) many family migrants have excellent qualifications and skills, (b) their earnings improve over time, (c) some may benefit from the host country's investment in training, enabling them to catch-up with their native counterparts, (d) during recession, skilled migrants may suffer more due to the lack of social capital, and (e) skills acquired by family migrants are complementary, while skilled migrants compete with the host country's local workforce (Burstein 2008).

Table 5. Top 10 Countries of Immigration through Family Reunification (FR) in the U.S., 2001

Country of Origin	Total	FR	FR (%)	Country of Origin	Total	FR	FR (%)
All countries	1,064,318	675,178	63.44				
Mexico	206,426	196,234	95.06	Dominican Republic	21,313	20,969	98.39
Philippines	53,154	40,863	76.88	Haiti	27,120	16,356	60.31
China	56,426	33,202	58.84	Colombia	16,730	14,884	88.97
India	70,290	30,157	42.90	Jamaica	15,393	14,536	94.43
Viet Nam	35,531	24,112	67.86	El Salvador	31,272	13,932	44.55

Source: Table 6.4. Family Migrations in the U.S. – Top Ten Countries of Immigration through Family Reunification (FR), 2001, cited in World Migration Report 2008. *Immigration and Naturalization Service (INS) Statistical Yearbook 2001*.

International marriages arise from the frequent foreign travels of the citizens, increasing presence of temporary and permanent migrants in the society, internet “mail-order” brides, and the shortage of brides in traditional agricultural societies in Taiwan, Japan, Republic of Korea, and China (World Migration Report 2008, ESCAP 2008). American and Japanese spouses are still preferred by Filipino partners. Out of 333,672 spouses/partners of foreign nationals, 41 and 30 percents are married to US and Japanese citizens, respectively (Table 6). The rise in the intermarriage between Japanese men and Filipinas since the 1980s coincided with the inflow of Filipina entertainers in Japan. Some Filipinas send remittances to their relatives back home. Children are reared as “double kids”. Many Japanese husbands look forward to doing business or spending their retirement years in the Philippines, with lower living costs, warmer December weather, and supportive in-laws who will tend to their geriatric needs (Satake 2004).

Table 6. Registered Filipino Emigrants and Spouses/Partners of Foreign Nationals, by Major Country: 1989-2007

Country	Emigrants		Spouses/Partners	
	Number	Percent	Number	Percent
USA	8,546	68.2%	136,427	40.9%
Canada	220,951	14.4%	13,379	4.0%
Japan	100,022	6.5%	100,906	30.2%
Australia	99,099	6.4%	26,340	7.9%
Germany	11,068	0.7%	11,748	3.5%
New Zealand	9,242	0.6%		
Italy	8,628	0.6%		
UK	8,226	0.5%	6,380	1.9%
Spain	6,185	0.4%		
South Korea	3,268	0.2%	5,386	1.6%
Taiwan			7,157	2.1%
Norway			2,642	0.8%
Sweden			2,499	0.7%
Others	21,217	1.4%	20,808	6.2%
TOTAL	1,536,452	100.0%	333,672	100.0%

Source: 2007 Overseas Employment Statistics, Philippine Overseas Employment Agency (POEA), <<http://www.poea.gov.ph>>

Temporary migrants leave behind their family members due to the brevity of their labour contracts, family reunification prohibition in the host country, or the nature of the job (especially for live-in domestics). Since children are the most vulnerable group in parental migration, several studies delve into the impact of migration on children left behind.¹⁶ An estimated 2 to 6 million children aged 0 to 14 years are left behind by migrant parents in 2000 (Annex 5). In their parent's absence, relatives act as their surrogates. The typical OFW contract runs for two years. The frequency of parental visit depends on the legal status of the migrant and the geographical proximity of their workplace. Temporary migrants based in Hong Kong and Taiwan visit regularly, while irregular migrants have to wait for their legal work documents before they can visit.

It is widely-held that the beneficial economic impact of remittances offsets the social costs of parental migration on the welfare of children. Part of the remittances funds the private education of their children. In school, children of migrants tend to obtain higher academic grades than children of non-migrants (Scalabrini Migration Center SMC 2004). Migrants' children are likewise healthier than non-migrants' children, as revealed by such measures as the ability to perform physical activities and the reports on illness and pain (University of the Philippines, Tel-Aviv University 2002). Migrants' children are able to adjust to separation from parents since members of the extended family act as surrogate parents (SMC 2004).

On the average, migrants' earnings are four to five times more than home earnings (Bryant 2005). An earlier study shows that OFW remittances are used mainly for debt payment (36 percent), daily household operation (32 percent), acquisition of consumer durables (13 percent) and children's education (10 percent). After footing the bill for the household essentials, the surplus is used for business capital (5 percent), home purchase (3 percent) and savings (1%).¹⁷

The 2007 Ilocos Norte survey of 248 households, which findings are limited to the presentation to descriptive statistics, highlights the differences in expenditure pattern between OFW and non-OFW families (Table 7). Except for food, OFW families spend a larger share of their remittance income on fuel, light & water, education, medical care, durables and non-durable goods and savings. In terms of average spending per child, OFW families spend twice as much as non-OFW families for food, clothing and education. And, OFW families save 16 times more than non-OFW families. OFWs provide for the future of their children through investments in insurance and pre-need education plan (Edillon 2008).

Table 7. Differences in Expenditure Pattern between OFW and Non-OFW Families (With Children)

Item ¹	Budget Share (%)		Item ²	Average Spending/Child (₱)			Type ³	Investment for Child (%)	
	OFW	Non-OFW		OFW	Non-OFW	Ratio		OFW	Non-OFW
Food	35.1	38.3	Total	18,889	10,984	1.7	Bank account	5.8	0.8
Fuel, light & water	6.8	6.4	Food	7,788	5,369	1.5	Life insurance	2.5	1.6
Transport & communication	9.6	8.7	Clothing	2,093	1,088	1.9	Health insurance	4.2	0.0
Education	7.2	5.4	Education	7,546	4,432	1.7	Pre-need plan	9.2	0.8
Medical care	2.1	1.8	Bank deposit	1,472	95	15.5			
Durable furnishings	3.4	2.6							
Non-durable furnishings	0.3	0.2							
Current saving	20.8	15.2							

¹Table 6. Share of selected expenditure items in the budget of similar OFW and non-OFW families (with children);

²Table 13. Average spending per child, pesos

³Table 14. Investments for the child, %

Source: Edillon (2008). "The Effects of Parent's Migration on the Rights of Children Left Behind in the Philippines", Working Paper United Nations Children Fund (August).

¹⁶ This section is based on Bryant, John (2005), "Children of International Migrants in Indonesia, Thailand and the Philippines: A Review of Evidence and Policies". UNICEF Innocenti Working Paper 2005-05, pages 2-3,

¹⁷ Bagasao (2003), Cited in "Table 5. Typical Use of Remittances Among OFWs in the Philippines". Cited in Coronel and Unterreiner 2008.

To date, there is still no quantification of the social costs of migration. Different studies identify the social costs to include: (a) “juvenile delinquency, drug abuse, psycho-social maladjustments, loss of self-esteem, early marriages, teen-age pregnancies, family breakdown” (Coronel and Unterreiner 2008: 21), (b) low decision making skills of migrant children (due to two layers authority in the household: parents and caregivers); undesirable personality traits of children (spoiled, wasteful, lonely, resentful, materialistic); marital problems (Bryant 2005); (c) lack of collective identity, focus, rootedness and grounding, and patience, while they crave for acceptance, affirmation, attention and clear set of values (Tanalega 2002), (d) alienation from parents and regret for not spending quality time with parents (SMC 2004), and (e) sense of loneliness from parental absence and less socially adjusted (Battistella and Conaco 1996).

Families with migrant mothers are subjected to more external shocks compared to absentee fathers (ESCAP 2008). Parrenas (2005) documents the gender role of left-alone mothers and fathers in the Philippines. When migrant husbands leave, they take care of the productive role, relegating the social reproductive role solely on their wives. Wives often withdraw from the formal labour market to become full-time mothers and to assume the gender role of fathers (decision-making and disciplining). When migrant wives leave, some husbands left behind reject the reproductive role of child care, but instead pass them on to female relatives (eldest daughter, aunts, grandmother, cousins) or to their domestic helpers. Thus, children of migrants prefer their father to work abroad rather than their mother since mothers can perform the dual role of father and mother more effectively (Scalabrini Migration Center 2004).

