Demographic and Economic Trends: Implications for International Mobility

Martin, Philip

University of California, Davis

1 May 2009

Human Development Research Paper 2009/17

Demographic and Economic Trends: Implications for International Mobility

Philip Martin

United Nations Development Programme
Human Development Reports
Research Paper

April 2009

Human Development Research Paper 2009/17

Demographic and Economic Trends: Implications for International Mobility

Philip Martin

United Nations Development Programme
Human Development Reports
Research Paper 2009/17
June 2009

Demographic and Economic Trends: Implications for International Mobility

Philip Martin

Philip Martin is Professor of Agricultural and Resource Economics at University of California, Davis.
E-mail: plmartin@ucdavis.edu.

Comments should be addressed by email to the author(s).

Abstract

About three percent of the world's 6.1 billion people were international migrants in 2000. Population growth is expected to slow between 2000 and 2050 in comparison to 1950-2000, but international migration is expected to rise as persisting demographic and economic inequalities that motivate migration interact with revolutions in communications and transportation that enable people to cross borders. The default policy option to manage what is sometimes deemed out-of-control migration, adjusting the rights of migrants, is unsatisfactory, prompting this review of longer term factors affecting migration patterns, including aging in industrial countries, rural-urban migration that spills over national borders, and the migration infrastructure of agents and networks that moves people. The paper concludes with an assessment of the likely effects of the 2008-09 recession on international migration.

Keywords: Global population and labor force; aging, international migration, rural-urban migration, recession and migration.

Introduction: Global Population and Labor Force Trends

This section examines global, regional and country-specific population and labor force trends to 2050. It highlights major demographic and economic trends that affect international migration.

The half century between 1950 and 2000 was the "fast-population-growth era." The world's population rose by 150 percent, and the populations of what became major migrant-sending countries such as Mexico and the Philippines rose by 200 to 300 percent. Global population growth is expected to continue to 2050, but at much slower rates. A quarter of the world's 200 countries are expected to have shrinking populations and a quarter are expected to continue growing at rates that will double their populations within a half century.

The current more-developed countries have a fifth of the world's people and almost four-fifths of the world's GDP.[1] Their average per capita income of $37,600 in 2007 was almost five times the average $8,000 of low-income countries.[2] This economic incentive to move from poorer to richer countries is reinforced by fast labor force growth in less-developed countries and stable or shrinking labor forces in more-developed countries.

Population Trends

The world's population, 6.7 billion in 2007, included 1.2 billion residents in "more developed" regions and 5.4 billion or 82 percent in "less developed" regions. The world's population is projected to rise to 9.2 billion by 2050 in the median variant (UN, 2007, pxxi).[3] With almost all population growth projected to occur in what are now

---

1 The UN list of more developed countries is not exactly comparable to the World Bank's list of high-income countries.
2 World Bank Economic Indicators, 2008. World GNI was $52.6 trillion, including $39.7 trillion or 77 percent in high-income countries. At PPP, world GNI was $65 trillion, including $38 trillion or 58 percent in the high-income countries.
3 Keilman (1998, 15) finds that UN projections of population are most reliable for 10-15 years into the future.

considered "less developed" regions, the share of global population in more developed countries is projected to fall from 18 percent today to 13 percent by 2050.

The world's population was about a billion in 1800 and rose to 2.5 billion in 1950. High birth rates and falling mortality explain the rise in the global population, and migration explains the sharp increases in the share of the global population in Latin America, North America, and Oceania.

Between 1950 and 2000, when the world's population increased from 2.5 billion to 6.1 billion, the major shifts in population weights by continent were the result of changes in fertility and mortality rather than large-scale migration. The most noticeable shift was the decline in the share of the world's people in Europe, down from 22 to 12 percent, and the rising share of the world's people in Africa, up from nine to 13 percent. This trend of an expanding Africa and shrinking Europe is expected to continue, so that by 2050 there are projected to be three Africans for every European.

Table 1. World Population by Continent, 1800, 1950, 2000, 2050 (Percent shares)

	1800	**1950**	**2000**	**2050***
World (mils)	978	2,535	6,124	9,191
Africa (percent)	11	9	13	20
Asia	65	56	61	59
Europe	21	22	12	7
Latin America & Caribbean	3	7	9	9
Northern America	1	7	5	4
Oceania		1	1	1

Sources: UN. 1999. The World at Six Billion, Table 2; *projected

UN. 2007. World Population Prospects. The 2006 Revision.

The global population has been increasing by about 78 million a year, adding the equivalent of a Germany to the world population each year. The UN projects declining fertility, from the average 2.6 children per woman in 2005 to 2.05 by 2050.[4] If fertility does not decline to below-replacement levels as projected, the global population would reach 10.8 billion by 2050 (UN, 2007, pxxi). A combination of below-replacement fertility and low immigration is expected to result in the shrinking of populations in a quarter of the world's countries, including many European countries, Russia and Eastern European countries, and Japan and Korea (UN, 2007, pxxiii).

The UN groups people into three age groups—under 15, 15 to 59 and 60 and older.[5] The major changes expected in the world's population over the next four decades include a rising share of people 60 and older and growing differences in age structures between continents. Globally, the major demographic trend is aging--10 percent of people were 60 or older in 2005, and their share of the global population is projected to more than double to 22 percent by 2050. Aging will be most pronounced in more developed countries, where the share of residents 60 or older is projected to rise from 20 percent in 2005 to 33 percent by 2050, so that there will be two persons 60 and older for each child 15 and younger (UN, 2007, pxxiii). In less-developed countries, by contrast, there will be far more elderly, but still about one child for each person 60 and older.

Table 2. World Population by Age Group, 2005 and 2050 (Percent Dist)

	2005 0-14	2005 15-59	2005 60+	2050 0-14	2050 15-59	2050 60+
World	28	61	10	20	58	22
More Developed	17	63	20	15	52	33
Less Developed	31	61	8	21	59	20

---

4 Fertility in the more developed regions in 2005 was 1.6, versus 4.6 in less developed regions. Fertility is expected to rise to 1.8 by 2050 in more developed regions and

5 The UN projects population by age for 21-five-year age groups, e.g. 0-4, 5-9, 10-14 etc, ending with 100+.

Africa	41	53	5	28	62	10
Asia	28	63	9	18	58	24
Europe	16	64	21	15	51	34
Latin America & Caribbean	30	61	9	18	58	24
Northern America	20	63	17	17	56	27
Oceania	25	61	14	18	57	25

Source: UN. 2007. World Population Prospects. The 2006 Revision (pxxiii).

Age differences between continents are most pronounced for the old and young. In 2005, there were more children under 15 than residents over 60 in every continent, including 8 children for every elderly adult in Africa. By 2050, there will be more people 60+ than under 15 in every continent except Africa, including two elderly adults for each child in Europe.

In four major labor-sending countries over the past half century, there was rapid population growth, led by the Philippines. The populations of these four countries are expected to continue increasing at a slower pace, but the Philippines is projected to have more people than Mexico by 2050 because of higher fertility. If these projections prove accurate, one would expect emigration pressures due to demography to decline faster in Mexico than the Philippines.

Table 3. Population: Mexico, Morocco, Philippines, Turkey, 1950-2050 (mils)

	1950	2000	2050	1950-00	2000-50
Mexico	28	100	132	257%	32%
Morocco	9	29	43	222%	48%
Philippines	20	76	140	280%	84%
Turkey	21	68	98	224%	44%

UN, 2007, Vol 1. Medium variant

Labor Force Trends

The ILO's labor force projections add labor force participation rates (LFPR) to the UN's population projections, meaning that the ILO projects the share of persons who are in the "economically active population," defined as those who are employed or looking for work. Many countries do not report LFPRs, and the ILO estimates LFPRs for them (ILO, 2008).[6]

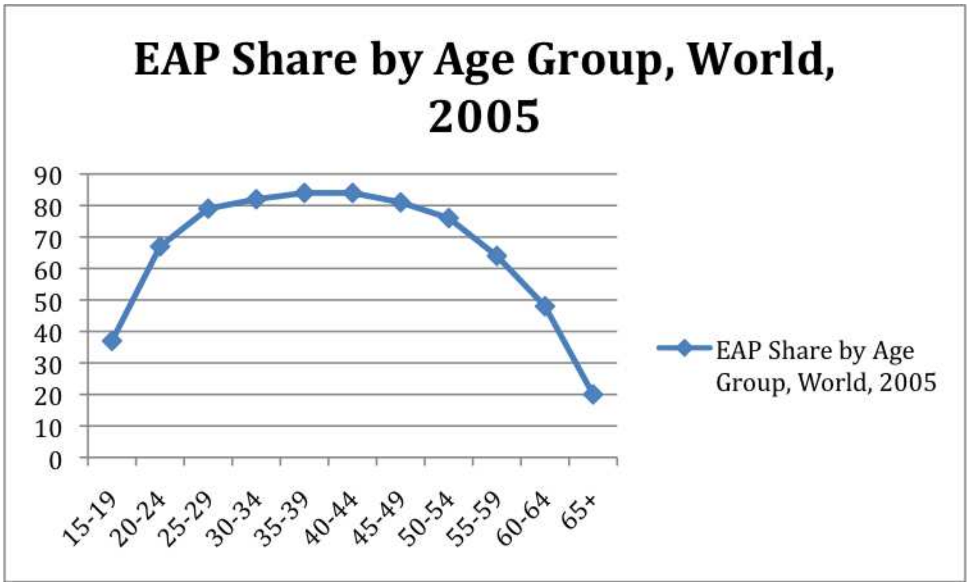
The ILO estimates LFPRs for 11 age groups, from 15-19, 20-24 etc to 65+, and for men and women. It finds that LFPRs:

- rise from younger to older age groups,
- reach their maximum values for men and women between the ages of 25 and 55, when 90 percent or more of men are in the labor force (women's LFPRs are slightly lower than men's because of motherhood) and
- begin falling for workers after age 55.

The result is a hat-shaped distribution of LFPRs, rising steeply as young people enter the labor force, reaching a maximum during the primary working years, and falling with retirement.

[6] The ILO (2008, 11) had LFPR data for 23 of the 191 countries for which projections were made; non-reporters are generally countries that are small and poor.

Figure 1. EAP Share by Age Group, World, 2005



The ILO's challenge is to apply appropriate LFPRs by age and sex to the correct base data--the number of persons in each age and sex group. It does this by country, as explained in volume 10 of the methodology (http://laborsta.ilo.org/applv8/data/SSMe.html). For example, in Mexico (p120), male LFPRs averaged 90 percent for the 25 to 50 age groups, while female LFPRs averaged 40 percent for the 25 to 50 age groups. In 1991, about 34 percent of economically active men were in agriculture, 25 percent in industry, and 41 percent in services; the distribution of economically active Mexican women was 11 percent in agriculture, 19 percent in industry, and 70 percent in services.

The ILO's most recent labor force projections cover the 1980-2020 period. The major trend at the global level is the gradual rise in the economically active share of the total population, from 43 percent in 1980 to 47 percent 2005 and 48 percent in 2020.

Table 4. EAP: World, 1980-2020 (mils)

	1980	**1985**	**1990**	**1995**	**2000**
World Pop	4,451	4,855	5,295	5,719	6,124

World EAP	1,930	2,160	2,406	2,605	2,818		
Share	43%	44%	45%	46%	46%		
	2005	**2010**	**2015**	**2020**	**2025**		
World Pop	6,514	6,910	7,295	7,667	8,010		
World EAP	3,050	3,279	3,481	3,651	3,845		
Share	47%	47%	48%	48%	48%		
	2030	**2035**	**2040**	**2045**	**2050**		
World Pop	8,317	8,587	8,824	9,025	9,191		
World EAP	3,992	4,122	4,236	4,332	4,412		
Share	48%	48%	48%	48%	48%		
EAP Change	1980-90	1990-00	2000-10	2010-20	2020-30	2030-40	2040-50
World EAP	25%	21%	17%	17%	9%	6%	4%

Source: http://laborsta.ilo.org (48 % EAP after 2020)

Population data from UN, 2007, medium variant

If the economically active share of the global population remains at 48 percent between 2020 and 2050, the world's labor force will increase from about 3 billion in 2005 to 4.4 billion in 2050. However, the rate of labor force growth will slow. There was remarkably fast labor force growth in the 1980s and 1990s, when the global labor force expanded by over 20 percent as a result of the baby boom of the 1960s and 1970s, to a projected expansion of four percent in the decade of 2040-50.

In 2005, about 20 percent of the world's workers were in the more developed countries and 80 percent were in the less developed countries. The labor force of the more developed countries is expected to remain at about 600 million if the overall LFPR remains at 48 percent, largely because of the stable populations of industrial countries. The ILO projects that the economically active share of populations in less developed countries will converge to the 48 percent of more developed countries, so the labor force of less developed countries will increase strictly with population after 2020. Thus, the labor force of more developed countries is projected to stop growing after 2020 because of the stable population, while the labor force of less developed countries continues rising at a slower rate and is still growing toward four billion in 2050.