Some migrant mothers maintain dual households, especially if they work as domestic helpers. They attend to the productive needs of their foreign employer, while tending to the nurturing concerns of their families back home, in absentia. The global care value chain is observed with the migrant mother caring for the children of the foreign employers, her relatives nurturing the needs of her children left behind, and domestic hires attending to the needs of her relatives’ children.

Young children tend to be more affected by the absence of the migrant mother. They obtain lower academic ratings, are predisposed to common illness, and are prone to loneliness and anxiety (ESCAP 2008). A study of 709 children from Metro Manila, Bulacan, Quezon and Rizal revealed that “at the level of psychological and emotional well being, ... children with the mother abroad tend to be more angry, confused, apathetic, and more afraid than other children” (Battistella and Conaco 1996). Actual interviews of 102 children of migrants in San Pablo City, Laguna (Hong Kong-based female migrants) and Mabini, Batangas (Italy-based female migrants) showed that mother’s absence evoked varied reactions from their children, depending on the child’s age. The mother’s absence caused pre-school children (age group 0-5 years) to feign indifference and to withdraw their affection from the biological to the surrogate mother. Regaining their children’s affection proved to be an arduous and painful process. Hardest hit by the mother’s absence were children aged 6-16 years because of their emotional attachment to their mother. In addition, this age group tended to become indecisive and to display deviant behaviour, borne out of their resentment towards their mother (Alunan-Melgar and Borromeo 2002).

However, there are factors which mitigate the adverse social costs of migration, such as the involvement of the extended family in the provision of child care and guidance, and the ease of communication access (texting, cellular phones, and internet). “Where one or both parents are absent, children experience a reconfiguration of gender roles and maintain a close family relationship through constant communication” (Scalabrini Migration Center, 2004). Upon their return to the home country, the migrant mother is expected to resume her care-giving role, while the returning migrant father takes on domestic chores at home, with much more zest than fathers left behind.

Using the 102 children sample of migrants in San Pablo City and Mabini, Anonuevo and Sopena (2002) found that children of migrants aspired to become future migrants like their parents. A significant impact of migration on children is the perpetuation of the culture of migration as children

dream of working abroad, not only for economic reasons, but to follow the path taken by their role models, i.e. their parents (Scalabrini Migration Center 2004).

2.4. Migration and Fertility

When world population was 3 billion in 1960, the estimated world migrant stock was 75.5 million (2.5 percent). In 2008, the estimated world population and migrant stock were 6.7 billion and 200 million (2.9 percent), respectively (UN: Trends In Total Migrant Stock 2005 Revision). By 2050, world population is projected at 9.35 billion, with the Philippines claiming the tenth most populous country spot at 150 million (Population Reference Bureau, 2008 World Population Data Sheet). The increasing trend in global migration is linked by some analysts to rapid population growth in developing countries. More specifically, the literature identifies the determinants of international migration as the economic, demographic and political differentials among countries alongside mediating factors such as technological innovation in transport and communication, labour recruitment, social networks, trade competition between countries, government migration policies and civil unrest. The empirical tests on the link between international migration and population growth revealed that in Western Europe, 1960 to 1991 emigrants were likely to originate from developed regions. And for those who hailed from developing regions, migration outflow in 1980-90 was higher for regions with falling population growth rates (e.g. Latin America compared with high population growth regions Africa and Western Asia). In the United States, only population size at origin country exhibited a positive correlation with immigration. Consistent with the West European finding, immigrants were more likely to originate from countries with moderate total fertility rates (TFR) rather than from high TFR countries. Immigrants also hailed from countries with geo-political ties with the United States (e.g. Philippines, South Korea and Vietnam).¹⁸

Philippine data reveal the trend toward total fertility decline from a high of 7.3 for the 1950-55 period to a moderate 3.3 in 2008. The OFW deployment rose from an annual average of 36,035 in 1975 to 1,077,623 in 2008. The inverse relationship between emigration rates and TFR (population growth rate) is consistent with Western Europe and US data cited above.

Trends in Total Fertility Rates and OFW Deployment, Philippines, Selected Years

	1950-55	1970-75	1995-2000	2007/ 2008 ²	Percentage Change	
					1950-55 to 1970-75	1970-75 to 1995-2000
Total Fertility Rate ¹	7.3	6.0	3.6	3.3	-17.8	-40.0
Annual OFW Deployment ³		36,035	762,022	1,077,623		

¹Table 2. Trends in total fertility rates in selected countries in the ESCAP region, 1950-55, 1970-75, 1995-2000, cited in Jones, Gavin (2008), "Underlying Factors in International Migration in Asia: Population, Employment and Productivity Trends"

²Population Reference Bureau 2008 World Population Data Sheet

³Philippine Statistical Yearbook, Philippine Overseas Employment Agency

The literature review revealed that there is a dearth of studies on the effect of migration on TFR in the Philippines. Existing studies on the migration-fertility interaction focused on the impact of emigrants on the fertility rates of host countries. For instance, the World Migration Report 2000 argues that if TFR subsumes income and modernization indicators, then international outmigration occurs best in an environment of moderate income and modern society, since the OFWs now have the resources to fund their movement across borders. The income and modernization indicators include GNI per capita, wellness (mortality rate, longevity, nutrition and water access) and characteristics of a modern society (percent urban, clustering, contraceptive use and declining fertility). The moderate TFR in 2000 and the tentative contraception acceptance of married women act as population growth

¹⁸The literature cited in this paragraph includes : (a) Kritz (2001), "Population Growth and International Migration: Is There a Link?" and (b) Zlotnik (2004), "Population Growth and International Migration".

accelerators, bringing projected population to 120.2 million and 150.1 million in 2025 and 2050, respectively.

International migration slows down the population decline of host countries through (a) the increase of the population base, especially for countries with below replacement fertility rates, and (b) the expansion of its rate of natural increase resulting from the migrants' high fertility rates and lower mortality rates (younger than native population). The intermarriage between the natives and the migrants change the social, cultural and religious institutions of the host countries. "Demographic trends also affect the receptivity of host countries to international migration. For example, lower fertility rates in combination with higher native educational levels were instrumental in causing the transition of the Republic of Korea, Japan and Singapore from labour-exporting to labour-importing countries. Migrant labour is now relied upon for construction, domestic services, and other low-skilled employment, while higher-educated natives take up professional and white-collar occupations" (World Migration Report 2000: 26-27).

Income and Modernization Indicators, Philippines 2008

Mid-2008 Population (millions)	Total Fertility Rate	Per 1,000 Population		Rates of Natural Increase (%)	Net Migration Rate	Projected Population (millions)		Percent Change 2008-50	GNI per Capita (US\$)
		Births	Deaths			mid-2025	mid-2050		
9.5	3.3	26	5	2.1	-2	120.2	150.1	66	3,730
% of Population Aged		Life Expectancy (years)			% of Married Women Using Contraception	Percent Urban	Population per Sq. Km	% of Under- nourished	% of Pop with Water Access
< 15	65+	Total	Male	Female					
35	4	69	66	72	51	63	302	18	93

Source: Population Reference Bureau 2008 World Population Data Sheet

Jones (2008) discusses the implications of the "marriage squeeze", the delay of the marriage age and cohort succession. The marriage squeeze is the relative shortage of one gender in the marriage market. For instance, in Southeast Asia and specifically the Philippines, the relatively higher proportion of educated females makes it difficult for single females (aged 26+ years) to find suitable marriage partners. Educated females would seek educated males. But the pool of single educated males (aged 26+ years) would opt for younger, not necessarily well-educated females, while the single less-educated males (aged 26+ years) would hesitate marrying single educated females. For rural males in South Korea, Japan, Taiwan, Vietnam and China, the less-educated with poor employment prospects have difficulty in finding local brides. They resort to overseas search for wives. The distortion in sex ratios at birth due to their preference for male children is expected to worsen in the next decades. International migration leads to fertility decline due to the delay of the female marriage age (when more single migrants work abroad), the disruption in childbearing (long separation from spouses) and the adjustment process in the host country. When fertility declines do not occur smoothly, cohort succession causes growth rates of different age groups to differ sharply. A sudden rise in fertility rates due to the influx of migrants belonging to the reproductive age group produces "echo effects" which would have implications on the planning of social services. And a decline in mortality rate due to the influx of younger migrants would have implications on the pension system.