Table 5. EAP: More and Less Developed Countries, 1980-2020 (mils)

	1980	**1985**	**1990**	**1995**	**2000**		
More Dev Pop	1,083	1,115	1,149	1,175	1,194		
More Dev Eap	523	545	569	574	589		
Share	48%	49%	50%	49%	49%		
Less Dev Pop	3,368	3,740	4,146	4,544	4,930		
Less Dev Eap	1,407	1,616	1,837	2,031	2,229		
Share	42%	43%	44%	45%	45%		
	2005	**2010**	**2015**	**2020**	**2025**		
More Dev Pop	1,216	1,232	1,245	1,254	1,259		
More Dev Eap	604	613	611	603	604		
Share	50%	50%	49%	48%	48%		
Less Dev Pop	5,299	5,674	6,050	6,413	6,752		
Less Dev Eap	2,446	2,666	2,870	3,048	3,241		
Share	46%	47%	47%	48%	48%		
	2030	**2035**	**2040**	**2045**	**2050**		
More Dev Pop	1,261	1,260	1,257	1,252	1,245		
More Dev EAP	605	605	603	601	598		
Share	48%	48%	48%	48%	48%		
Less Dev Pop	7,057	7,327	7,567	7,774	7,946		
Less Dev Eap	3,387	3,517	3,632	3,732	3,814		
Share	48%	48%	48%	48%	48%		
EAP Change	1980-90	1990-00	2000-10	2010-20	2020-30	2030-40	2040-50
More Dev Eap	9%	5%	4%	5%	0%	0%	-1%
Less Dev Eap	31%	26%	21%	20%	11%	7%	5%

Source: ILO http://laborsta.ilo.org (48% EAP after 2020)

Population data from UN, 2007, medium variant

In sum, the world's labor force in 2005 was about three billion, including 20 percent or 600 million in more developed countries. The labor force in more developed countries is projected to remain at about 600 million for the next four decades, while the labor force in less developed countries is expected to increase in line with population from 2.4 billion in 2005 to three billion in 2020 and 3.6 billion in 2040. Put another way, the 600 million *growth* in the size of the less developed labor force between 2005 and 2020, and again between 2020 and 2040, is equal to the (stable) labor force of more developed countries.

Most of the world's workers do not move, and most migrants move only a short distance. By continent, Africa is expected to have the fastest growing labor force and Europe a shrinking labor force. Most studies focus on areas with shrinking populations and labor forces, especially in Europe, and often examine the three policy levers that could be used to offset projected declines in the number of workers, viz, raising fertility,[7] encouraging more residents to work longer, and admitting immigrants. Most of the European studies put more emphasis on the fertility and employment policy levers than migration. For example, Bikak et al, projected that the labor force of the EU-27 would fall from 233 million in 2002 to 210 million in 2052; 57 percent of persons 15 and older were in the labor force in 2002, and they projected that only 49 percent would be in the labor force in 2052 in the base scenario (Bikak et al, 2006, 20).[8]

Africa will contribute disproportionately to labor force growth. The 357 million African workers in 2005 were 15 percent of the workers in developing countries in 2005. By

[7] Many demographers assert that fertility falls fastest in more developed economies with traditional social structures, attributing low fertility in Italy and higher fertility Sweden to the relative absence of child care and work arrangements that foster motherhood and to more traditional attitudes about motherhood.

[8] The population of the EU-27 countries, 494 million in 2002, was projected to be 495 million in 2052 under the base scenario, which antipastos 1.2 million net migrants a year (Bikak et al, 2006, 15-16).[8]

2050, Africa is expected to have an economically active population of 930 million, that is, almost 570 million more, so that 40 percent of the 1.4 million expected growth in developing country labor forces is in Africa. As the most rural continent, with 38 percent of residents urban in 2008 against a global average of 49 percent (www.prb.org), there is likely to be large-scale rural-urban migration, some of which spills over national borders.

It should be emphasized that labor force projections are subject to more uncertainty than population projections, especially over long periods. There have been three important changes in labor forces over the past half century, married women working for wages, later entry into the work force because of more education, and earlier retirement with better pensions. Labor force projections assume continued convergence in male and female labor force participation and do not anticipate significant increases in labor force participation among older workers. It should be emphasized that these assumptions about the future behavior of persons who could be in the labor force or retired may be wrong, especially as many countries with pay-as-you-go public pension systems raise the age at which workers receive full benefits (OECD, 2008).

Inequalities and Migration

People mover between areas to take advantage of differences, explaining migration from colder to warmer climates and from areas with lower wages to areas with higher wages. Globalization has increased linkages between countries, and made more people aware of differences between them.

Capital and goods also flow between countries, and their growth has led to international and regional bodies to set rules for trade and investment. However, people are different from money and goods, and managing their entry and stay is a core attribute of national sovereignty. International movements of people are not governed by a comprehensive global migration regime and, with a few exceptions, by regional migration agreements. Most nation states do not welcome newcomers as immigrants, but almost all countries that are richer than their neighbors have guest worker programs that allow local employers to recruit and employ foreign workers. Many also have significant numbers of unauthorized or irregular migrants.

Most of the world's people, and most population growth, occurs in developing countries. The world's population, which reached six billion in October 1999, is growing by 1.2 percent or 80 million a year, with 97 percent of the growth in developing countries.[9] In the past, significant demographic differences between areas sometimes resulted in large-scale migration. For example, Europe had 21 percent of the world's almost one billion residents in 1800 and the Americas four percent. When there were five Europeans for every American, millions of Europeans emigrated to North and South America in search of economic opportunity as well as religious and political freedom.

Will history repeat itself? Africa and Europe have roughly equal populations today, but by 2050, Africa is projected to have three times more residents. If Africa remains poorer than Europe, the diverging demographic trajectories of these two continents may propel young people from overcrowded cities such as Cairo and Lagos to Berlin and Rome.

The economic differences that encourage international migration have two dimensions, one fostered by inequality between countries and the other by inequality within countries. The world's almost 200 nation states have per capita incomes that range from less than $250 per person per year to more than $50,000, a difference that provides a significant incentive for especially young people to migrate for higher wages and more opportunities.[10] The 30 high-income countries had a billion residents in 2005, a sixth of

---

[9] The average woman in developing countries has 3.5 children (excluding China), versus 1.5 children per woman in developed countries. According to the Population Reference Bureau (www.prb.org), the world's fastest growing population is in Gaza, where the population growth rate is 4.5 percent a year, and the fastest shrinking population is in Russia, where the population is declining by 0.5 percent a year.

[10] Young people are most likely to move over borders because they have the least invested in jobs and careers at home and the most time to recoup their "investment in migration" abroad.

the world's population, and their gross national income was $36 trillion, 80 percent of the global $45 trillion.[11]

The resulting average per capita income of $35,000 in high-income countries was 21 times the average $1,750 in low and middle-income countries. Despite rapid economic growth in some developing countries, including East Asian "Tigers" in the 1990s and China and India more recently, the 20-1 ratio in per capita incomes between high-income and other countries rose between 1975 and 2000 and shrank only marginally since then. Average per capita incomes were 61 times higher in 2005 in high-income than low-income countries, and 13 times higher in middle-income countries.

Differences encourage migration, but it takes networks or links between areas to encourage people to move. Migration networks are a broad concept, and include communication factors that enable people to learn about opportunities abroad as well as the migration infrastructure that actually transports migrants over national borders and the rights regime that allows them to remain abroad. Migration networks have been shaped and strengthened by three revolutions of the past half century, in communications, transportation, and rights.

The communications revolution helps potential migrants to learn about opportunities abroad. The best information comes from migrants established abroad, since they can provide family and friends with information in an understandable context. Cheaper communications enable migrants to quickly transmit job information as well as advice on how to cross national borders to friends and relatives at home. For example, information about vacant jobs on Malaysian plantations may be received in rural Indonesia before it spreads to nearby Malaysian cities.[12] Meanwhile, films and television programs depicting

---

[11] Average per capita was $7,000 per person. At purchasing power parity, which takes into account national differences in the cost of living, the world's gross national income was $56 trillion or $9,400 per capita--$32,500 per capita in the high-income countries and $5,200 in low and middle-income countries.

[12] These farm worker recruitment networks are examined in Rural Migration News. http://migration.ucdavis.edu/rmn/index.php

life in high-income countries may encourage especially young people to assume that the grass is greener abroad, or that migration will lead to economic betterment.[13]

The transportation revolution highlights the cost of travel today compared to mass migration a century or two ago. British migrants unable to pay one-way passage to North American colonies in the 18th century often indentured themselves, signing contracts that obliged them to work for three to six years for whoever met the ship and paid the captain. Transportation costs today are far less, typically less than $2,500 to travel anywhere in the world legally, and $1,000 to $20,000 for unauthorized migration. Most studies suggest faster payback times for migrants today, so that even migrants who pay high recruitment or smuggling fees can usually repay them within two or three years.

The communications and transportation revolutions help migrants to learn about opportunities and to cross national borders, while the rights revolution affects their ability to stay abroad. After World War II, most industrial countries strengthened the constitutional and political rights of people within their borders to prevent a recurrence of fascism, and most granted social or economic rights to residents in their evolving welfare states without distinguishing citizens and migrants.

As migration increased in the 1990s, policy makers began to roll back especially socioeconomic rights for migrants in an effort to manage migration. Adjusting rights is widely acknowledged to be both a blunt and inefficient instrument to manage economically motivated migration.

Population Aging and International Migration

This section assesses the implications for future international migration flows of aging populations in industrial countries. Aging, population decline, and and an expanding health-care sector could change migration signficantly.

---

[13] Even if migrants know that movies and TV shows portray exaggerated lifestyles, migrants who find themselves in slave-like conditions abroad sometimes say that they did not believe that things in rich countries could be “that bad.”

Global population aging is unprecedented, appears to be irreversible, and is occurring so rapidly that especially developing countries are will have far less time to adjust than today's industrial countries. The share of developed country populations 60 and older is projected to rise from 20 to 33 percent between 2005 and 2050, while the share of developing country populations that are elderly is projected to double from 10 to 20 percent in this period.

Some industrial countries are expected to experience both population aging and population decline. These countries, including Italy, Japan, Russia, have not yet developed comprehensive immigration responses that could include e.g. admitting immigrants to maintain their populations or ratios between dependent and working-age populations.

Ageing is likely to prompt some migration of the elderly to lower-cost areas, to induce the development of technologies that enable the elderly to care for themselves in the countries in which they live, and prompt more migration of caregivers from lower to higher wage countries. The exact mix of responses is likely to vary across countries and depend on economic and personal factors. For example, making health insurance portable and developing high-quality health care facilities is likely to encourage more of the elderly to move to lower-cost areas, many of which have warmer weather.

Population Aging

UN reports emphasize four major aspects of population aging (2002, pxxviii). First, global population aging is unprecedented. For the first time in human history, there are expected to be more elderly than children in 2050, as both are currently defined. Second, population aging is universal, confronting all societies with challenges related to inter- and intra-generational equity. Third, population aging appears to be enduring, meaning that we are unlikely to return to a world in which there are several children for each elderly person.[14] Fourth, the more developed countries had much more time to adjust to

[14] In 2007, there were more people 65 and older than under age five, and this is unlikely to change in the future.

population aging than is likely to be available to the less developed countries. For example, it took over a century for the share of French residents 65 and older to double from seven to 14 percent, but in many developing countries the share of residents 65 and older will double in two decades or less.

The world's population is growing by about 1.2 percent a year; the population of persons 60 and older is growing at least twice as fast. About 20 percent of the residents of more developed countries are 60 and older, a proportion expected to rise to a third by 2050. The share of elderly among the residents of less developed countries, about 10 percent today, will rise faster, doubling to 20 percent by 2050. The median age of all people on earth was 24 in 1950, 27 in 2000, and is projected to be 38 in 2050; for more developed countries, these median ages were 29, 37, and a projected 46.

Many countries are expected to experience population aging and population decline. Japan, Russia and many parts of the ex-USSR, and Italy and Germany are examples of countries that are both aging and shrinking. The UN found that 15 percent of 193 governments responding to a 1999 survey, two thirds in Europe, thought their rate of population growth was too slow; 41 percent thought their population growth rate was too high, and 44 percent thought it was satisfactory (Zoubanov, 2000).

Economic Effects of Aging

The major reasons for population aging are rising life expectancy and declining fertility. Neither trend is likely to reverse soon. Most governments redistribute incomes from working-age residents to the young and old, so that population aging can be expected to shift government priorities from education toward health, especially if older voters want governments to make such a shift in priorities. Many countries also provide income support to the elderly from the contributions of currently employed workers, and population aging strains the finances of such pay-as-you-go pension or social security systems.

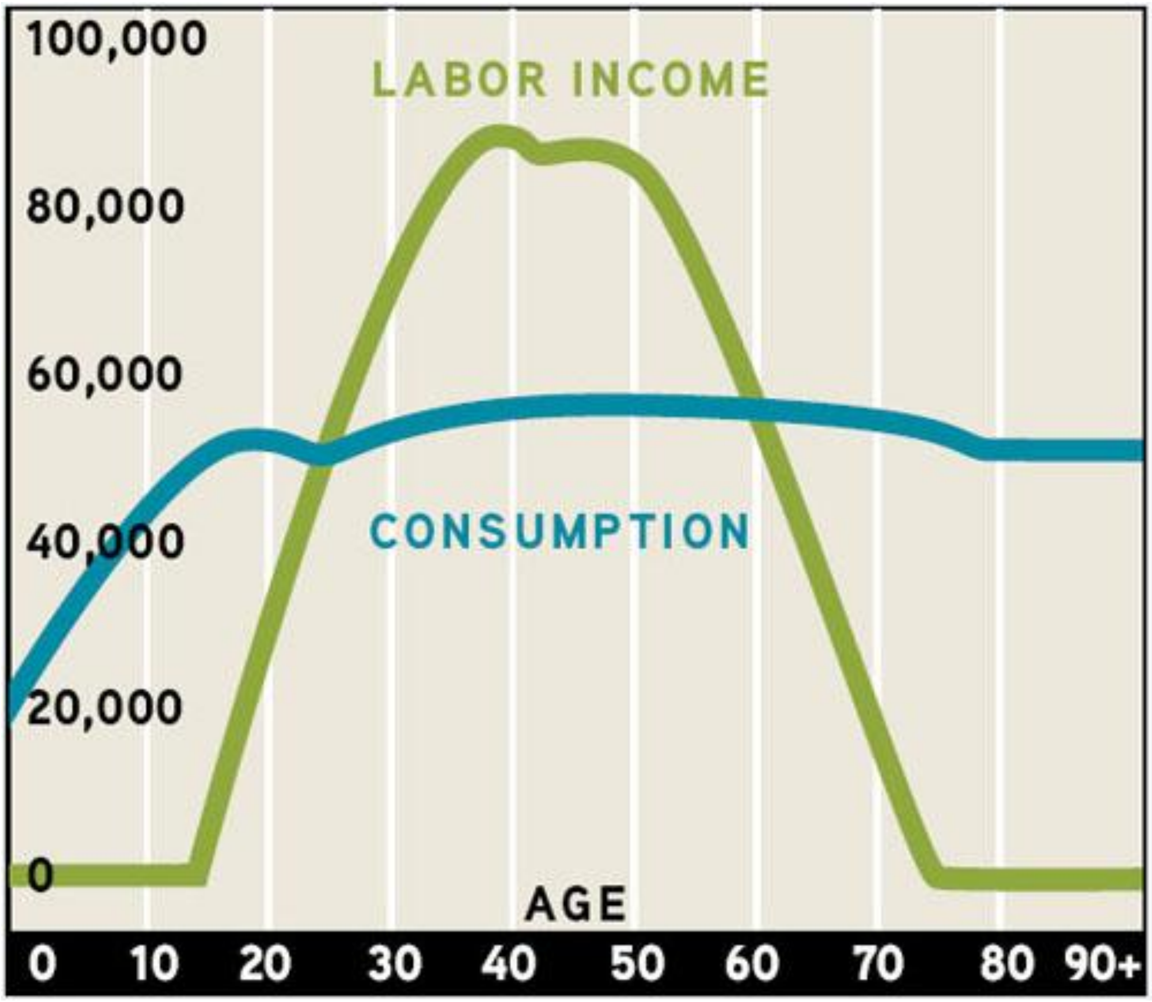
Economists believe that societies can benefit from two "demographic dividends" that speed up economic and job growth. The first dividend is a one-time event, as declining fertility means there are fewer youth to educate and more women available to work for wages. Families tend to invest more in each of their fewer children, and the availability of large numbers of well-educated young workers can fuel economic and job growth, sometimes stimulated by foreign investment, as with the East Asian economic miracle economies (World Bank, 1993).[15]

The second demographic dividend can be ongoing, as longevity prompts workers to increase their savings, lowering the cost of capital and increasing investment, which can raise productivity. The life-cycle theory of consumption and savings assumes that households accumulate wealth during working years to maintain consumption in retirement. If workers save for retirement during their peak earnings years, countries with a high proportion of workers will tend to be dominated by savers, putting downward pressure on the rate of return to capital and spurring investment. The result can be an increase in productivity for ever-fewer workers and a virtuous circle of low interest rates, more investment, and rising productivity and earnings.

---

[15] Real per capita GDP in East Asia rose almost five percent a year between 1960 and 2005. Credit is attributed to sound macroeconomic policies, infrastructure investment, and policies that favored exporters. The ensuing discussion focused on whether productivity growth or large increases in physical capital and labor were largely responsible for the rapid economic growth, that is, was the miracle due to innovation or perspiration.

Figure 2. Life-cycle Theory of Consumption and Savings[16]



The second demographic dividend is premised on private savings for retirement. However, if government policies provide the elderly with generous pensions and health care benefits, making it unnecessary for workers to save during their working lives, economic growth may slow as taxes on ever-smaller cohorts of workers rise to provide penion and health benefits to the elderly. If governments provide penion and health benefits from taxes levied on current workers, the tax rate must rise or the age of retirement must increase.

---

[16] Figure is taken from Lee and Mason.
www.imf.org/external/pubs/ft/fandd/2006/09/basics.htm

The share of government resources devoted to the elderly is about the same as their share of the population in industrial countries (Papadimitriou, 2007). With little prospect for an upsurge in fertility, many observers say that governments in countries experiencing both population aging and decline face the choice of reducing benefits for the elderly or raising taxes on workers.

On the other hand, raising the retirement age to 75 could maintain current support ratios, the ratio of non-working children and retired persons to those of working age, in most industrial countries (United Nations, 2000, p5). Since older people are healthier than a generation ago, raising the age before those who retire receive full retirement benefits can dramatically reduce dependency ratios. One researcher estimates that a French woman of 77 in 2000, in terms of health and fitness, is equivalent to a 63-year old in 1900 (Bourdelais, 1999).

Aging and Replacement Migration

Migration is often touted as at least a partial "solution" to population aging, giving governments an alternative to reduce benefits for the elderly or raising taxes on workers. The basic argument is straightforward. Working age immigrants who arrive and find jobs can pay taxes that can help to sustain pay-as-you-go social security systems. However, immigration (unless it increases over time) has mostly a one-shot effect on the financing of pay-as-you-go social security systems, since immigrants also age and become eligible for government-provided benefits.

Replacement migration would have to be far higher than current levels of immigration to maintain current ratios of working age to elderly populations, especially in Europe (United Nations, 2000). The Big 4 EU countries, France, Germany, Italy, and the UK, included about two-thirds of EU-15 residents (those in the 15 EU countries before enlargement in 2004 and 2007), and received about 88 percent of the EU's immigrants in 1995. To maintain their 1995 populations at then prevailing fertility rates, immigration would have to triple, from 237,000 a year to 677,000 a year, and immigration to Italy would have to increase over 42 times its mid-1990s level.

Table 6. Replacement Migration in Europe, 1995

	Actual Immigration in 1995 (thousands)	Average annual number of migrants required: 2000-2050					
		to maintain 1995 Pop (thousands)	Multiple of 1995 immigration	to maintain 1995 working-age pop) (thousands)	Multiple of 1995 immigration	to maintain Pop support ratio* (thousands)	Multiple of 1995 immigration
EU (15 countries)	270,000	949,000	4	1,588,000	6	13,480,000	50
Big 4 EU	237,000	677,000	3	1,093,000	5	8,884,000	37
France	7,000	29,000	4	109,000	16	1,792,000	256
Germany	204,000	344,000	2	487,000	2	3,630,000	18
Italy	6,000	251,000	42	372,000	62	2,268,000	378
United Kingdom	20,000	53,000	3	125,000	6	1,194,000	60
Other EU countries	33,000	272,000	8	495,000	15	4,596,000	139
United States	760,000	128,000	0	359,000	0	11,851,000	16

*Migrants necessary to maintain 1995 population ratio of persons ages 15-64 to those ages 65 or older.

To maintain their 1995 labor forces, the Big 4 EU countries would have to increase immigration to 1.1 million a year. Finally, to “save social security,” to keep stable the ratio of persons 18 to 64 years old to persons 65 and older, immigration to the Big 4 EU countries would have to increase 37-fold, to almost 9 million a year. Italy alone would have to admit 2.3 million immigrants a year.

Opinion polls suggest that most Europeans do not welcome more immigration.[17] The EU-15 nations receive 300,000 to 500,000 legal newcomers a year, including returning citizens, family members of settled foreigners, guest workers, and asylum applicants, plus up to 500,000 unauthorized foreigners, not all of whom stay in Europe. Unemployment rates for foreigners from outside the EU are often 2-3 times higher than for natives and EU nationals, allowing opponents of more immigration to assert that opening doors wider to immigrants, or legalizing unauthorized foreigners, could add to unemployment rather than tax-paying workers.[18]

Even if migration cannot solve the fiscal challenges associated with government taxing current workers to care for the elderly, selective migration policies may be able to provide low-cost caregivers for the elderly reducing support costs. Ageing is projected to increase fastest in less developed countries, meaning that the demand for caregivers for the elderly is likely to rise fastest in them, but wage differences in the labor-intensive care industry could nonetheless stimulate migration in response to aging. Most caregivers are women, and migration in response to population aging is likely to include migrant women who care for elderly residents in their homes as well as migrant health care workers who provide care in homes as well as nursing homes and hospitals.

There is some migration targeted at the young and old in the emerging global care chains, as when women leave their families to care for the young and old abroad (Yeates, 2005). Much of the global care chain literature focuses on health care, and much of it is very critical of the restrictions on female migrants who cross borders to provide care. For example, Canada's Live-in Caregiver Program requires migrants to live in private homes and provide care to children or the elderly for at least two years in a three-year period to become eligible for an immigrant visa

[17] A poll released in December 2007 found that over 80 percent of Germans and Britons thought that immigrants should have to pass language tests to remain in these countries. Tony Barber, Europeans want tests for immigrants, Financial Times, December 13 2007
[18] The ratio of non-EU foreigner to the total unemployment rate is highest in northern and western Europe, where the welfare state is best developed, and where a large government sector restricts government jobs to nationals or EU foreigners (Sapir, 2000).

(www.cic.gc.ca/ENGLISH/work/caregiver/index.asp); critics charge that migrant women are vulnerable to abuse because they are in private homes and subject to removal if they lose their jobs (Diocson, 2005).

Global care chains that increase migration are likely to expand, but there are alternatives to migrant care givers that range from technology to migration to care-providing countries. Japanese firms have pioneered a variety of technologies to enable the elderly to remain in their homes and summon help when needed or rely on robots to help with daily chores from cooking to bathing.[19] There have also been proposals for "retirement villages" in countries with lower cost workers, such as the Philippines.[20]

Ageing can be a reason for migration, as the elderly seek better weather, lower living costs, or other amenities. Ageing can also induce migration, as migrant caregivers arrive to care for the elderly. All three responses to aging, migration of the elderly to lower-cost areas, new technologies to help the elderly care for themselves, and increased migration of caregivers from poorer to richer nations, are likely to occur, with the exact mix varying with wages and economic conditions and a wide range of other factors. However, more migration of caregivers from poorer to richer areas is likely to be an important component of the response to aging.

The Need for Migrants

Employers sometime argue that they need migrants to fill essential jobs shunned by local workers, sometimes asserting that they cannot afford to pay higher wages because of international competition, as with agriculture, or because higher wages would mean higher costs and higher prices that drive away consumers, as with restaurants. At the same time, it is sometimes argued that there are a fixed number of jobs, so that the arrival

---

[19] Economist, "Better than people," December 20, 2005, says that "Although they are at ease with robots, many Japanese are not as comfortable around other people." www.economist.com/world/asia/displaystory.cfm?story_id=5323427

[20] One proposal to attract elderly Japanese to the Philippines is at: www3.jetro.go.jp/ttppoas/anken/0001051000/1051449_e.html

of migrant workers increases unemployment among local workers. Both shortage and lump of labor arguments, in their simple forms, are wrong.

The lump of labor assumes there are a fixed number of jobs that must be shared with more workers as a result of migration. However, economies are dynamic, and the presence of more workers can prompt an expansion of employment to provide them with services that range from housing to food, creating jobs for both migrant and local workers. It is for this reason that the unemployment rate can fall or remain unchanged despite an upsurge in migration.

Labor markets are flexible, creating jobs when more workers are available and adjusting to fewer workers with rising wages and higher productivity. The signal for adjusting to more jobs than workers is wages. As they rise, some workers shift between sectors, some employers subsitute capital for labor, and there are many other changes that can bring labor supply and demand into balance.

Rural-Urban and International Migration

This section examines the links between rural-urban migration within countries and international migration. Three examples, from Mexico, Morocco, and the Philippines, highlight the diversity of the links between rural-urban migration and international migration.

Mexico-US migration began with US government-approved recruitment of Mexican workers living near north-south oriented railroads that offered the lowest cost transport to farm jobs in the southwestern United States. Most Mexican-born US residents continue to arrive from the same rural areas of the west-central states of Mexico in which Braceros were recruited between 1942 and 1964. Migration orgins in Mexico and destinations in the US have diversified during the past decade, and more indigenous residents of southern Mexican states, many of whom speak Indian languages rather than Spanish, are arriving and moving to the midwest and southeastern US.

Morocco is the major migrant-sending country in northern Africa; at least 1.5 million of five percent of the 31 million people born in Morocco have emigrated. Emigration pressures remain significant, especially in rural areas that have a tradition of resisting the central government and remain relatively poor. Morocco has also become an important transit country for sub-Saharan Africans headed to Europe.

The Philippines is the major labor exporter in southeast Asia; 10 percent of the 90 million persons born in the country are abroad. Many Filipino migrants are from lagging rural areas, but many provide recruiters and the POEA with Metro Manila addresses, which makes it hard to determine the exact links between rural and international migration.

Perhaps the most important message of this section is that migrants seek opportunity. If those migrating from rural areas can find opportunity in cities inside their country, they do not cross national borders, as exemplified by the apparent *absence* of links between rural-urban migration within China and migration from China. However, when rural-urban migrants cannot find opportunity in cities within their countries, some may emigrate, as with Mexicans drawn to border-area maquiladoras (foreign-owned assembly plants) who continued on to the United States.

Mexico-US Migration

The largest bilateral flow of migrants today is from Mexico to the United States; at least 10 percent of the 120 million people born in Mexico have moved to the US.

Large-scale Mexico-US migration was not anticipated in 1970, when Mexico had about 50 million residents and there were about 750,000 Mexican-born US residents, meaning that about 1.5 percent of Mexicans had moved to the US. By 2000, Mexico's population doubled to 100 million, and the number of Mexican-born US residents increased to 10 million, so that 10 percent of those born in Mexico had moved to the United States. Mexico-US migration continued at high levels through 2006, reaching a peak 12 million

Mexican-born US residents before numbers appear to have leveled off in 2008 with the US recession and stepped up enforcement of US immigration laws.[21]

The reasons for large-scale Mexico-US migration lie inside both countries. The US government allowed US farmers to recruit Mexican Braceros (strong arms) between 1942 and 1964, giving up to two million rural Mexicans US work experience over two decades (Martin, 2009, Chapter 2). Meanwhile, Mexican government policies in the 1920s grouped most small farmers into ejidos that did not give clear titles to land; population growth led to ever smaller plots in a system of land tenure that discouraged private investment.

When the US government ended the Bracero program, the Mexican and US governments tried to find alternative jobs for rural Mexicans who had moved their families to the border area (Braceros had an incentive to move to the border area because US farmers had to pay their cost of transportation, and individuals closer to the US were most likely to be selected). Mexico in the mid-1960s had an import-substitution policy, but made an exception for maquiladoras, foreign-owned plants that imported components, assembled them into finished goods, and re-exported the finished goods. Maquiladoras did not help many ex-Braceros, who were mostly young men, because the factories preferred young women.