The migration-fertility literature discusses four major hypotheses on the fertility behaviours of migrant women, viz., (a) assimilation, (b) adaptation, (c) disruption and (d) selectivity. The assimilation hypothesis assumes that the migrants exhibit similar fertility levels as their home environment, and that any convergence towards the host fertility rates occurs in the second generation. Kulu (2003) cites Hiday's (1978) work showing that internal migrants in the Philippines initially retained the fertility level of their origin region. Adaptation suggests that migrants will eventually adopt the fertility behaviour of the destination region due to the change in the price-induced demand for children and to income change. Selectivity argues that migrants possess characteristics which are different from the native population at origin, and which may be similar to

the native population at destination. Kulu alludes to Hendershot's (1971) observation that older migrants to Manila had lower fertility rates while younger migrants exhibited higher fertility rates. The early stage of urbanization was difficult, prompting migrant selectivity. With the establishment of social networks in the urban area, the migration decision has become relatively easy. Disruptions brought about by migration, such as long separation from the spouse, or interruption in the supply of contraception, could alter fertility rates.¹⁹

2.5 International Migration and Demographic Distribution

The literature on the demographic distribution of Filipino OFWs is quite scarce. To remedy the gap, Bryant (2002) combines data from several sources to draw up a socio-demographic profile of OFWs (Table 8). Migrants are a highly select group. They are relatively young (52 percent of them belong to age 15-34). Although there is a gender balance between male and female migrants, female migrants tend to be younger (64 percent belonging to age group 15-34) than their male counterparts (42 percent). The average number of OFW children is 2.8, with migrants aged 45+ registering the highest average number of OFW children at 4.3. Bryant pointed out that the Survey of Overseas Filipinos captures only a subset of all overseas Filipinos.

]Table 8. Number of OFWs, by Age, Sex¹, Civil Status², and Number of Children³, 2002 (thousands)

Age	Male	Female	Total	Percent	Single	Married	Widowed/Separated	Mean No. of Living Children
15 - 19	2	6	8	0.8%				0.07
20 - 24	35	79	114	10.8%				0.65
25 - 29	111	137	248	23.5%				1.67
30 - 34	83	98	181	17.1%				2.69
35 - 39	90	69	159	15.1%				3.47
40 - 44	95	52	147	13.9%				3.81
45+	137	61	198	18.8%				4.28
Total	554	502	1056	100.0%	395	630	54	2.8

¹ Appendix Table 3. Numbers of Filipinos working overseas, 2002 (thousands) cited in Bryant (2005), "Children of International Migrants in Indonesia, Thailand, and the Philippines: A Review of Evidence and Policies", Source of Data: Data obtained from the table entitled 'Number of Overseas Filipino Workers, by Age Group and by Sex' on the National Statistical Organization website, www.census.gov.ph/data/sectordata/2003/of0202.htm. Data downloaded on 4 August 2004.

² Appendix Table 4. Mean number of living children, women aged 15-49, Philippines 1998 cited in Bryant (2005), "Children of International Migrants in Indonesia, Thailand, and the Philippines: A Review of Evidence and Policies. Source of Data: National Statistical Office (1998).

Table 9 documents the net migration experience (1950-2000) and migration projections (2000-2050) by broad geographical areas. Europe reversed its migration status from emigration (net sending) in the 1950-1970 period into an immigration (net receiving) area. North America and Oceania (traditional migration countries) consistently receive emigrants from other countries (1950-2000), which trend is expected to be perpetuated in the 2000-2050 period. Asia, which started as an immigration region in the 1950s, emerges as the main supplier of emigrants from the 1990s onwards, displacing Latin America and the Caribbean.²⁰

¹⁹ Discussion is based on (a) Kulu, Hill (2003), "Migration and Fertility: Competing Hypotheses Re-examined", and (b) Jensen, Eric and Dennis Ahlburg (2003), "Why Does Migration Decrease Fertility? Evidence from the Philippines".

²⁰ "At the country level, during 2000-10, 33 of the 45 developed countries have been net receivers of international migrants. This group includes traditional countries of immigration such as Australia, Canada, New Zealand and the United States, most of the populous countries in Northern, Southern and Western Europe as well as the Russian Federation and Japan. The movement of people from less developed regions to more developed regions has dominated the world migration patterns for almost half of the century, but flows among developing countries have also been important. Several developing countries or areas have been attracting migrants in large numbers, including Hong Kong SAR China, Israel, Kuwait, Malaysia, Qatar, Saudi Arabia, Singapore, South Africa, Thailand and the United Arab Emirates. Jordan and the Syrian Arab Republic have been the primary receivers of refugees from Iraq. Many African countries have been the destination of refugee flows from neighboring countries. During 2000-2010, the countries having the highest levels of net emigration included China, India,

By 2050, the Philippines, projected to be the tenth most populous country in the world (Table 10), will also be the fifth largest supplier of emigrants mainly to OECD countries (UN 2007: 22). Assuming that the 2000 Filipino OFW Profile in OECD countries and the absence of restrictive migration policies in these countries, the culture of migration will perpetuate and the outflow of young (55 percent from age group 25-39 years), highly educated (64 percent college graduates), highly skilled (nurses, IT professionals, teachers), predominantly female service workers (caregivers and domestic helpers) and gender-balanced Filipino migrants will continue.

Table 9. Average Annual Net Number of International Migrants per Decade by Major Area, 1950-2050 (Medium Variant)

Major Area	Net Number of Migrants (thousands)									
	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	2010-2020	2020-2030	2030-2040	2040-2050
More developed	-3	556	1,088	1,530	2,493	2,902	2,268	2,269	2,272	2,272
Less developed	3	-556	-1,088	-1,530	-2,493	-2,902	-2,268	-2,269	-2,272	-2,272
Least developed	-104	-148	-447	-788	-37	-29	-277	-373	-375	-375
Others	108	-409	-641	-742	-2,456	-2,873	-1,991	-1,896	-1,897	-1,897
Africa	-125	-242	-289	-267	-310	-416	-377	-395	-393	-393
Asia	194	-22	-377	-451	-1,340	-1,311	-1,210	-1,221	-1,222	-1,222
Europe	-489	-31	288	441	1,271	1,271	799	805	808	808
Latin America	-68	-293	-415	-781	-1,108	-1,108	-616	-590	-595	-595
Northern America	403	479	748	972	1,453	1,453	1,305	1,300	1,300	1,300
Oceania	85	109	44	86	111	111	99	101	102	102

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2007). *World Population Prospects: The 2006 Revision, Highlights*, New York: United Nations

Table 10. Ten Most Populous Countries, 2008 and 2050

Rank	2008		2050	
	Country	Population (millions)	Country	Population (millions)
1	China	1,324.7	India	1,755.2
2	India	1,149.3	China	1,437.0
3	United States	304.5	United States	438.2
4	Indonesia	239.9	Indonesia	343.1
5	Brazil	195.1	Pakistan	295.2
6	Pakistan	172.8	Nigeria	282.2
7	Nigeria	148.1	Brazil	259.8
8	Bangladesh	147.3	Bangladesh	215.1
9	Russia	141.9	Congo	189.3
10	Japan	127.7	Philippines	150.1

Source: Population Reference Bureau 2008 World Population Data Sheet

Table 11 presents the Philippine demographic experience and prospects for the 100-year period from 1950 – 2050. Philippine population is expected to increase seven-fold from 20 million in 1950 to 140 million in 2050. While the share of the economically active (age group 15-59) increased from 46 percent in 1950 to 53 percent in 2000, the share of young dependents (age group 0-14) declined, with the share of old dependents (60 and over) remaining relatively stable at 9 percent. By 2050, the young and old dependents will comprise 20 and 34 percents of the population, respectively. The decline in young dependents is due to the less than replacement TFR (1.85). Population growth will stabilize in 2050 from a 1950 three (3) percent high to a near zero population growth (0.50 percent) in 2050. The median age will double from 18 years in 1950 to 36 years in 2050 and more Filipinos will live longer from 48 years in 1950 to 79 years in 2050.