There was little unauthorized Mexico-US migration in the 1960s, which enabled Cesar Chavez and the United Farm Workers to win one-year wage increases of more than 40 percent in the late 1960s with California grape growers. Unionization and rising farm

---

[21] The Center for Immigration Studies estimated a peak 12.5 million unauthorized foreigners in August 2007, and a drop to 11.2 million in May 2008; almost 60 percent of the unauthorized in the US were born in Mexico. The Pew Hispanic Center estimated that the unauthorized population in the US rose by 800,000 a year between 2000 and 2004, but only 500,000 a year between 2005 and 2007. Pew estimated that the 12 million unauthorized in March 2008 included seven million Mexicans, three million from the rest of Latin America, and two million from the rest of the world. See Migration News. 2008. Unauthorized, Population, States and Cities. October Volume 14 Number 4. http://migration.ucdavis.edu/mn/more.php?id=3433_0_2_0

wages were the hall marks of the 1970s, especially in California, while the population of rural Mexico surged. However, strikes called in California in the early 1980s to push entry-level farm wages to twice the federal minimum wage just after the Mexican peso was devalued sharply sent millions of Mexicans northward. There were no penalties or sanctions on US employers who knowingly hired unauthorized workers, so that up to a quarter of US seasonal farm workers were unauthorized in 1986, when the US government attempted to reduce unauthorized Mexico-US migration with sanctions on employers who knowingly hired unauthorized workers (Martin, Mines and Diaz, 1985).

The 1986 immigration reforms also included two legalization programs for unauthorized foreigners in the US, one based on residence (in the US before 1982) and the other based on having done US farm work just before reforms were enacted. Mexicans were 85 percent of the 2.7 million foreigners legalized, and almost 45 percent of the Mexicans were legalized under the farm worker program. There were only about six million adult men in rural Mexico in the mid-1980s, and a million became US immigrants in the late 1980s under the Special Agricultural Worker program (Martin, 1994). However, their families were not legalized, under the theory that these Mexican men wanted to work only seasonally in the United States. This assumption proved false, and the decision of many rural Mexicans who had become US immigrants to bring their families to California during the early 1990s recession helped to set the stage for voter approval of Proposition 187 in 1994, the same year that the North American Free Trade Agreement went into effect.

Mexico is a rapidly urbanizing middle-income developing country with a very uneven record creating formal sector jobs and strong links to the US labor market. The World Bank's 2008 indicators put GNI per capita at $8,340, versus $46,000 in the US, a one to five spread. However, inequality means that the gain from leaving rural Mexico for the US is much larger, often increasing wages by 8 or 10 times. Mexico's economy expanded by 2.6 percent a year between 2000 and 2007, about the same as the US economy's 2.7 percent a year growth.

Rural Mexicans continue to migrate to the United States because they can more easily find formal sector jobs in the US. In 2000, about 15 million Mexicans had formal private-sector jobs in Mexico, and six million Mexicans had formal private-sector jobs in the United States. Between 2000 and 2006, the employment of Mexicans in the US rose about as much as formal sector employment in Mexico. Thus, the story of Mexico-US migration is one in which the US government approved and then tolerated the recruitment of rural Mexicans, and the lack of alternatives in urban Mexico combined with the availability of US jobs to sustain the flow. Eventually, rural Mexico will run out of young people willing to migrate, but perhaps not for another decade or two (Martin, 2005a).

Table 7. Mexico-US Population and Labor Force, 1970-2000

	Mexico	US
Population (Mils)-1970	53	203
Labor Force (Mils)-1970	15	83
% of population	28%	41%
Population (Mils)-2000	100	281
Labor Force (Mils) 2000	40	141
% of population	40%	50%
Labor Force Increase	167%	70%
Employment	2000	2000
Formal Sector Jobs (Mils)	15	125
Filled by Mexicans	15	6
Employed in Ag (Mils)	6	3

Filled by Mexicans	6	2
Population (Mils)-2050	151	414
Labor Force (Mils) 2050	70	207
% of population	46%	50%
Labor Force Increase	174%	146%

Sources: US Census and Conapo, 2050 projections from PRB

IMSS Instituto Mexicano del Seguro Social. Subdirección General de Finanzas.

Morocco-Europe Migration

Morocco is a country of 31 million with a demographic structure similar to that of other Northern African countries and Turkey. About 30 percent of Moroccans are under 15 and six percent are 65 and older, compared with 28 and six percent in Turkey and 16 and 18 percent in Western Europe (PRB, 2008).

Historically, Morocco received Arab-speaking migrants after 600AD and many Muslims and Jews leaving Spain after the reconquista of the Iberian Peninsula in 1492 moved to Morocco. Morocco became a French colony in 1912. French farmers recruited internal migrants to fill seasonal jobs, and growing cities attracted rural-urban migrants, including to Algerian cities (Algeria became a French colony in 1830). Spain controlled northern Morocco and the western Sahara between 1912 and 1956, when Morocco gained its independence.

In the late 1950s and early 1960s, rapid economic growth in France and other western European countries attracted Moroccan guest workers. By 1968, there were an estimated 137,000 Moroccans in Western Europe, including 61 percent in France and less than one percent in Spain (de Haas, 2005). A combination employer recruitment policies—employers familiar with Moroccan workers were most likely to recruitmen them—and the Moroccan governent's selective passport issuance policies meant that most labor migrants were from initially three "migration belts" until networks allowed Moroccans from other areas to become guest workers as well (de Haas, 2007).

The number of Moroccan citizens in Western Europe, as reported by Moroccan consultates, more than doubled to 291,000 in 1972 and continued rising after guest worker recruitment was stopped in 1973-74 via family unification. By 1990, there were 1.2 million Moroccans in Western Europe, including 55 percent in France. During the 1990s, Moroccans began to move to Italy and Spain, so that by 2005 the number of Moroccan citizens in Western Europe doubled to 2.3 million, including 43 percent in France, 17 percent in Spain, and 14 percent in the Netherlands.

Relatively few Moroccans returned to Morocco in the 1970s because failed coups in 1971 and 1972 ushered in an era of economic instability and repression; Moroccans have one of the lowest rates of return migration among guest workers recruited to Western Europe. De Haas (2005) estimated that at least three million Moroccans, over 10 percent, are outside the country, including 2.2 million in Europe.

As in Mexico, the Moroccan government encouraged foreign employers to recruit workers in poorer Berber-speaking areas such as the northern Rif Mountains; Berbers had long resisted central authority. Migration begat more migration from these areas, as friends and relatives settled abroad facilitated movement at a time of economic stagnation at home that discouraged the investment of remittances. Until visa requirements were imposed on Moroccans in 1990 by Italy and in 1991 by Spain, Moroccans could go to these countries as tourists and remain to work.

The Moroccan government actively discouraged citizens abroad from integrating in the 1960s and 1970s, in part to forestall what could have been support for the opposition at home and to maintain the flow of remittances. Moroccan government policy changed in the early 1990s, and now encourages naturalization abroad so that Moroccans become dual nationals,[22] and welcomes Moroccan migrants when they make return visits. One result is rising remittances, which are five to 10 percent of GDP, more than ODA and FDI, and remittances have remained high in recent years even as outmigration slowed (de Haas and Plug, 2006, 611).

Like Mexico, Morocco has become both a source and transit country for migrants headed to Europe (Mansvelt Beck et al, 2001). The EU has provided assistance to discourage sub-Saharan Africans from traveling through Morocco en route to Europe, sometimes with methods that draw protests from human rights organizations. The EU is also providing significant support to promote economic development, especially in Morocco's northern provinces that remain important sources of migrants headed to Europe.

The migration of Moroccans to Europe affected rural-urban migration patterns. As in Turkey, many Moroccans who returned invested in towns and cities in their region of origin rather than in the villages from which they came, encouraging those who did not migrate to Europe but are seeking more opportunity, to move to towns and cities (Morocco was 56 percent urban in 2005; Turkey was 62 percent urban). The spending of remittances in migrant areas had multiplier effects that attracted rural-urban migrants from poorer areas of Morocco.

Filipino Migration and Development

The Philippines is the major migrant-sending country in Asia, sending over a million workers a year abroad or over 3,000 a day. Sending workers abroad was a reaction to the 1973-74 oil price hikes that slowed economic growth and increased unemployment in the Philippines; foreign migration at the time was considered a bridge until economic growth resumed.

[22] Moroccans cannot lose their natinoality; when they naturalized abroad, they become dual nationals.

The first Filipino migrants were men, some of whom had been employed by US military contractors during the Vietnam war to provide support services. However, by the time the Philippine Overseas Employment Administration (POEA) was created in 1982, the majority of Filipino migrants were women, many of whom had relatively high levels of education and were going abroad to provide care in private homes. The high share of female migrants, and their employment abroad in sectors not covered by labor laws, helps to explain the protective system erected in the Philippines to protect Filipino migrants during recruitment and while abroad.

Migration has become a major element of the Filipino economy and society. Over half of Filipinos have been abroad or have a relative who is or was abroad. The experiences of migrants are reported daily in the press, and their experiences abroad are depicted in novels and dramatized in movies. The 2000 movie “Anak" or "Daughter" tells the story of a mother who returned from working as a maid in Hong Kong and found her family torn apart by her absence. Radio programs such as Babaeng Migrante, May Kakampi Ka (Women Migrant, You have an Ally) discuss issues relevant to women thinking of emigrating.

The business of migration are a key part of the Filipino economy, involving recruiters, travel agents, remittance and insurance services. Businesses that help migrants to invest their remittance savings are common, even in rural areas whose major link to the global economy is migration. Many investment advisors travel to places with Filipino migrants such as Hong Kong, offering training in how to start a small business upon return. Coining terms such as “Entrepinoys,” they urge domestic helpers to “get away from this employment mentality, working just so our children can get better work, and see the other side of the coin, see the beauty of creating your own life through business.” Critics say that few returned maids succeed in business at home.

The press and the national government treat migrants as national heroes for venturing abroad to work and send remittances to families at home. Returned migrants are viewed with respect in their home towns for their hard work and achievements abroad.

Nevertheless, the impacts of migrants on families, communities and the economy are mixed. There are many accounts of mothers working abroad so that their children can finish school, but also of relatives who become dependent on remittances and stop trying to improve their lot by their own efforts. Some returned migrants lose their savings in a failed business, and then re-migrate.

The Philippines has slipped in economic rankings, explaining why many rural Filipinos see emigration as the surest route to upward mobility. In 1960, the Philippines had a $300 GDP per capita, second in Asia only to Japan at $500. Successive governments maintained an import-substitution strategy much longer than the East Asian "miracle" economies, so that the Philippines did not receive the foreign investment that led to export and job creation booms like those of Taiwan and Thailand. Widespread corruption and complicated tax laws and tax evasion limit tax revenue to 15 percent of GDP, which restricts the government's ability to invest and improve infrastructure. Efforts to increase tax collections, end monopolies, liberalize trade, and privatize state-owned businesses have been blocked in Congress by those who would lose privileges, so the Philippines has a low savings rate and high levels of domestic and foreign debt.

Agriculture employs a third of the labor force of 34 million, and is dominated by two crops, rice for domestic consumption and coconuts for export. Rice production rose in the 1990s, while coconut production fell. Other export crops are bananas and pineapples; many sugar producers have switched to other crops and fish farming. Most farms are very small—90 percent were smaller than 5 hectares in the early 1990s, and there are far more landless peasants than farmers with land. Efforts to break up land holdings larger than 5 hectares have been blocked by large landowners, some of whom incorporated and gave their workers shares of stock instead of land.[23] Small farmers who receive redistributed land often fail because of poor infrastructure and declining prices of coconut and sugar.

---

[23] For example, Eduardo M. Cojuangco Jr. obtained a monopoly on coconut exports from then President Ferdinand Marcos, and used the profits to buy farm land as well as the beer and food conglomerate San Miguel. Instead of selling his land to peasants, Cojuangco persuaded peasants working his land to let him retain land titles, and to become shareholders in what he calls a "corporative."

Many Filipino migrants return to their rural villages after two or three years abroad, often with the goal of starting a small business. There are a variety of migrant coops and private businesses to help them invest their savings from overseas work.[24] However, the National Reintegration Center for Overseas Foreign Workers (www.nrco.dole.gov.ph) reports that most unskilled migrants must work abroad at least three years to repay the debts they incurred to become OFWs, so those with the most savings have been out of the Philippines the longest. A typical pattern is for a woman to go abroad under a series of two-year contracts between 25 and 45, and then return to retire.

The impacts of migration and remittances in rural Philippines were captured in a report on Pozorrubio, a city of 60,000 with 6,000 residents overseas.[25] Western Union plays a central role in the city's life, bringing remittances from migrants overseas that have spruced up the city; Pozorrubians of Greater Los Angeles donated supplies to a local hospital. The Rural Bank of Pozorrubio says that remittances have given it more savings than can be lent locally.

The emigration wave began in the 1980s, and remittances brought concrete houses and appliances—even before there was electricity, some homes put dishwashers, refrigerators and televisions on the porch. Education for children was the priority of many families, and many residents posted their degrees on their homes, such as Certified Public Accountant," "Attorney at Law" or "Registered Nurse." However, despite the focus on education, the children of overseas workers usually become overseas workers themselves, largely because remittances did not create good-paying local jobs. Children educated with their parents' remittances often say they want to work abroad as a domestic helper.

---

24 There are reported to be over 200 cooperatives, associations and self-help groups that have managed to pool their remittances to create small and medium enterprises.

25 Robert Frank, "Checks in the Mail," Wall Street Journal, May 22, 2001. www.siquijor.com/Articles/pozzorubio.htm

The Migration Infrastructure

Differences encourage migration, but it takes networks or links between areas to encourage people to move. Demographic and economic inequalities provide the incentives for people to move within and between countries, and the migration infrastructure enables them to move.

The private "merchants of labor" who move most workers over national borders, and are paid for their services by migrants as well as employers in migrant-receiving countries, are difficult for governments to regulate effectively. Migration networks encompass information and the means to move. Both communications and transportation are becoming cheaper and more accessible in a globalizing world, enabling more people to learn about opportunities away from where they live and move to take advantage of them. Moving for opportunity is also fraught with risk. The risk that migrants wind up being exploited in the destination increases with lack of information, inadequate regulation of intermediaries and employers, and irregular status

The implications for human development are straightforward. In an ideal world, migrants would move from one country to another under the terms of contracts checked by governments aiming to protect them in both sending and receiving countries. This is the scenario outlined in ILO and UN conventions, but rarely found in practice. The question is how to move from current realities toward the scenarios outlined in the conventions.

Migration Agents

There are several institutions that help migrants to move over borders: employers seeking migrants, public employment services that can match local workers with foreign jobs, social networks such as friends and family who are or were abroad and can help migrants cross borders and find jobs, and private recruiters. Migrants going abroad may consult with and utilize the services of more than one of these labor intermediaries.

Around the world, the rising number and increased diversity of migrants has been accompanied by a declining role for direct employer recruitment and public employment services, on the one hand, and growing roles for networks and private agents on the other. The networks that help migrants to cross borders and find jobs can create "social capital," meaning that individuals with family and friends abroad can gain access to higher wage jobs in distant places without using the services of fee-charging agents. These networks have received far more attention than private agents. Indeed, if migration is the "most under-researched of the global flows," the role of private agents is among the most understudied aspects of international labor migration.

There are three broad responses to the growth of merchants of labor in facilitating international migration:[26]

- step up enforcement to eliminate "bad apples" by requiring recruiters to identify themselves to authorities via a registration system. In order to register, recruiters must usually pass tests on relevant laws and provide financial security for migrants by posting bonds that can be tapped if they do not fulfill their promises to migrants,
- encourage more legitimate agents to get into the migrant brokerage business so that competition gives migrant workers options and leads to effective self regulation and ratings to guide migrants toward better agents (compare the dominance of multinationals such as Western Union in moving remittances and the absence of Adecco and Manpower from international labor brokerage), and
- increase the role of public employment service agencies in moving workers over borders to ensure that minimum standards are satisfied in recruitment and deployment.[27]

---

[26] This section draws on Martin, 2005b

[27] In the extreme, public ES agencies could be given a monopoly to move workers over borders to ensure that minimum standards and norms are followed. However, the job-matching role of ES agencies has declined in most countries, and the ILO has recognized the importance of private employment agencies in Convention 181. Article 2 allows states to "prohibit…private employment agencies from operating in respect of certain categories of workers or branches of economic activity" while Article 7.1 asserts that "Private employment agencies shall not charge directly or indirectly, in whole or in part, any fees or costs to workers," although Article 7.2 allows exceptions.

These policy options are very similar to those available to deal with migrant remittances. However, there are fundamental differences between moving workers and moving money over borders. Workers are people whose status and goals can change, economies of scale may be less important in moving migrants because people have to be interviewed and assessed, and multi-dimensional migrants must evaluate a "package" of wages, benefits, and other factors offered by recruiters, making the employment package is far more complex than the remittance transaction. Recruitment transactions occur far less often than remittance transactions, limiting migrant learning by doing. Finally, remitting funds over borders is more likely to be "legal" than being employed for many migrants, as recognized by US government regulations that allow US banks and money transfer firms to send remittances on behalf of unauthorized foreigners.

Labor market matching is complicated and costly when employers and workers are separated by national borders. In addition to employers and workers having different citizenships, there can be differences in language, culture, and expectations that make it hard for employers to evaluate potential new hires and for workers to understand the advantages and disadvantages of particular jobs. The chances for and costs of mistakes rise in cross-border job matching for both employers and workers because of transportation charges, risks to employers and workers of workplace misunderstandings and accidents, and other factors.

International conventions call for no-cost job matching and bilateral agreements between migrant-sending and –receiving countries to protect migrants and ensure there are no surprises for migrants or employers. The ILO's Migration for Employment Convention 97, 1949, Article 2, says: "Each Member … undertakes to maintain… an adequate and free service to assist migrants for employment, and in particular to provide them with accurate information. The ILO Private Employment Agencies Convention, 181, 1997, Article 8 says "Where workers are recruited in one country for work in another, the Members concerned shall consider concluding bilateral agreements to prevent abuses and fraudulent practices in recruitment, placement and employment."

However, the absence of internationally recognized job descriptions and worker credentials means that bureaucratic labor exchanges are often ill-suited for cross-border worker and job matching, which is why flexible social networks and private recruiters often have an edge over no-fee public employment services in matching workers and jobs in the international labor market. Currently employed workers know the job and the capabilities of friends and relatives at home. If an employer finds a current worker to be reliable and wants additional workers with similar characteristics, turning to current workers and asking them to recruit friends and relatives is an optimal way to get additional workers. If they recruit only workers who are capable of doing the job, currently employed workers tend to often take responsibility for orienting and training new arrivals. In this way, particular work places can be "colonized" by networks that bridge borders and link areas of worker origin and destination (Waldinger and Lichter, 2003).

Private recruiters operate along a spectrum with public ES agencies at one end and social networks at the other. The major assets of recruiters are contracts to fill foreign jobs and knowledge of workers willing to migrate to fill them.[28] Abella (2004) examined the recruiter's share of the wage gap that motivates migration, emphasizing that the fee a migrant is willing to pay to a recruiter depends primarily on the gap between wages at home and abroad. Other factors increasing the willingness of migrants to pay higher recruiting fees include prospects for settlement and upward mobility abroad and the difficulty of migrating illegally (or without the help of recruiters). Thus, we expect recruiting fees to be highest at the beginning of a labor migration flow because, after workers are established abroad, potential migrants should have access to information via social networks and may find alternative routes to travel abroad for employment, including going as tourists to visit relatives and staying to work.

Public employment services may not reduce migration costs. For example, under the 14 bilateral agreements that the Korean government has signed with migrant-sending

---

[28] Some recruiters are ex-migrants who understand what the foreign job entails, but many have little knowledge of the abilities of the workers they recruit to fill foreign jobs.

governments, only government agencies may recruit, screen, and deploy migrants. One result is complaints from recruiters and some workers about high recruitment costs and lack of transparency. In other cases, as with agreements between Thailand and its neighbors, recruitment costs are much higher to migrate legally under bilateral agreements than illegally.

Women may face special problems in migration. They may be less able to borrow money to pay pre-departure costs, may face difficulties traveling to cities to obtain documents alone, and are more likely to be employed abroad in private homes that are not covered by labor laws.

Countries such as the Philippines try to limit recruiting fees to one month's wages for the typical two-year contract, or 4.8 percent of expected earnings. Abella concluded that "limits on fees [that recruiters] can charge to workers have been widely disregarded, often with the cooperation of employers." This suggests that, if the wage differential is such that migrants are willing to pay more than one month's wages, there are likely to be extra payments regardless of the government regulation.

The Philippine Overseas Employment Administration in 2007 required domestic helpers going to Hong Kong to use an approved recruiter, and banned the recruiters from charging recruitment fees. However, according to protesting domestic helpers who want to be able to contact Hong Kong employers directly, recruiters simply substituted training fees that were harder to regulate than recruiting fees.[29]

Migration Networks

Migration networks include communication factors that enable people to learn about opportunities abroad as well as the migration infrastructure that actually transports migrants over national borders, such as recruiters and travel agencies.[30] Migration

[29] Veronica Uy, "OFWs in HK to rally vs direct-hiring ban," Inquirer, February 3, 2009
[30] Labor brokers and recruiters are examined in Martin, 2005b and Kuptsch, 2006.

networks have been shaped and strengthened by three revolutions of the past half century, in communications, transportation, and rights.

The communications revolution helps potential migrants to learn about opportunities abroad. The best information comes from migrants established abroad, since they can provide family and friends with information in an understandable context. Cheaper communications enable migrants to quickly transmit job information as well as advice on how to cross national borders to friends and relatives at home. For example, information about vacant California farm jobs may be received in rural Mexico, thousands of miles away, before it spreads to nearby cities that have double-digit unemployment rates.[31] Meanwhile, films and television programs depicting life in high-income countries may encourage especially young people to assume that the grass is greener abroad, that migration will lead to economic betterment.[32]

The transportation revolution highlights the declining cost of travel. British migrants unable to pay one-way passage to North American colonies in the 18th century often indentured themselves, signing contracts that obliged them to work for three to six years for whoever met the ship and paid the captain (Hatton and Williamson, 1998). Transportation costs today are typically less than $2,500 to travel anywhere in the world legally, and $1,000 to $20,000 for unauthorized migration. Most studies suggest faster transportation payback times today, so that even migrants who paid high smuggling fees can usually repay them within two or three years (Kyle and Koslowski, 2001).

The rights revolution refers to the spread of individual rights and entitlements that allow some foreigners to stay abroad. Many governments have ratified United Nations, International Labor Organization, and other conventions that commit them to guarantee basic human rights to all persons within their borders, including due process, emergency

[31] These farm worker recruitment networks are examined in Rural Migration News. http://migration.ucdavis.edu/rmn/index.php
[32] Even if migrants know that movies and TV shows portray exaggerated lifestyles, migrants who find themselves in slave-like conditions abroad sometimes say that they did not believe that things in rich countries could be "that bad."

health care, and sometimes housing and food while they are awaiting decisions on their applications for asylum. This means that individuals who allege that they face persecution at home are given an opportunity to explain why, and if the first judge rejects their request, they may receive benefits while their appeal is pending, a process that can take several years. Most European countries have social safety net programs that provide housing, food and health care for asylum applicants, making it easier for migrants who made it to Europe to stay there, at least for several years.

Numbers versus Rights

Policy makers who can do little about inequalities in the short run, and do not want to slow the spread of communications and transportation innovations, often revert to the policy instrument over which they have direct control in an effort to manage migration, the rights of migrants. Examples of how policy makers dealt with migration crises by adjusting the rights of migrants include European efforts in the early 1990s that made it more difficult for foreigners to apply for asylum and US restrictions on the rights of immigrants to welfare benefits.

Governments receiving migrants make three policy decisions—how many, from where, and in what status, answering the three fundamental questions of numbers, selection procedures, and rights. These questions are answered in ways that help to achieve national goals, such as maximizing economic growth, maintaining public finances, and ensuring social cohesion and national security. However, the answers in many countries also reflect the ability of special interests to achieve relatively narrow goals in the legislative process that benefit themselves at the expense of other groups, as with US farmers who used the Bracero program between 1942 and 1964 to expand labor-intensive agriculture without raising farm wages significantly—most farm workers during the Bracero program were US citizens (Freeman, 1996; Martin, 2009).

The numbers, selection, and rights triangle often differs for high- and low-skilled migrants in ways that reflect relative scarcity. Globally, there are relative shortages of high-skilled migrants and relative surpluses of low-skilled migrants, so governments often grant highly skilled migrants more rights than they do low-skilled migrants. Indeed, one can conceptualize migrant numbers and migrant rights sloping upward for the highly skilled—the US attracts more highly skilled foreigner workers in part because it grants them more rights than does Germany—and downward sloping for low-skilled migrant workers. The reasons for these differences between the high-skilled and low-skilled reflect supply and demand parameters—there is a relative shortage of high-skilled workers willing to migrate, and a relative surplus of low-skilled migrants.

Welcome-the-skilled and rotate-the-unskilled is often reflected in government policies. Singapore makes this policy most explicit, but EU efforts to encourage the arrival of non-EU foreigners by offering them blue cards while promoting circular migration for low-skilled migrants offers another variation. Non-EU foreigners with at least a university degree or five years professional experience who are offered jobs paying at least 1.5 times the minimum wage in the EU country to which they are moving can receive four-year work and residence visas and arrive with their families. European Commission President Jose Manuel Barroso said: "With the European blue card, we send a clear signal: highly-skilled workers from all over the world are welcome in the European Union."

At the same time, the European Commission advocates circular migration to speed up development in migrant countries of origin. The European Pact on Immigration and Asylum approved in October 2008 set out principles for managing migration. Part five calls for "comprehensive partnerships [with sending countries]…to encourage the synergy between migration and development," including EU-wide or bilateral agreements that open slots for legal labor migration in exchange for cooperation to reduce irregular migration, promote circular migration, build capacity in migrant-sending countries to discourage illegal migration. This part also promotes co-development activities that allow migrants settled in Europe to participate in the development of their countries of origin.

The trade off between migrant numbers and rights looms large in negotiations to liberalize trade in services under the WTO's General Agreement on Trade in Services.

The value of services is about 75 percent of economic output in high-income countries, 65 percent of the world economy, and half of the economic output in low-income countries.

There are four major modes or ways to provide services over national borders, often summarized as cross-border supply, consumption abroad, FDI or commercial presence, and Mode 4 migration, which the GATS refers to as the temporary movement of "natural persons."[33] Mode 4 service provider migrants can be substitutes or complements for the other types of trade in services. For example, accountancy services can be provided on-line (Mode 1) rather than by sending an accountant abroad to audit financial statements (Mode 4), or the client could travel to the country where the service provider is located (Mode 2). Similarly, an IT service provider abroad (Mode 4) may return and provide services to foreign clients via the internet (Mode 1), suggesting that Mode 4 movements can complement Mode 1 or attract clients to travel, Mode 2.

Most Mode 4 GATS commitments deal with exploratory business visits and moving key personnel across borders within a multinational. In most cases, business visitors are allowed to stay abroad up to 90 days, while key personnel transferred over borders by multinationals are generally allowed to stay at least three years (Chaudhuri, 2004). Requests and offers during GATS negotiations suggest that industrial countries want to liberalize Mode 3 trade in services, since their comparative advantage is investing capital in the form of subsidiaries to provide banking, insurance, and other services in developing countries. Developing countries, on the other hand, want to liberalize Mode 4 movements of natural persons, reflecting their comparative advantage in lower-wages (Mattoo and Olarreaga, 2004).

GATS applies to trade in services, not labor migration, and thus does not apply to "measures affecting natural persons seeking access to the employment market" of another

---

[33] Temporary is not defined in the GATS, but GATS explicitly does not apply to permanent migration. Most WTO members limit service providers to less than five years in their country.

country [or] measures regarding citizenship, residence, or employment on a permanent basis" in another country. However, GATS applies to foreigners providing services as self-employed independent contractors or as employees, and service provider employees are considered migrant workers under ILO Conventions, so that a country that agreed to exempt migrant service providers from minimum wage protections could be abiding by its GATS commitments while violating ILO Conventions.