Indonesia, Mexico and the Philippines. Pakistan and the Islamic Republic of Iran also registered high levels of net emigration, partly as a result of the repatriation of Afghani refugees". Cited in United Nations Department of Economic and Social Affairs/Population Division (2007). *World Population Prospects: The 2006 Revision, Volume 1: Comprehensive Tables*, 22)

Analysis of the Philippine demographic experience reveals that the Philippines can supply the need for foreign labour by developed and developing countries. Barring major fortuitous events, the Philippines will continue to invest in the education of its human resources, to confront the issue of the educated unemployed and over-education, to deal with an increasing number of OFW children, and to rely increasingly on OFW remittances for its income generation. The expected below-replacement TFR decline is a response to both development and international migration

Table 11. Population Estimates and Projections, Philippines, 1950 - 2050

Indicator	Estimates				Medium Variant	
	1950	1960	1980	2000	2025	2050
Population (000)						
Total	19,996	27,054	48,088	76,214	115,858	140,466
Male	9,943	13,558	24,241	38,383	58,215	70,252
Female	10,053	13,496	23,847	37,830	57,643	70,215
Sex ratio (males per 100 females)	98.9	100.5	101.7	101.5	101.0	100.1
Age distribution (%)						
0 - 4	17.5	18.4	16.3	13.3	9.1	6.5
5 - 14	26.1	27.4	26.9	24.5	18.7	13.2
15 - 24	17.9	18.6	20.6	20.3	18.6	14.1
25 - 59	29.0	27.5	27.8	32.5	36.4	32.5
60 and over	9.5	8.1	8.4	9.4	17.2	33.7
Female 15-49	45.3	43.9	46.9	50.9	53.1	49.0
Median age (years)	18.2	17.0	18.1	20.8	27.2	36.3
Population growth (%)	2.99	3.09	2.44	2.08	1.09	0.50
TFR (children/woman)	7.29	6.85	4.95	3.54	2.18	1.85
Life expectancy at birth (years)						
Male	46.0	52.9	60.2	68.2	73.5	76.4
Female	49.6	56.7	66.4	72.5	78.2	81.0
Both sexes	47.8	54.8	62.1	70.3	75.8	78.7

Source: United Nations (2007). *World Population Prospects: The 2006 Revision, Highlights*, (New York: United Nations).

2.6. Irregular Migration and Citizenship

The literature is replete with attempts of host countries to monitor, control and restrict the access of irregular migrants to citizenship, especially the right to suffrage. This section discusses a case when the host country grants irregular migrants the voting privilege. Sadiq (2005) illustrates how Filipino irregular migrants were able to participate in the electoral process in Sabah using census practices and documentation. Cross-border movements across the Sulu Archipelago into Sabah have been a long-time occurrence with Filipinos gaining entry into and exiting Sabah by a two-day travel by boat. Filipinos tended to settle in Sabah's eastern town of Sandakan, which has not become predominantly a Filipino community. The existence of barter trade early in the ninth century has spanned into the BIMP-EAGA (Brunei, Indonesia, Malaysia, Philippines-East Asian Growth Area). Sadiq identified three emigration streams from Mindanao to Sabah. The first migration stream occurred during the Spanish period when ethnic Muslims from Sulu (Sulu) and Tawi-tawi (Badjaos) were driven out from their homelands. The second wave, mainly political refugees, happened during the Mindanao insurgency problem in the 1970s. The bulk of migrants, though, surged from 1978 onwards in response to economic opportunities in Sabah. Seasonal Filipino labourers cross borders during planting season, and easily return home after the harvest season.

In his paper, Sadiq described another form of attraction for Filipino migrants, i.e. documentary citizenship. The desire of Muslim-Malay politicians to win elections at the state level and to change the demographic-political climate of Sabah induced them to assist Filipino migrants in acquiring documentary citizenship, an informal mechanism that fast tracks the access of irregular migrants to citizenship, including social welfare benefits and political suffrage. Thus, the granting of documentary citizenship has become a major industry in Sabah. The illegal migrant is first given a

birth certificate of another person, before being issued an identity card. In some cases, the migrant is issued a fake identity card for as low as 10 ringgit (\$2.63). This practice is frowned upon by the natives, mainly because many of them have difficulty acquiring an identification card (IC). The IC is required for their children to gain entry into schools and to claim social benefits. Sadiq refers to these migrants as *suffraged non-citizens* and natives who do not have ICs as *non-suffraged citizens*. Another way to gain citizenship is through self-reporting during census-taking. Seemingly, when the election period will have elapsed, the federal and state governments will crack down on illegal migrants.

Right after a major crackdown, the Philippine government would spend a lot of resources to relocate and retool these “halaws” (castaways) in Southern Philippines. But after some time, they would again slip back into Sabah (Barrios-Fabian, 2004). Sadiq also made this observation. Politicians would lament that the Filipino migrants they had sponsored in Sabah would slip back into Mindanao and return back to Sabah, making them vulnerable to border patrol checks.

3.0 Economic Impact of Migration and Remittances

This section presents the impact of migration and remittances on economic outcomes. In particular, it looks at the impact on key indicators of development, namely, consumption and investments, and poverty and inequality. It also provides a discussion on the methodological issues.

3.1 Consumption and Investment

Household expenditure is the primary indicator of household welfare. Investments, on the other hand, provide indication on the future capacity to finance expenditure both at the aggregate and household levels. Remittances are, in general, additions to household income. Remittances can also be directed toward specific investment opportunities either by the recipients or at the prodding of the OFWs themselves. A number of studies on international migration concluded that remittances are primarily consumed and not invested. But what does evidence so far show?

On the aspect of consumption, the effect is not only limited to the total consumption expenditure but is also expected to affect the distribution to the different expenditure items as well. Thus, the interest is not only to find out whether general consumption expenditure increases with migration or remittances but also to find out if the expenditure pattern is altered in desired ways. The basic expectation from economic theory is that remittances increases income, and is thus expected to increase the demand for normal goods. The estimation results show mixed results. Simple comparisons of levels and expenditure shares show positive impact on total consumption expenditures (implying lower savings given income) of remittances. It also shows higher expenditure shares on specific types of expenditures such as housing, education and recreation services, and durable goods among remittance-receiving households compared to non-receiving households. Comparison of expenditure elasticities between remittance-receiving and remittance non-receiving households shows higher expenditure elasticities in remittance-receiving households in housing, education, health care, durables, transportation and communications but lower elasticities for food regularly eaten outside the home, alcohol and tobacco. These differentials in expenditure elasticities between remittance-receiving non-receiving household are also found to vary across the range of expenditure shares. However, another multivariate model estimate of the impact of remittances on total expenditures also show insignificant impact contrary to results mentioned earlier even if the same study also found to result in increases in expenditure on education and durable goods.

In terms of investment, if one considers investments as the inverse of consumption, then the conflicting results on expenditures discussed earlier also means conflicting results on household investments. Considering studies on direct household investments expenditures, the estimated impact is mixed. No impact was found on investment income and the number of investments activities but there is a positive impact on new entrepreneurial activities particularly capital intensive ones, i.e., transportation and communication and manufacturing.

Tullao, Cortez and See (2007) did simple comparisons of the level of consumption between households receiving and not receiving remittances. They also estimated Engle functions relating expenditures shares and total expenditures plus controls for other household characteristics for remittance-receiving and remittance non-receiving households separately. The simple comparisons show higher consumption expenditure for remittance-receiving households. It also finds higher allocation for housing, education, health care and recreation services. The proportion of households with amenities such as television sets, refrigerators, and washing machines is, as expected, higher among households receiving remittances. The expenditure elasticities generated from the Engle function estimates substantially validated the results from the simple comparisons, i.e. higher expenditure elasticities for those with remittance income for housing, education, health care, durables, and transportation and communications.