The numbers-vs-rights trade off in GATS becomes clear when dealing with minimum wages. A bedrock principle of ILO Conventions 97 and 143, as well as the 1990 United Nations International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, is wage parity between migrant and local workers. However, Chaudhuri et al (2004: 366) assert that equal wages would limit numbers: "Wage-parity… is intended to provide a nondiscriminatory environment, [but] tends to erode the cost advantage of hiring foreigners and works like a de facto quota." Chanda (2001: 635) goes further, asserting that wage parity "negates the very basis of cross-country labor flows which stems from endowment-based cost differentials between countries." In other words, if GATS opened new channels for migrants, would they be paid local minimum wages, which may limit their numbers, or could they work for lower-than-minimum wages, which would presumably increase numbers?

The 2008-09 Recession and Migration

The recession that began in the United States in December 2007, set off by the end of a credit-fueled economic boom linked to rising home prices, soon became the first global recession in a quarter century.[34] Real global economic growth, which averaged almost four percent between 2003 and 2007, is expected to fall reverse in 200, so that the global economy shrinks by at least one percent. The question is how this global recession will affect international labor migration and remittances.

[34] There is no commonly accepted definition of "global recession;" Rogoff (2002) suggested that global per capita output growth of 1.2 percent in 2001 was almost a global recession. The usual US definition of a recession is at least two quarters of falling GDP.

Between 2000 and 2005, the volume of remittances to developing countries increased much faster than real global GDP or the stock of migrants—remittances to developing countries more than doubled between 2000 and 2005, while real GDP rose by 14 percent and the stock of migrants rose by eight percent. Between 2005 and 2010, remittances to developing countries are expected to continue increasing much faster than either real global GDP or the stock of migrants.

Between 2000 and 2005, real global GDP expanded from $39 trillion to $45 trillion, about 14 percent in 2005 dollars. Remittances rose much faster and migration much slower—the stock of migrants rose by about half as much as real GDP.[35] GDP growth is expected to slow from the four percent or more rates reached in 2000, 2004 and 2006, remittance growth is also expected to slow; the migrant stock has been increasing by 2.8 million a year.

Table 8. Global Growth, Migrants, and Remittances, 2000-10

	2000	2005	2010
Real GDP (tril $-2005)	39.2	44.8	50.5
Annual growth (%)	4.2	3.4	1.0
Nominal Remittances to ldcs ($ bil)	84.2	194.2	297.0
Annual growth (%)		19%	6%
Migrant Stock (Mils)	177	191	205
Annual growth (%)		1.6%	1.5%

2010 data are projected and assume migrant stock rises by 2.8 million a year, as between 2000 and 2005

Sources:

www.ers.usda.gov/Data/Macroeconomics/

Ratha et al, 2008

www.un.org/esa/population/unpop.htm

[35] Growth data are from the USDA's global database (www.ers.usda.gov/data/macroeconomics/#BaselineMacroTables); migration data are from the UN (www.unmigration.org)

If real global growth shrinks one percent in 2009 and expands by two percent in 2010 as projected, the world's GDP would be almost $51 trillion by 2010, when the global stock of migrants could be 205 million. In such a scenario, real GDP would have risen by 13 percent between 2005 and 2010 while the stock of migrants rose by seven percent, suggesting roughly a 2-1 ratio between growth in global GDP and growth in the stock of migrants.

World GDP is distributed similarly to stocks of international migrants. The US, the EU-15, and Japan had 66 percent of the world's GDP and 63 percent of the world's migrants in 2005. The four-fast growing BRIC countries—Brazil, China, India, and Russia--had about 11 percent of the world's GDP and 10 percent of the world's migrants—the migrants were concentrated in two of the four BRIC countries, Russia and India. A comparison of the major industrial countries and the BRICs suggests (1) an uneven relationship between economic growth and migrant stocks and (2) a substitution of internal for international migrants in rapidly growing developing countries such as China.

Table 9. World GDP and GDP Growth, by Region, 2000-05-08 (2005 dollars)

	2000	2005	2008	Change 2000-05	Change 2005-08
World	39,208	44,772	49,511	14%	11%
US	11,093	12,433	13,220	12%	6%
EU-15	11,828	12,795	13,649	8%	7%
Japan	4,018	4,284	4,486	7%	5%
Brazil	856	980	1,126	14%	15%
China	1,456	2,300	3,126	58%	36%
India	550	758	974	38%	29%
Russia	590	794	950	35%	20%
US, EU-15, Japan	26,939	29,513	31,355	10%	6%
Share	69%	66%	63%		

BRICs	3,452	4,833	6,176	40%	28%
Share	9%	11%	12%		

Source: USDA, International Macro Data

www.ers.usda.gov/Data/Macroeconomics/

Real global economic growth averaged three percent a year between 2001 and 2008, but is projected to fall to less than one percent in 2009 and 2010 because of the recession that began in the US in December 2007. The current recession is unusual in beginning in the US rather than a developing country, and spreading from the US to other industrial and developing countries with a lag. There is considerable uncertainty about whether the recovery from what is quickly becoming a global recession will have a V-shape, with a quick rebound due to governmental stimulus programs, a U-shape, with a longer period until recovery as bad debts are reworked, or an L-shape, with a deferred recovery.

The recession is likely to slow new deployments of foreign workers to higher wage countries, both because employers request fewer (US employer requests for H-1B visas are expected to drop for FY10) and because some governments halt the recruitment of new foreign workers (Korea and Malaysia announced recruitment stops in January 2009). The stock of migrant workers in many countries is likely to stop growing and may decline. Settled migrants are likely to advise potential unauthorized newcomers not to come if there are no jobs, but it is not clear whether legal jobless migrants will return to their countries of origin or remain abroad.

Remittances are expected to be less sensitive to recession than migrant numbers. Remittances have been increasing at double-digit annual rates, but are expected to rise more slowly in 2008 and may decline in 2009. South Asia is expected to have the fastest growth in remittances in 2008, up 16 percent, reflecting an assumption that migrants in the Gulf oil exporters will not be as affected by the 2008-09 recession as elsewhere. By contrast, remittances to Latin America are expected to be flat or decrease, since most are from the US.

Table 10. Remittances to Developing Countries, 2001-08 ($ mils)

	2001	2002	2003	2004	2005	2006	2007	2008
Total	95,217	115,502	143,345	163,535	194,174	228,800	264,896	282,793
Annual change		21%	24%	14%	19%	18%	16%	7%
East Asia and Pacific	20,105	29,477	35,402	39,077	46,586	52,841	57,988	62,307
Annual change		47%	20%	10%	19%	13%	10%	7%
Europe and Central Asia	12,394	13,729	16,027	22,556	31,660	38,830	50,804	53,530
Annual change		11%	17%	41%	40%	23%	31%	5%
Latin America and Caribbean	24,229	27,918	35,219	41,728	48,716	57,384	61,000	61,095
Annual change		15%	26%	18%	17%	18%	6%	0%
Middle-East and North Africa	14,653	15,211	20,361	23,034	24,150	26,656	32,075	34,500
Annual change		4%	34%	13%	5%	10%	20%	8%
South Asia	19,173	24,137	30,366	28,694	33,092	39,615	43,824	50,942
Annual change		26%	26%	-6%	15%	20%	11%	16%
Sub-Saharan Africa	4,663	5,030	5,970	8,445	9,969	13,475	19,204	20,418
Annual change		8%	19%	41%	18%	35%	43%	6%

Source: Ratha et al, 2008
www.worldbank.org/prospects/migrationandremittances

Job losses during the 2008-09 recession have been concentrated in four major sectors--construction, financial services, manufacturing, and travel-related services. Migrants are employed in all these sectors, but their characteristics differ by sector. Migrants in construction and travel-related services are often employed in low-skill jobs, those in manufacturing tend to hold blue-collar jobs, and migrants employed in financial services are in high-skill jobs. This means that migrants leaving boom areas such as Dubai in 2009 are likely to include both financial specialists and construction laborers.

Globally, the ILO expects unemployment to increase from about 190 million in 2007 to 210 million by the end of 2009.[36] The jump in unemployment in the OECD countries may be even sharper, up from 34 million in 2008 to 42 million in 2010, with little or no net new job creation in 2008 and 2009 in the world's major industrial economies.[37]

An important motor of recent economic growth that attracted migrants was construction, which is shedding jobs rapidly as tighter credit slows building activities. The major effects of the 2008-09 recession vary by country and sector, but it appears that:

- unauthorized migration from Mexico to the US slowed in 2008 due to the sharp fall in residential construction and rising unemployment throughout the economy. The US Hispanic unemployment rate, which had fallen to near the rate for whites in 2005-06, returned to its more usual 1.5 times the white rate in 2009
- the unemployment rate in Spain, which fell below nine percent in 2005-06 for the first time in two decades, jumped over 13 percent in 2009, the highest in the EU. The unemployment rate for foreigners was over 20 percent, prompting the government to offer return bonuses to non-EU foreigners who agreed to leave for at least three years
- factory closures in China sent many rural-urban migrants back to their villages before the usual return for the Lunar New Year that began January 26, 2009. Many may not return to factory jobs after the holiday, slowing the growth in the 150-million strong rural-urban migrant population.

[36] Statement released October 20, 2008. ILO says global financial crisis to increase unemployment by 20 millionwww.ilo.org/global/About_the_ILO/Media_and_public_information/Press_releases/lang--en/WCMS_099529/index.htm

[37] Statement released with the OECD Economic Outlook November 25, 2008. Economic Outlook forecasts sharp rise in unemployment as recession takes hold across OECD. www.oecd.org/document/35/0,3343,en_2649_201185_41721827_1_1_1_1,00.html

- entries of new migrants to fill manufacturing jobs in Korea were halted in February 2009, and the government of Thailand announced that there would not be a re-registration for foreign workers in 2009—the hope is that foreigners will leave rather than remain illegally, opening jobs for Thais. The same strategy was tried and abandoned during the 1998 financial crisis
- GCC countries remain the great unknown. The government of Saudi Arabia announced that it would continue to build six economic cities, but many construction projects in Dubai shed workers in 2008-09.

Construction

Globally, the construction industry accounts for about seven percent of global employment. Low interest rates in major industrial countries plus rapid economic growth and major infrastructure investments in developing nations such as China and oil-exporting nations in the Middle East attracted migrants, both internal and international. As construction slows and employment shrinks, many of these migrants are likely to lose their jobs.

In the US, the construction slowdown has resulted in especially large employment losses among foreign-born Hispanics. Housing prices in the US peaked in 2005-06 and began falling in 2007-08, slowing what had been a rapidly expanding residential construction sector that attracted migrants. For example, employment in US construction reached 7.7 million in Fall 2006 before shrinking by almost a million to 6.8 million in December 2008 (www.bls.gov); the unemployment rate for persons in construction occupations rose from 9.4 percent in December 2007 to 15.3 percent in December 2008. About two-thirds of the three million Hispanic workers employed in US construction in 2007 were foreign-born, and almost all of the 300,000 Hispanic construction workers who lost jobs between 2007 and 2008 were foreign born.

Traditionally, the unemployment rate of Black workers has been twice the white rate, and the rate for Hispanic workers 1.5 times the white rate. The Hispanic-white unemployment rate difference narrowed as the overall unemployment rate fell toward four percent in 2006 (Kochbar, 2008). As unemployment climbed in Fall 2008, these ratios returned to their traditional levels.

The combination of the US recession and stepped up enforcement of laws against unauthorized workers was credited for reducing the growth in the stock of unauthorized foreigners in the US, which reached 11.9 million in March 2008, up from 8.4 million in 2000. However, the increase slowed from 800,000 a year between 2000 and 2004 to 500,000 a year between 2005 and 2007 (Passel and Cohn, 2008). Other estimates put the peak number of unauthorized foreigners at 12.5 million in summer 2007, and estimated that the stock dropped by over a million by summer 2008.[38]

There was a similar downturn centered on construction in fast-growing European countries that attracted migrants, including Greece, Ireland, and Spain. Aging populations seeking warmer climates, airline deregulation, and cheap credit fueled a housing boom in southern Europe that attracted both local residents and EU nationals from northern Europe. Many of the construction workers were migrants.

In Spain, the unemployment rate rose from eight percent in 2007 to almost 13 percent early in 2009, and reached 20 percent among non-EU foreigners. In a bid to reduce unemployment, the Spanish government offered lump sum payments to jobless migrants who had earned unemployment insurance benefits if they agreed to leave and not return to Spain for at least three years. [39] Eligible foreigners receive 40 percent of their UI benefits in Spain and 60 percent in their country of origin after surrendering Spanish work and residence cards at the Spanish consulate or embassy.

---

[38] The US debate focuses on the peak number of unauthorized foreigners, exactly how fast the number is dropping, and whether the slowing economy or stepped-up enforcement is more responsible for the apparent decline. See Migration News. 2008. Unauthorized, Population, States and Cities. October. Volume 14 Number 4. http://migration.ucdavis.edu/mn/more.php?id=3433_0_2_0

[39] The program was announced September 19, 2008, and is open to jobless migrants who registered with UI authorities within 15 days of layoff from the 19 countries that have bilateral social security agreements with Spain and are not EU members. UI benefits in Spain are 70 percent of usual earnings for their first six months of joblessness, and 60 percent for the next 18 months.

There were about 300,0000 unemployed foreigners as the program got underway in November 2008, but only 200 a week applied for the return bonus. The largest group of foreign workers, 687,000 Romanians, are EU nationals and not eligible, but Moroccans, the number two group at 673,000, are eligible. Most migrant advocacy groups advised their clients to reject the return-bonus offer, pointing out that the migrants could be refused re-entry to Spain in three years even if their employers wanted to rehire them. Both employers and unions opposed return bonuses—employers because they want to continue to recruit abroad and unions because they believe that migrants who contributed to the Spanish economy should receive integration assistance rather than be encouraged to depart.

Newspapers reported that migrants from Ecuador and other Latin American countries in Spain were weighing the return bonus offer.[40] On the one hand, it is difficult to live in high-cost Spain on UI benefits that are only half of normal earnings despite free health care. On the other, economic troubles at home, plus the fact that many migrants sold their land and other assets to move to Spain, discourage returns. Older jobless foreigners nearing retirement and planning to retire in their countries of origin are most likely to accept the return bonuses.

Manufacturing

Global employment in manufacturing is estimated at 150 million to 200 million, including about 50 million in the G7 industrial countries. Among industrial countries, Germany has the highest share of workers employed in manufacturing, about a quarter, and the US the lowest share, an eighth. The US, Japan, and Germany have almost three-fourths of the manufacturing workers in the G7 industrial nations.

China, often called the world's factory, had an official 83 million and an estimated 109 million workers employed in manufacturing at the end of 2002; the 109 million figure

---

[40] For more details see Migration News. 2009. Spain, Italy, Turkey. January. Volume 15 Number 1 http://migration.ucdavis.edu/mn/more.php?id=3489_0_4_0

includes 38 million workers classified as employed in urban manufacturing by the Ministry of Labor and 71 million reported by the Ministry of Agriculture as employed in town and village enterprises (Banister, 2005, 13). About 20 percent of those employed in urban manufacturing are rural-urban migrants,[41] as are many of the 71 million TVE manufacturing workers--some foreign investors prefer to set up factories in TVEs to take advantage of lower wages.

Most migrant manufacturing workers moved from rural areas in the center and western parts of China to cities and coastal provinces in the east.[42] In 2008-09, there were reports of coastal factories employing rural-urban migrants closing as export orders dried up, sometimes drawing protests from workers who did not receive back wages and severance pay. An estimated 10 million rural-urban migrants returned to their villages before the usual return date, Chinese New Year, which began January 26, 2009, and there was speculation that some would stay in their villages because of fewer factory and construction jobs available in cities and coastal provinces and higher grain prices.

Japan has two major types of migrants among its 12 million manufacturing workers—mostly Chinese trainees paid less than the minimum wage and Nikkeijin, descendants of Japanese who emigrated to Latin America a century ago, who are regular workers earning regular wages. There are about two million foreigners legally in Japan, including 600,000 Koreans,[43] 560,000 Chinese, 315,000 ethnic Japanese Brazilians and 195,000 Filipinos. Many Japanese businesses want doors opened wider to low-skilled migrant workers, but such a policy shift looks unlikely anytime soon. Instead, there are complaints from Japanese workers in temporary and part-time jobs being laid off with little notice and few benefits.

---

[41] Some rural-urban migrants may not be included in the 38 million estimate of urban manufacturing employees.
[42] About 20 percent of those classified as employed in urban manufacturing in 2003 were also "workers whose population registration is in rural areas" (Banister, 2005, 23)
[43] Koreans in Japan in 1965 were allowed to become Japanese citizens, live as foreigners in Japan, or return to Korea—600,000 are living as foreigners in Japan.

Migration is likely to slow in 2009 as Japanese workers with temporary jobs are laid off. In an effort to retain jobless Nikkeijin, government programs to teach Japanese and offer retraining were announced in January 2009.[44] However, the result may be resentment of the mostly Brazilian Nikkeijin by unemployed Japanese. Many Japanese businesses abandoned traditional lifetime employment during the early 1990s recession, and today 35 percent of jobs in Japan are filled by temporary and part-time workers who can be laid off with minimal notice, double the 18 percent of 1988.

Korea signed MOUs with a number of Asian countries to admit foreigners as workers under the Employment Permit System for up to three years; most migrants are employed in small and medium manufacturing firms (www.eps.go.kr/wem/en/index.jsp). The government announced that admissions under the EPS would be halted in February 2009 because of the worsening economy, prompting many Asian labor-sending countries to request an exemption. Migrants preparing to work in Korean factories often incur significant costs to learn the Korean language and history in their country of origin.[45]

Thailand has an estimated two million migrant workers from neighboring Burma, Cambodia, and Laos, but fewer than 500,000 registered migrants. Since 1992, employers have registered the migrant workers they employ, paying fees for work permits (most employers deduct these fees, equivalent to about a month's wages, from migrant pay). Most of the migrants are employed in construction, agriculture and fisheries.

The Thai government in January 2009 announced that it would not re-register migrants in 2009 in the hope that some will leave when their work permits expire, opening jobs for Thais as unemployment rises. This reduce-migrant-employment-to-open-jobs-for-Thais did not work during the 1998 financial crisis, most famously when the government was forced to backtrack on a plan to substitute Thais for migrants in rice mills. Migrant advocates say that substituting Thais for migrants is unlikely to open jobs for Thais in

---

[44] Blaine Harden, "Japan Works Hard to Help Immigrants Find Jobs," Washington Post, January 23, 2009

[45] For example, almost 7,000 Nepalese had passed the Korean language test when EPS admissions were halted, prompting protests in front of the Korean embassy in Nepal.

2009, citing fewer than 120 Thais responding to ads for 150,000 fishery-related workers in Samut Sakhon province in 2008.

Malaysian government officials have been discussing plans to reduce the number of migrants for several years. Deputy Home Minister Datuk Chor Chee Heung said there were 2.1 million legal foreign workers in Malaysia in December 2008, including 749,200 in manufacturing, 347,700 in plantations, 307,800 in construction, 296,300 domestic helpers, 211,100 in services, and 184,600 in other agriculture.[46]

On January 21, 2009, the government froze new entries of migrant workers to make more jobs available for Malaysians, and ordered employers to lay off foreign workers first.[47] Migrants typically pay agents to get factory jobs, and as multinationals such as Intel unannounced layoffs and plant closures, there was speculation about whether laid-off migrants would leave Malaysia or seek other jobs to repay debts.

Financial and Travel-Related Services

Migrants employed at the top of the job ladder in financial services and in a variety of jobs in hotels and restaurants have also been affected by the 2008-09 recession. However, it is very difficult to establish patterns of labor displacement and migrant reactions to layoffs.

The Economist discussed the uncertainty facing Ugandan migrants employed in London financial services. Several reported that they planned to go home because of the difficulty finding and keeping jobs, especially as the value of the British pound falls.[48] Others noted that their families at home are requesting more support to cope with higher food prices.

---

46 They included 1.2 million Indonesians, 200,000 Nepalese, 130,800 Indians, 96,900 Vietnamese, and 64,200 Bangladeshis.

47 Julia Zappei, "Malaysia Bans Hiring of Foreign Workers," AP, January 22, 2009

48 The Economist, "Global migration and the downturn," January 15, 2009. The article sketched a broad picture, from the sharp decline in migration during the 1930s Depression to recent attacks on foreigners in Moscow before concluding that the decline in new deployments of migrant workers is likely to be sharper than the fall in remittances, as predicted by the World Bank, and that there could be protests in labor-

The US is also reducing employment in financial services. Outplacement firm Challenger, Gray & Christmas, which reports job cuts announced by financial firms, reported 153,000 in 2007, up from 50,000 each in 2005 and 2006; the number of financial firm job cuts for 2008 is expected to be up from year-earlier levels.[49] There is little data on the fate of the often highly educated workers employed in financial services. Some are foreigners in the US with immigrant or temporary worker visas, and it is not clear whether they will take lower-paying jobs and wait for a rebound or leave.

The United Arab Emirates has been attracting migrant workers to fill almost all private sector jobs, including in financial services. There have been reports of layoffs, and discussion of giving expatriates more than the usual one-month to find a new job or leave the country. AFP reported that up to 45 percent of the construction-related work force in the UAE could be laid off in 2009, including managers and analysts.[50]

The fundamental reason for the 2008-09 recession was an unsustainable credit bubble, but one trigger of the downturn was high energy and commodity prices. Energy and commodity prices have since fallen from historic peaks, with uncertain impacts on economies dependent on energy and commodity exports. The Gulf Cooperation Council member-states include about 15 million foreigners among 40 million residents. Most of the foreigners are migrant workers with two-to-three year contracts, so that five to seven million migrants a year enter to replace those who leave. The foreigners are concentrated in construction, private households, and a wide range of services.

Dubai may represent one end of the spectrum, while Saudi Arabia represents the other. The Saudi government is building six "economic cities" that aim to house about five

---

sending countries as potential migrants become frustrated with the lack of jobs at home and abroad.

[49] Statement available at www.challengergray.com/press/press.aspx
[50] "Massive layoffs expected in UAE," AFP, December 24, 2008. www.google.com/hostednews/afp/article/ALeqM5hzVDllRBH4wCPPs2PlITe7agwe2Q

million residents and employ 1.5 million workers by 2015; the government said it would continue their construction despite the falling price of oil and thus government revenue.

Many migrants are employed in travel-related services, especially hotels and restaurants. Employment in this sector, which had been increasing rapidly, slowed sharply in 2008, first because of high oil prices and later because of unemployment and falling incomes. However, unlike the idle building sites or the layoffs announced by manufacturing and financial services, hotels and restaurants often adjust by laying off some employees or reducing their hours, which makes the effects of the slowdown less visible.

2008-09 Versus Earlier Recessions

In 1973, a war between Israelis and Arabs led to a sharp increase in oil prices and a global recession, as especially manufacturing economies adjusted to higher energy prices. Food prices rose sharply in the mid-1970s, and high inflation limited the ability of governments to borrow and stimulate their economies with job creating policies.

The major migration effects of the mid-1970s oil-linked recession were felt in Western Europe and the Middle East. Western European countries such as France and Germany halted guest worker recruitment as joblessness rose sharply, especially in sectors such as manufacturing and construction that employed large numbers of migrants. However, migrants who had been employed at least a year were not forced to depart, and most did not, largely because their countries of origin were also suffering from oil-price linked recessions, and the social safety net was stronger where they were than at home (Miller and Martin, 1982). When it became clear in the late 1970s that the guest worker era was over, many migrants unified their families in Western Europe, and return bonus programs in the early 1980s failed to persuade significant numbers to depart. The years between 1975-85 are often considered the decade in which many European countries became reluctant countries of immigration (Martin, 2004).

The mid-1970s was the beginning of a new guest worker era in the Middle East, as governments used sharply higher oil revenue to build infrastructure, housing, and expand the economy (Seccombe, 1985). Most first-wave activities between 1975 and 1980 involved construction projects usually managed by multinationals that brought workers from home (Korea) or recruited migrants from Arab and Asian countries. Over time, demand shifted from hundreds of men recruited for major construction projects to a few migrants to fill jobs in private households, stores, and other services, more women were recruited, and private agents in both oil exporting and migrant-sending countries charged fees to migrants and sometimes employers.

In the US and Canada, immigration was at historically low levels in the 1970s. As manufacturers adjusted to higher energy prices, there were widespread layoffs, job-creation programs, and internal migration, as from Michigan to Texas. However, farm wages in states such as California climbed at historically unprecedented rates as new legal rights to organize unions and the absence of newcomer migrants gave unions new bargaining power (Martin, 2003a). Mexico's discovery of significant oil reserves in 1978 led to a government spending boom that discouraged outmigration.

The second oil shock in 1979-80 associated with the Iranian revolution effectuated another recession in the industrial countries and a new windfall in the oil exporting states. However, this global recession quickly reduced the demand for oil, drove the US unemployment rate toward 10 percent, and produced economic crises in oil-exporters such as Mexico that anticipated had planned for continued high prices. Manufacturing firms restructured in ways that shed workers, often automating at home and investing in factories in lower-wage countries. US farm wages that had been pushed very high during the 1970s came under pressure as Mexicans who lost jobs realized they could earn far more in the US, especially as the value of the peso plummeted, setting in motion the era of mass Mexico-US migration that immigration reforms in 1986 unintentionally accelerated (Martin, 2003a).

Europe recovered from the 1981-82 recession, and in the late 1980s began to grow faster and create new jobs as the single European market increased flexibility and efficiency. Simultaneously, a loosening of restrictions on emigration from Eastern Europe allowed migrant workers to filter into European labor markets that governments believed were regulated tightly enough to prevent widespread unauthorized migration. The fall of the Berlin wall in 1989 prompted countries such as Germany to launch new guest worker programs in a bid to ensure that “inevitable migration” from Poland and elsewhere would be legal. Individual countries as well as the European Union dealt with an upsurge in asylum seekers as well as competition from lower wage workers under EU rules that encouraged freedom of movement to provide services (Castles and Miller, 2003, Chapter 4).

By the mid-1990s, economic and job growth had resumed in the US and Europe, although Japan continued to wallow in the aftermath of the crash of its bubble economy in the early 1990s despite very low interest rates. Unemployment fell sharply in the US, as job growth accelerated to almost three million a year, equivalent to 10,000 net new jobs added each work day. The belief that the world had entered an era of a “new economy” no longer subject to business cycles became common in North America and Western Europe.[51]

Investors began to seek higher returns in emerging economies such as Russia and the Asian Tigers. This foreign investment led to bubbles that, when they burst in 1997-98, caused recessions that led to sharp increases in unemployment in Korea, Malaysia, and Thailand. In countries such as Thailand, internal rural-urban migrants returned to rural homes, and the Thai government announced plans to send migrants home in order to open up jobs for nationals. However, the effort to substitute jobless native workers for migrants largely failed Thailand, Malaysia, and other Asian tiger economies.[52]

---

[51] Newsweek coined the term “new economy” in 1995 to refer to steady economic growth, low unemployment, and the end of macroeconomic cycles; economist Robert Gordon (1998) called the late 1990s the Goldilocks Economy.

[52] The Malaysian government announced in July 1998 that 100,000 foreigners employed "in jobs shunned by Malaysians" could stay, including those employed in restaurants, gas stations, cemeteries, golf courses, vegetable gardens, food manufacturing, orphanages and senior homes, laundry shops, janitorial jobs, male barber shops, tailor shops and cargo services. However, foreigners employed as golf caddies, supermarket

The Asian financial crisis was relatively short lived and confined to a few countries. The fact that economic and job growth soon resumed made it unnecessary to deal with the question of what would have happened to migrant workers if the recession had persisted. Some analysts concluded that Asian tiger economies were structurally dependent on foreign workers before the crisis, but the fact that economic growth soon resumed meant that this hypothesis was not tested, as the number of migrant workers resumed its growth (Martin, 2003b) .