Tabuga (2007) estimated the impact of remittances on household expenditures using the Family Income and Expenditure Survey (FIES) 2003 and the Engle curve formulation, relating shares of expenditure to total expenditures/income augmented by household characteristics and a remittance receipt dummy. A distinct contribution of this paper are quantile regression estimates which provide estimates of the remittance impact on the full range of values of expenditure shares rather than just on the average share given by OLS. The study finds that with remittances, households allocated more to consumer goods and leisure. It finds that remittance induces households to spend more on education, housing, and durable goods. It also finds that it does not induce households to spend more on vices like tobacco and alcohol and on food regularly eaten outside.

The quantile regression estimates show that the impact of total expenditure on food share is negative, but, in addition, it also finds that the impact for those with higher food shares yields a larger negative—the coefficient of those with highest share is 2.5 times more than the smallest. This means that remittance receipts cause larger negative changes for those with larger food shares (poorer households) compared to those with smaller food share (richer households). A similar pattern is found for dining out and gifts. The study finds a larger positive impact on remittance receipts for those with large expenditure shares on education, health, consumer goods, fuel, communication, household operations and durables. For housing, minor repair and leisure, the expenditure impact of remittances is about even across different expenditure shares.

Using exchange rate shocks as indicator for changes in remittances, Yang (2008) finds no indication that total consumption expenditure²¹ is affected by changes in remittances. He, however, finds positive impact on potentially investment-related disbursement, particularly on education and on ownership of durable goods such as television sets and vehicles.

Only one study, Yang (2008), was found directly analyzing the impact of migration and remittances on household investment activities. He examined the impact of the exogenous shock – i.e., the more than 50 percent increase in the value of the currencies of destination countries against the Philippine peso during the Asian financial crisis – on household investment income, overall entrepreneurial activity and on 11 specific entrepreneurial activity types.

Findings point to neither a clear impact on household entrepreneurial income nor on overall entrepreneurial activity. While there is a positive impact on starting new entrepreneurial activities, there is none on existing or old entrepreneurial activities. Furthermore, he finds discernible impacts on specific entrepreneurial activities. Of 11 specific activity types, Yang found positive impacts in transportation/communications and manufacturing, which are both capital-intensive types of activity. A one standard deviation increase in exchange rate shock was found to increase entry into transportation/communication and manufacturing by 1.2 and 0.9 percentage points, respectively. He explained that perhaps entrepreneurial activities in these sectors are dampened by credit constraints,

²¹ This is net of expenditures on education, durable goods or capital investment in household enterprises which he considers investment.

thus positive income shocks from remittances have enabled households to make the necessary investments.

Except for the disagreement on total consumption expenditures, the studies appear to agree on the positive impact of remittances on expenditures on specific household goods. As argued earlier, the simple comparisons in Tullao, Cortez and See (2007) assume that migrant and non-migrant households are identical except for their migration status. To the extent that this is not so will bias the result of the comparisons. The expenditure elasticities computed from the Engle curve calculation both in the studies of Tullao, Cortez and See (2007) and Tabuga (2007) is likewise affected by the endogeneity of migration/receiving remittances to the same variables affecting expenditure shares. OLS estimation in the presence of endogeneity will yield inconsistent estimates. Only Yang's study (2008) is free from these problems. Although Yang's (2008) approach has yielded reliable estimates, the results thus far merely scratch the surface of issues relating migration and remittances to household direct investments. There is a need to explore this area further and to determine if there is a basis for the oft-cited claim that remittances are mostly spent on consumption rather than investments. The results from the Yang (2008) study suggest that this is not the case.

3.3 Poverty and Inequality

Alleviating poverty and reducing inequality are global concerns, and are likewise the centrepiece programs of all administrations in this country. In view of this, the impact of migration and remittances on poverty and on inequality are of interest for policy makers. Studies reviewed are consistent in showing the negative impact of remittances on poverty. The assessment of impact on inequality, however, is not as unanimous.

Yang and Martinez (2005) found that remittances (indicated directly by exchange rate shocks) reduce poverty incidence but not poverty depth as measured by the poverty gap.²² They also found that a 10 percent favourable change in the exchange rate leads to a 0.6 percent (or 2.8 from instrumental variables estimation) decline in the poverty incidence in migrant households. Furthermore, as poverty incidence declines among migrant households with favourable exchange rate changes, there is evidence of spillovers to non-migrant households. This is channelled through: (a) a rise in gifts from migrant households to non-migrant households; and (b) a general increase in economic activity arising from remittances. The gifts do not appear to be large enough to explain the reductions in poverty; thus they presume that the general increase in economic activity plays a larger role in effecting this change.

The impact of transfer (which includes remittances) and non-transfer incomes on measures of poverty both at the household and provincial levels using pooled time-series cross-section FIES data from 1985 to 2000 was analyzed by Sawada and Estudillo (2005). They found that increases in both transfer and non-transfer income decreases poverty. In addition, they found that transfer income is more important than non-transfer income at the household level and the other way around at the provincial level analysis. They have argued that provincial aggregation may have dampened the nuances present in household level analysis.

Using FIES 1997 and APIS 1998, Ducanes and Abella (2007b) traced the movements of a panel of households by poverty status. They found that families with OFWs are able to climb up the income ladder quite rapidly, with an average of about 6 percentage points in income distribution in a period of one year. Moreover, a significant number of those who were able to raise their financial status are poor. They also pointed out that those poor households who successfully crossed over from poverty were those with migrants that have more education.

²² Measured in levels and as a percentage to the poverty threshold.

Capistrano and Sta Maria (2007) used regression analysis relating poverty measures, and remittances and number of migrants, controlling for average income (per capita regional domestic product) and its distribution (GINI index). They used cross-section time series regional poverty data from the FIES and remittance data from SOF for years 1997, 2000, and 2003 in the analysis. They found that migration and remittances are associated with a modest reduction in poverty incidence. In particular, they estimated that a 10 percent increase in per capita remittance and number of labour migrants leads to approximately 0.4 percent and 0.2 percent reduction, respectively, in the proportion of families living below the poverty line. Similar impacts are also found the depth of poverty as measured by poverty gap and squared poverty gap.

Using regional level data from FIES 1994, 1997, 2000, 2003, regression estimates in Pernia (2008) show that remittances have a positive and significant effect on poverty reduction. Pernia found that with higher ratio of remittance per capita to GRDP per capita greater proportion of poor household get out of poverty. A 10 percent increase in the ratio of remittance per capita to GRDP per capita results to a 2.6 percents rise in the proportion of households lifted out of poverty. The poverty equation was estimated using simultaneous three-stage least squares with remittance per capita and gross domestic product per capita as independent variables, and with controls for human development and infrastructure indicators.

Turning now to impacts on inequality, the usual claim is that only the rich can afford to pay the placement fees and are educated enough to land in a remunerative job overseas. Is there empirical evidence to this intuitively appealing claim? To give an indication of the likely impact of migration and remittances on the distribution of income, the distribution of households (a) with migrants, (b) receiving remittances, and (c) by importance of remittances to household income across income groups are shown in Table 12. The table shows that the concentration of households with migrants and are remittance recipients are higher as one goes the income ladder.²³ In addition, the proportion of remittance to household income also follows the same pattern. Its immediate implication is that the current cohort of migrants and remitters are likely to contribute to increasing inequality. Of course, this conclusion is dependent on the implicit assumption that households with migrant/receiving remittances and those without migrants/not receiving remittances are identical except for this characteristic.

Table 12. Households with OFWs and receiving remittances, 2003

Income Decile	% with OFW	% with remittance	% remittance to HH income
1 (poorest)	0.26	1.28	0.39
2	0.67	1.94	0.60
3	1.00	2.94	0.99
4	1.47	3.90	1.44
5	2.74	5.70	2.20
6	3.79	7.24	3.21
7	5.48	9.64	4.68
8	8.11	12.85	6.31
9	12.96	17.03	9.21
10 (richest)	18.25	20.78	11.22
Total	5.47	8.33	7.26

Source: FIES and LFS 2003

Memo: No of HH is 16.5 million

²³ Remittances here refers to remittances of workers abroad and net of pension, dividends and gifts

Tullao, Cortez and See (2007) shows similar results, i.e. families receiving remittances²⁴ are concentrated in the top income deciles. For instance, they pointed out, using FIES data, that in 1988 44.3 percent of households belonging to the ninth decile and 41.2 percent of households in the tenth decile received remittance income, while the rest of the households received less than 4 percent. They observed that the concentration in the top income deciles has declined but the difference is still substantial across income deciles.

Using different approaches, Rodriguez (1998) did several plausible estimates of the impact of migration on income distribution. He finds that migration causes average income to rise but at the same time cause income distribution to deteriorate. The first method uses actual and counterfactual scenarios with and without migration. This method yielded an increase of average per capita income by 6.3 percent with migration but is also accompanied by a 7.9 percent increase in the Gini coefficient. The second method uses a one percent change in emigration level. This yielded a rise in household income by 0.06 percent and is accompanied by an increase in the Gini coefficient by 0.032 percent. Thus, both methods show migration causing deterioration in income inequality.

Yang and Martinez (2005), on the other hand, didn't find significant impact of remittances (indicated by exchange rate shocks) on several measures of inequality, namely, Gini coefficient, and 90-10 and 75-25 percentile ratios. This did not change even after controlling for weather conditions, such as the El Niño phenomenon coincidentally occurring during the study period.

Using entirely different approach, Pernia (2006, 2008) argues that migration and remittances is likely to contribute to the deterioration in income inequality. He showed that (a) there are more migrant workers coming from more developed regions; (b) remittances contribute to overall regional development but the benefits are bigger for households in upper income groups; and (b) remittances increase the average income of richer households more than poorer households. All of these imply that migration and remittances, in its current configuration, are likely to contribute to the deterioration of income inequality.

As a final point, it is important to note that above analyses did not consider dynamic effects. Analysts have illustrated presence of dynamic impact both conceptually and empirically. For instance, Rodriguez (1998) following ideas in Stark, Taylor and Yitzhaki (1986) conceptually explored the dynamic effects of migration on inequality. It has been argued that if migration is a process of information acquisition (also called network effects) and this is not household specific, one can expect that the initial negative effects on income distribution would dissipate as the opportunities of migration become more evenly distributed. Some evidence of this effect is provided in Ducanes and Abella (2007) where they found using a panel data between 1997 and 1998 that a significant part of new migrants come from lower income groups.²⁵

The over time profile analysis such as those in Ducanes and Abella (2007b)²⁶ provides a more reliable comparison compared to the one-time comparison such as those in Rodriguez (1998) and Tullao, Cortez and See (2007) under the assumption that migrant and non-migrant households have identical observed and unobserved characteristics, except for the migration status or that equivalent households are randomly assigned between migrant and non-migrant status. When these are not the same, and they are expected to be so, the comparison between migrant and non-migrant households will be difficult to interpret. The difference on the impact on poverty and inequality can be because migrants have higher latent observed capacities (e.g., high education status, more earning assets) or, in the case of one-time comparison, unobserved capacities (e.g., ability, risk taking behaviour or

²⁴ These apparently include all transfers from abroad which include pensions, dividends and gifts and not only workers' remittances

²⁵ Evidence on this effect had also been found in Mexico (Mckenzie and Rapoport, 2007).

²⁶ Ducanes and Abella (2008) actually had a more nuanced analysis. They compared 4 groups over two periods, namely, (a) those who just gained an OFW, (b) those who just lost an OFW, (c) those who had consistent presence of OFW, and (d) those who had not had OFWs while the other studies only compared households with and without migrants.

entrepreneurial spirit) to earn. The results of Sawada and Estudillo (2005) suffer from the problem of the endogeneity of transfer income (that include remittances). Transfers are known to be affected by the economic status of the recipient households. In fact they pointed out that there was a marked increase in remittances in 1997 during the El Niño phenomenon. In the Yang and Choi (2007) study, roughly 60 percent of declines in household income are replaced by remittance inflows from overseas. Meanwhile, the validity of the analysis in Yang and Martinez (2005) emanates from the exogeneity of the exchange rate shocks which was found to be directly correlated with remittances. Questions on the validity of the exchange rate shocks as indicator for remittance flows is laid to rest with the IV (instrumental variable) estimation results which used the exchange rate shocks as instrument to remittances. In addition, the paper also controlled for the likely independent impact of the weather on poverty as El Niño coincidentally happened at the onset of the Asian financial crisis using rainfall data.

On estimates using aggregate data, Capistrano and Sta Maria (2007) did not control for the endogeneity of remittances and number of migrants, which will result in biased estimates. Pernia (2008), by using simultaneous equation estimation techniques, has controlled for the endogeneity of remittances but unlike Capistrano and Sta Maria (2007) did not consider the cross-section time series nature of the data. It is an empirical question which one is a greater problem under the circumstances – endogeneity or unobserved individual or time characteristics²⁷. As mentioned earlier, Sawada and Estudillo (2005) who estimated both at the household and provincial level showed conflicting results and have pointed out to aggregation as the likely source of the difference in results.

4.0 Summary

The paper reviewed the social and economic impacts of migration and remittances. Social issues covered include the impact on education, health, family cohesion, fertility and even citizenship and irregular migration. The economic issues covered the impact on consumption and investments, as well as on poverty and inequality.

Education improves the chances of labour migration, and labour migration also influences the education decisions of those who are left behind. There is evidence of the education selectivity of migration. International migration opportunities are found to be a decisive factor for investing in human-capital-inducing activities, although educated migrants do not always land into jobs they are trained for. Income elasticity of education expenditures is found to be higher among households with migrants compared to those without migrants. Studies on the impact at the household level are unanimous in pointing to the positive impacts of remittances on education expenditures

The impacts on health are of two forms, namely, impact of the migration of health professionals and the impact of migration on the health of migrants. That migration of health professionals cause shortage of supply in the domestic market is still being debated on. Some argue there is indeed a critical shortage other point to a surplus. The analysis of the impact on domestic health care market is critically dependent on the resolution of this issue. The issue of health of migrants themselves revolves around the issue of disparity of care between migrant and native workers. There is limited analyses on the impact of migration and remittance on health outcomes at the household level. There is, however, a unanimous assessment that health care expenditures increase with increase in remittances.

²⁷ Wooldridge (2002) argued that “panel” data can be viewed as having a specific error structure. As such, he presented conditions under which 3SLS and standard random effects and fixed-effects estimation are identical and where the 3SLS will yield more efficient estimates. It was not shown, however, which of these conditions are met in the studies under review so there is telling whether Capistrano and Sta Maria (2007) who employed random effects but did not consider the endogeneity of remittances/migration will yield better estimates compared to Pernia (2006) who considered endogeneity but did not consider the error structure implied by a cross-section time series nature of the data.

Another thorny issue in migration is its impact on family cohesion. There are three separate concerns related to the type of migration, i.e., (a) permanent migrants, (b) marriage to foreigners, and (c) temporary migrants. Permanent migrants are considered better off because their families are usually with them. Marriages to foreigners show mixed results. The most often cited problematic group are temporary migrants whose families are left behind. Impact on children is always the central issue and the verdict is mixed. Another common observation is that bigger impact on children happens when the mother rather than the father migrate for work. Finally, still another largely unresolved issue is the scope of what constitute as the social costs migration on families.

The impact of migration on fertility is largely determined by the characteristic of migrants. Migrants are usually thought of as mostly of reproductive age and have the fertility characteristics of their origins, e.g. higher than their native counterparts. Thus migration is expected to slow down global population decline. For source countries like the Philippines, however, this may mean lower fertility because of income, modernization and separation effects. But evidence on this is only found in rural-urban migration and not yet on international migration.

An interesting relationship has been documented between political exercises and irregular migrants. It has been documented that irregular migrants became the object of attention of politicians wanting to win local elections. After political exercises, however, treatment becomes entirely different. This leads to circular migration that is often not working for the benefit of irregular migrants.

The survey of studies on the economic impact of migration shows that while there are definite positive effects on specific expenditures, e.g. education, health and housing, there is no consensus on the impact on aggregate consumption. This also means there is no definite impact on savings (given income) and investments. The impact on direct investment of households is only found on new activities and not on traditional ones.

Finally, the impact on poverty and inequality also shows mixed results. There appears to be unanimity on the negative impact of migration and remittances on poverty incidence, i.e., an increase in the number of migrants and the amount of remittances reduces poverty incidence. But the impact on inequality is unclear. Simple comparisons show that increases in migration and remittances lead to the deterioration of the distribution of income. But there are indications that the dynamic effects point to a likely dissipation of this initial negative effect as migration becomes more diffused.

The foregoing review provides a preview of the complexity of the issues involved in understanding the social and economic impact of migration and remittances. The issues range from defining the scope of the impact, measurement, and finally estimation. One needs interdisciplinary research to define the scope of the impact, particularly, the social impacts. Much of the analysis is hampered by paucity of data. For instance, to understand the dynamic effects, real panel data, which can also deal with unobservable factors, is needed. In establishing the impact of migration and remittances there is a need to deepen analyses using better specifications and estimation procedure to deal with the endogeneity of migration and remittances and unobservable factors.

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Annex 1. Changing Global Demand for Filipino Newly-Hired OFWs: 1975-2007

Occupation	Number					Percent (%)				
	1975	1980	1993	2000	2007	1975	1980	1993	2000	2007
All Workers	12,501	157,394	256,197	253,030	306,383	100	100	100	100	100
Professional and technical	6,685	24,361	64,830	78,685	43,225	53.5	15.5	25.3	31.1	14.1
Managerial	71	740	326	284	1,139	0.6	0.5	0.1	0.1	0.4
Clerical	225	5,383	4,226	2,367	13,662	1.8	3.4	1.6	0.9	4.5
Sales	53	451	2,539	2,083	7,942	0.4	0.3	1.0	0.8	2.6
Service	2,747	23,442	89,296	91,206	107,135	22.0	14.9	34.9	36.0	35.0
Agricultural	118	1,581	1,753	526	952	0.9	1.0	0.7	0.2	0.3
Production	2,602	101,436	93,149	57,807	121,715	20.8	64.4	36.4	22.8	39.7
For reclassification			78	20,072	10,613			0.0	7.9	3.5

Source: Philippine Statistical Yearbook, Various Years, POEA Website

There was a 25-fold increase in the demand for Filipino migrant workers from 12,501 in 1975 to 306,383. In relative terms, the demand for professional and technical workers was strongest in 1975 when it captured 54 percent of the global labour demand for newly-hired OFWs. In absolute terms, the demand for professional and technical terms peaked at 78,684 in 2000, after which it declined to 43,225 in 2007. The 30-year period saw the declining demand for professional and technical workers from its all-time high of 54 percent in 1975 to 14 percent in 2007. Instead, the demand shifted from brain drain (professional and technical workers) to brawn drain, specifically the demand for production and service workers. The demand for production and service workers increased 47-fold and 39-fold, respectively. The share of production workers in global labor demand increased from 21 percent in 1975 to 40 percent in 2007, while service workers' share climbed from 22 percent in 1975 to 35 percent in 2007.

Annex 2. Deployment of Selected Skilled Workers, by Destination: 2000 and 2007

Country	Nurses		Teachers		IT Professionals		Total	
	2000	2007	2000	2007	2001	2007	2000	2007
Saudi Arabia	4,386	6,633	61	143	148	210	4,595	6,986
USA	91	186	86	971	181	123	358	1,280
UAE	305	616	11	41	8	21	324	678
Kuwait	133	393			5	8	138	401
Qatar	7	214	11	45	2	29	20	288
Singapore	418	276			53	8	471	284
Taiwan	1	174					1	174
Oman			1	156			1	156
Ireland	127	127					127	127
Malaysia					2	93	2	93
Bahrain			4	65	1	8	5	73
Japan			18	24	6	37	24	61
China				54			-	54
Indonesia			8	44			8	44
United Kingdom	2,628	38					2,628	38
Brunei			10	25			10	25
Trinidad	-	17					-	17
Australia					5	5	5	5
Others	245	330	31	98	53	48	329	476
TOTAL	3,955	2,371	180	1,523	316	380	4,451	4,274

Source: Philippine Overseas Employment Administration (POEA) Website

The demand for nurses dropped by 40 percent from 3,955 in 2000 to 2,371 in 2007, largely due to the decline in the UK demand. Instead of hiring nurses, UK turned to Filipino caregivers, a lower-valued occupation. Saudi Arabia remained the highest employer of Filipino nurses. The demand for teachers increased 8-fold, mainly attributable to the USA demand. The demand for IT professionals remained stable at the 300-mark. Overall, Saudi Arabia remained the largest employer for nurses and IT professionals, while the USA heavily recruited Filipino teachers.

Annex 3. Deployment of Selected Service Workers, by Destination: 2001 and 2007

Country	Performing Artists		Caregivers		Domestic Helpers		Total	
	2001	2007	2001	2007	2001	2007	2001	2007
Japan	70,244	4,592					70,244	4,592
Hong Kong	13	113			27,713	22,127	27,726	22,240
Kuwait				170	9,225	4,806	9,225	4,976
Saudi Arabia			3	27	10,660	2,581	10,663	2,608
UAE	19	100		6	5,422	3,149	5,441	3,255
Italy		22			1,740	4,951	1,740	4,973
Taiwan				6,346			0	6,346
Canada				4,170			0	4,170
Israel			397	2,993			397	2,993
Qatar					1,329	1,912	1,329	1,912
Singapore					1,518	1,568	1,518	1,568
Cyprus				54	922	1,763	922	1,817
Spain				49	955	1,542	955	1,591
Korea	94	1,350					94	1,350
Jordan					36	1,285	36	1,285
UK				521			0	521
Bahrain	43	43					43	43
Malaysia	30	22					30	22
Saipan	1	45					1	45
China	13	21					13	21
Indonesia	9	23					9	23
USA				9			0	9
Others	264	90	61	54	8,750	2,193	9,075	2,337
TOTAL	70,635	6,421	461	14,399	68,270	47,877	139,366	68,697

Source: Philippine Overseas Employment Website

The global demand for performing artists, caregivers and domestic helpers had dropped by 48 percent from 142,573 in 2001 to 68,697 in 2007. This was largely attributable to the 90 percent fall in the demand for performing artists and the 33 percent decline in the demand for domestic helpers. The weakened demand of the Spanish market for performing artists triggered the fall, while rising competition from other countries account for the soft demand for domestic helpers.²⁸ A bright spot for service workers is the 31-fold increase in the demand for caregivers, especially in the UK, Singapore, Saipan and Israel.

²⁸ Momsen (2005), "Victim or Victor" in *Gender, Migration and Domestic Service* cites several studies which alludes to the education of domestic workers. Campani's Tuscany research (1993) indicated that Filipina domestics came from low middle-income families with high school education. Pratt's Canadian research (1997) reported that Canada's placement agencies trivialized the education of Filipina domestics as several respondents complained of de-skilling when they are required to work as live-in caregivers before they can apply for open visa. during their first two years in domestic service. Gonzales' Singapore research (1997) observed that 17% and 45% of Filipina domestics had a university degree and some tertiary education, respectively. In Canada, Filipina domestics are valued as excellent housekeepers (Stiell and England, 2005) and are portrayed as Filipinas are "portrayed as 'naturally' docile, subservient, hard-working, good-natured, domesticated, and willing to endure long hours of housework and child-care with little complaint" (p. 50). Yeoh and Huang (1999) profiled the Filipina domestic in Singapore as married, aged 30-39, with a high school degree (55%) and with previous work experience (83%). For the 8% who had college degrees, their previous occupation were teacher, nurse, clerks, and supervisors.

The data on Hong Kong foreign domestic helpers illustrates the case for declining demand for Filipina domestics.

Year	Philippines	Indonesia	Thailand	Others	Total
2002	148,400	78,100	6,700	3,900	237,100
2003	126,600	81,000	5,500	3,800	216,900
2004	119,700	90,000	4,900	3,800	218,400
2005	118,000	96,900	4,500	3,800	223,200
2006	120,800	104,100	4,300	3,600	232,800
2007	123,500	114,400	4,100	3,500	245,500

Source: Hong Kong Labor Department as cited in Ignacio, Emilyzen and Yesenia Mejia (2008), "Managing Labour Migration: The Case of the Filipino and Indonesian Domestic Helper Market in Hong Kong", Harvard University, Policy Analysis Exercise.

The competition from Indonesian domestic helpers comes in the form of lower wages, with roughly 22% receiving salaries below the minimum allowable wage (MAW) of HK\$3,400 per month. Compared with the Filipino domestics, roughly half of whom had college degrees, no Indonesian respondent had a college degree.

Annex 4. Stock Estimate of Overseas Filipinos, 2001 and 2007

Region/Country	2001				2007			
	Permanent	Temporary	Irregular	Total	Permanent	Temporary	Irregular	Total
Land-based Workers	2,736,528	2,794,353	1,625,936	7,156,817	3,656,527	3,867,417	900,023	8,423,967
Africa	271	46,515	18,114	64,900	1,983	69,880	18,540	90,403
Asia, East & South	70,349	817,144	511,363	1,398,856	213,736	747,069	258,640	1,219,445
Japan	65,647	138,522	36,379	240,548	133,528	38,329	30,700	202,557
Malaysia	310	58,233	363,000	421,543	26,002	90,965	128,000	244,967
Singapore	152	56,377	71,917	128,446	29,850	70,616	56,000	156,466
Asia, West	1,546	1,232,962	118,287	1,352,795	4,082	2,055,647	121,850	2,181,579
Kuwait	92	53,067	10,000	63,159	94	129,708	10,000	139,802
Qatar	13	37,626	1,000	38,639	15	189,943	5,600	195,558
Saudi Arabia	239	897,000	18,000	915,239	350	1,046,051	20,000	1,066,401
UAE	373	128,604	38,000	166,977	703	493,411	35,000	529,114
Europe	152,851	411,248	174,936	739,035	248,987	555,542	112,990	917,519
UK	45,889	15,767	8,344	70,000	90,654	102,381	10,000	203,035
Americas	2,291,311	236,475	773,537	3,301,323	2,943,812	354,352	354,843	3,653,007
Canada	338,561	21,146	4,000	363,707	410,626	49,309	3,000	462,935
USA	1,910,844	60,373	532,200	2,503,417	2,517,833	128,910	155,843	2,802,586
Oceania	220,200	50,009	29,699	299,908	243,927	84,927	33,160	362,014
Australia	204,075	687	2,041	206,803	221,892	19,455	9,000	250,347
Sea-based Workers		255,269		255,269		266,553		266,553
TOTAL	2,736,528	3,049,622	1,625,936	7,412,086	3,692,527	4,133,970	900,023	8,726,520
Top 10 Destinations	2,566,195	1,467,402	1,084,881	5,118,478	3,431,547	2,359,078	463,143	6,253,768
Percent of top 10	94%	48%	67%	69%	93%	57%	51%	72%

Source: Commission on Filipinos Overseas

Roughly 37 percent of 7.4 million OFWs are permanent migrants, with 70 percent of them residing in the USA, 12 percent in Canada and 7 percent in Australia as of 2001. The number of permanent migrants rose from 2.7 million in 2001 to 4.1 million in 2007, with its share expanding to 42 percent of total OFWs in 2007.

Annex 5. Estimates of Filipino Children Left Behind by OFWs

Using the 2000 Philippine Census household data (10% sample), the IOM OFW estimate is 1.1 million. A reconciliation procedure involving the 1997 Survey of Overseas Filipinos points to the more accurate estimate of 2 million. This implies that the 2000 Census coverage rate is 50 to 60 percent, an acceptable rate even for developed countries' standard. Crude estimates indicate that female OFWs had lower incidence of having at least one child (55%) compared with male OFWs (82%).

Annex 5a. OFWs Aged 15-59 with Children, 2000 Census

Gender	At least 1 child aged 0-4 [A]	At least 1 child aged 1-17 [B]	All OFWs aged 15-59 [C]	All Filipinos aged 15-59 [D]	% OFWs to All Filipinos C/D	% OFWs with at least 1 child [A+B]/C
Males	156,000	326,000	585,000	21,308,000	2.7%	82.4%
Females	82,000	201,000	517,000	21,096,000	2.5%	54.7%
Total	238,000	527,000	1,101,000	42,404,000	2.6%	69.5%

Note: Last 2 columns are author's estimates using Table 23.

Source: Table 23. Overseas Filipino workers aged 15-59, according to 2000 Census Data cited in International Organization for Migration (2008), Situation Report on International Migration on East and Southeast Asia

The estimate of 1.1 million OFW children is to be adjusted by a factor of 2 due to under-reporting. Nevertheless, the figure is substantially lower compared to estimates of other studies which range from three to six million OFW children. The data reveal that there are more children left behind by the father OFW (58 percent) compared to either children of mother OFW (30 percent) or both parents OFW (12 percent).

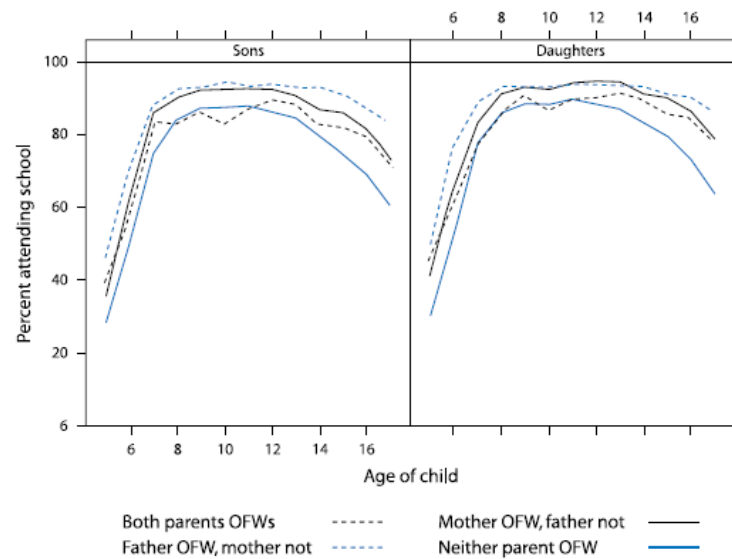
Annex 5b. Distribution of Filipino Children by Migration Status of Parents, 2000 Census

Age Group	All Children	Neither Parent OFW	All Children of OFWs	Father OFW, Mother Not	Mother OFW, Father Not	Both Parents OFW
0 - 4	9,563,000	9,259,000	304,000	188,000	79,000	37,000
5 - 17	22,691,000	21,857,000	834,000	474,000	266,000	94,000
Total	32,254,000	31,116,000	1,138,000	662,000	345,000	131,000
Share (%)						
0 - 4	100.0	96.8	3.2	2.0	0.8	0.4
5 - 17	100.0	96.3	3.7	2.1	1.2	0.4
Total	100.0	96.5	3.5	2.1	1.1	0.4

Source: Table 24. Distribution of Filipino children by migration status of parents, according to 2000 Census, cited in International Organization for Migration (2008), Situation Report on International Migration on East and Southeast Asia

The figure below depicts the differences in the school attendance of Filipino children, by migration status. Regardless of age and gender of the children, school attendance of OFW children is higher than non-OFW children. Also, children of father OFWs reported the highest incidence of school attendance, revealing the benefits of mothers who stay behind and attend to the child care activities of the household.

Figure 26. Percentage of children attending school, by age, sex and migration status of parents, Philippines, 2000



Source: Calculated from 10 per cent sample from 2000 census.

Source: "Figure 26. Percentage of children attending school, by age, sex, and migration status of parents, Philippines, 2000" cited in International Organization for Migration (2008), Situation Report on International Migration on East and Southeast Asia. page 180.