What Next?

The world appears headed into the most severe recession in a quarter century, marked by shrinking economies and rising joblessness in most countries. With the number of migrants and remittances at all time highs, there is a great deal of interest in whether flows of labor from poorer to richer countries will continue to increase, stabilize, or reverse, and who among the migrants will be most severely affected.

Comparisons with past recessions suggest that the global nature of the 2008-09 recession could affect migrants differently than in the past for three major reasons. First, during this recession one region is not benefiting economically at the expense of another, so that migrants can shift to alternative destinations, as when high oil prices attracted migrants to the Gulf countries while doors to migrants closed to Western Europe. Second, the first effects of recession are being felt in cyclically sensitive industries such as construction and manufacturing, where last-hired and often male migrants may be among the first to be laid off. What is less certain is whether laid-off migrants will remain in destination countries or return to their countries of origin, as with jobless migrants in Spain, and whether female migrants in service jobs will be laid off or have their wages reduced.

Third, there is far more interest in remittances and their contribution to development in migrant-sending countries than during previous recessions. Remittances are far higher than in the past, and are expected to remain high even as foreign direct investment and

---

helpers, in medical centers or private clinics, beauty salons, karaoke lounges or courier services did not have their work permits renewed.

other flows of funds to developing countries slow (Ratha et al, 2008). The governments of migrant-sending countries may develop financial instruments to attract more remittances, such as offering migrant bonds with attractive returns, or use the specter of more unauthorized migration in a bid to preserve jobs for migrant workers or to request financial aid from industrial countries (Chamie, 2009). Many international organizations have urged countries employing migrants not to quickly shut their doors.[53]

Fourth, immigration is less likely to be affected significantly in the United States than in other traditional immigration countries because a higher share of US immigrants are entering under family unification preferences (Papademetriou and Terrazas, 2009). Immigration to Australia, Canada, and New Zealand, on the other hand, may be more affected by the recession because half or more of the immigrants are admitted under economic criteria that give priority to those most likely to obtain jobs.

Conclusions

The world's population is aging at a time when almost all population and labor force growth is concentrated in the 170 developing countries, where over half of residents live in rural areas. Migration is a response to differences between areas, and millions of younger rural residents of developing nations are moving in search of higher wages and more opportunities. The fact that some have settled in urban areas within nations and abroad makes it easier and cheaper for additional migrants to join them.

Inequalities that promote migration, coupled with communication and transportation revolutions that make it easier and cheaper to move, have prompted policy makers to turn to the instrument over which they have most control, rights, in an effort to manage

[53]ILO DG Juan Somavia's December 18, 2008 International Migrants Day message asked migrant-receiving countries to "assess their labor market needs before resorting to general layoffs of migrant workers." (www.ilo.org/public/english/bureau/dgo/speeches/somavia/2008/migrants.pdf) Employers rather than governments usually make hiring and layoff decisions; the message presumably argues against policies such as that adopted by the Malaysian government, which ordered migrants to be laid off before Malaysian workers.

migration. In western Europe in the 1990s, access to the asylum system was restricted by defining some countries as safe and requiring those seeking asylum to apply for refuge in the first "safe" country they reached, a policy change that reduced applications. In the US in the 1990s, the access of legal and unauthorized foreigners to means-tested federal assistance was reduced in an effort to head off a backlash against foreigners arriving with their "hands out," rather than seeking a "hand up" the ladder of economic opportunity.

Managing migration by adjusting the rights of migrants may become increasingly difficult in a world of persisting demographic and economic inequalities. For the first time in human history, there are expected to be sharp differences in demography across countries, with at least a quarter of the world's countries expected to have aging and shrinking populations. The question is whether these generally richer industrial countries will open border gates to migrants or whether they will raise retirement ages or take other steps in an effort to minimize migration.

Two extremes mark the spectrum of likely responses to slower population growth and aging. One imagines world of bilateral, regional, and global migration agreements that make it easier for workers to cross national borders legally, so that in a few decades migrants will be accepted in workplaces with the same indifference as most consumers have about where their TVs, cars and other goods were made. The other extreme foresees relatively low levels of labor migration, as aging societies that may "need" migrants resist the changes that accompany migration.

Reality is likely to lie between these extremes, making it hard to assess the implications for human development. Migration is likely to remain a journey of hope for millions of people around the world, and most of those who move are likely to find the opportunities they are seeking. Receiving areas can benefit economically and culturally from the contributions of migrants, and migrant-areas-of-organ can benefit from remittances that reduce poverty and provide a new impetus for development. However, there are likely to be yawning gaps between the rights and protections laid out in international conventions and the realities faced by many migrants.

Bibliography

Aaron, Henry. 1999. Behavioral Dimensions of Retirement Economics. Brookings. www.brookings.edu/press/Books/1999/retirement.aspx

Banister, Judith. 2005. Manufacturing employment in China. Monthly Labor Review. July. 11-19 www.bls.gov/opub/mlr/2005/07/art2full.pdf

Bhagwati, Jagdish. 2003. Borders Beyond Control. Foreign Affairs, January-February.

Bhattacharyya, Sanghita and Kim Korinek. 2007. Internal Migration, Gender and Vulnerability: The Case of Construction Migrants in India." Asian and Pacific Migration Journal 16(4): 511-532

Bijak, Jakub, Dorota Kupiszewska, Marek Kupiszewski, Katarzyna Saczuk and Anna Kicinger. 2007. Population and labour force projections for 27 European countries, 2002–2052: impact of international migration on population ageing. European Journal of Population Vol 23. 1–31

Bourdelais, Parice. 1999. Demographic aging: A notion to revisit. The History of the Family. Volume 4. No 1. Pp 31-50

Castles, Stephen and Mark J. Miller. 2003. The Age of Migration. Palgrave-Macmillan.

Chamie, Joseph. 2009. Exporting People. Yale Global. http://yaleglobal.yale.edu/display.article?id=11843

Chanda, Rupa. 2001. Movement of Natural Persons and the GATS. World Economy, Vol. 24, No. 5, May. pp. 631-654.

Chaudhuri, Sumanta, Aaditya Mattoo, and Richard Self. 2004. Moving People to Deliver Services: How can the WTO help? Journal of World Trade. Vol. 38, No. 3; 363-94

de Haas, Hein. 2005. Morocco: From Emigration Country to Africa's Migration Passage to Europe. October. www.migrationinformation.org/Profiles/display.cfm?ID=339

de Haas, Hein and Roald Plug. 2006. Cherishing the Goose with the Golden Eggs: Trends in Migrant Remittances from Europe to Morocco 1970–2004. International Migration Review. Vol 40. No 3. Fall pp603-634

de Haas, Hein. 2007. Morocco's migration experience: a transitional perspective. International Migration Vol. 45 No 4. pp39-70.

Diocson, Cecila. 2005. Filipino Women in Canada's Live-In Caregiver Program. February 28. www.philreporter.com/Issue03-16-302005/Filipino%20Women%20in%20Canada.doc

Federal Reserve Bank of Kansas City. Global Demographic Change: Economic Impacts and Policy Challenges. Symposium proceedings. August 26–28, 2004. Available at: http://www.kc.frb.org/Publicat/sympos/2004/sym04prg.htm

Freeman Gary. 1995. Modes of Immigration Politics in Liberal Democratic States International Migration Review. Vol 29 No. 4.

Ghosh, Bimal. Ed. 2000. Managing Migration: Time for a New International Regime? New York. Oxford University Press. http://www.oup-usa.org

Gordon, Robert. 1998. Foundations of the Goldilocks Economy: Supply Shocks and the Time-Varying NAIRU. Brookings Papers on Economic Activity. Vol. 29. No 2. pp297-346.

Helton, Arthur C. 2003. People movement: the need for a World Migration Organization. www.opendemocracy.net/people-migrationeurope/article_1192.jsp

Kochhar, Rakesh. 2008. Latino Labor Report, 2008: Construction Reverses Job Growth for Latinos. Pew Hispanic Center. http://pewhispanic.org/reports/report.php?ReportID=88

International Labor Organization. 2008. Estimates and Projections of the Economically Active Population, 1980-2050. August. http://laborsta.ilo.org/applv8/data/EAPEP/EAPEP_methodology.pdf

International Labor Organization. 2005. ILO Multilateral Framework on Labor Migration. Non-binding principles and guidelines for a rights-based approach to labor migration, ILO, Geneva

International Monetary Fund. The Economics of Demographics. Finance and Development. September 2006;43(3). Available at: http://www.imf.org/external/pubs/ft/fandd/2006/09/.

Keilman, Nico. 1998. How Accurate Are the United Nations World Population Projections? Population and Development Review, Vol. 24, Supplement: Frontiers of Population Forecasting (1998), pp. 15-41

Liang, Zai. 2001. The Age of Migration in China. Population and Development Review, Vol. 27, No. 3 (Sep., 2001), pp. 499-524

Lee, Ronald and Andrew Mason. 2006. What Is the Demographic Dividend? Finance and Development. September. Volume 43, Number 3. www.imf.org/external/pubs/ft/fandd/2006/09/basics.htm

Mansvelt Beck, Jan and Paolo De Mas. 2001. The Strait of Gibraltar: Europe's Rio

Grande? In Russell King, Paolo De Mas, and Jan Mansvelt Beck. Eds. Geography, Environment and Development in the Mediterranean. Brighton. Sussex Academic Press

Martin, Philip. 2009. Importing Poverty? Immigration and the Changing Face of Rural America. Yale University Press. http://yalepress.yale.edu/yupbooks/book.asp?isbn=9780300139174

Martin, Philip, Manolo Abella and Christiane Kuptsch. 2006. Managing Labor Migration in the Twenty-First Century. Yale University Press

Martin, Philip. 2005a. Mexico-US Migration. Pp 441-486 in Gary Hufbauer and Jeffrey Schott. Nafta Revisited: Achievements and Challenges. Institute for International Economics. http://bookstore.iie.com/merchant.mvc?Screen=PROD&Product_Code=332

Martin, Philip. 2005b. Merchants of labor: Agents of the evolving migration infrastructure. ILO Institute Discussion Paper 158/2005. www.ilo.org/public/english/bureau/inst/papers/index.htm

Martin, Philip. 2004. Germany: Managing Migration in the 21st Century. pp221-252 in Cornelius, Wayne A., Takeyuki Tsuda, Philip L. Martin, and James F. Hollifield. Eds. 2004. Controlling Immigration. A Global Perspective Stanford University Press. www.sup.org/book.cgi?id=4189

Martin, Philip. 2003a. Promise Unfulfilled: Unions, Immigration, and Farm Workers. Ithaca. Cornell University Press

Martin, Philip. 2003b. Thailand: improving the management of foreign workers. Bangkok: ILO and IOM (English and Thai). www.ilo.org/asia/whatwedo/publications/lang--en/docName--WCMS_BK_PB_197_EN/index.htm

Martin, Philip, Richard Mines and Angela Diaz. 1985. A profile of California farmworkers. California Agriculture. May. pp16-18

Miller, Mark J. and Philip L. Martin. 1982. Administering foreign-worker programs: Lessons from Europe. Lexington, MA: Lexington Books, D.C. Heath and Company

OECD. 2008. Ageing and Employment Policies. Average effective rate of retirement in 1970-2007. www.oecd.org/LongAbstract/0,3425,en_2649_33927_39371914_1_1_1_37457,00.html

Papademetriou, Demetrios G. and Aaron Terrazas. 2009. Immigrants and the Current Economic Crisis. January. www.migrationpolicy.org/news/2009_1_14.php

Papadimitriou, Dimitri. Ed. 2007. Government Spending on the Elderly. Palgrave Macmillan.

Passel, Jeffrey and D'Vera Cohn. 2008. Trends in Unauthorized Immigration. Pew Hispanic Center. http://pewhispanic.org/reports/report.php?ReportID=94

Ratha, Dilip, Sanket Mohapatra and Zhimei Xu. 2008. Outlook for Remittance Flows 2008-2010. November. www.worldbank.org/prospects/migrationandremittances

Rogoff, Kenneth. 2002. The Recession that Almost Was. Financial Times. April 5. Available at www.imf.org/external/np/vc/2002/040502.htm

Ruhs, Martin and Philip Martin. 2008. Numbers vs. Rights: Trade offs and Guest Worker Programs. International Migration Review. Vol. 42. No 1. Pp249-65

Sapir, Andre. 2000. Who is afraid of globalization? The challenge of domestic adjustment in Europe and America. CEPR Discussion Paper 2595. www.cepr.org/pubs/new-dps/dplist.asp?dpno=2595&action.x=4&action.y=3

Seccombe, Ian. 1985. International Labor Migration in the Middle East: A Review of Literature and Research, 1974-84. International Migration Review, Vol. 19, No. 2. Summer. pp335-352

Smil, Vaclav. 2005. The Next 50 Years: Unfolding Trends. Population and Development Review, Vol. 31, No. 4 (Dec., 2005), pp. 605-643

United Nations. 2007. World Population Prospects. The 2006 Revision. Vol 2. www.un.org/esa/population/publications/wpp2006/wpp2006.htm

United Nations. 2002. World Population Ageing. 1950-2050 www.un.org/esa/population/publications/worldageing19502050/ Data available online at: http://esa.un.org/unpp/index.asp?panel=1

United Nations. 2000. Replacement Migration: Is It a Solution to Declining and Ageing Populations? www.un.org/esa/population/publications/migration/migration.htm

Waldinger, Roger and Michael Lichter. 2003. How the Other Half Works: Immigration and the Social Organization of Labor. University of California Press

World Bank. 1993. The East Asian Miracle: Economic Growth and Public Policy. Oxford University Press

Yeates, Nicola. 2005. Global care chains: a critical introduction. Global migration perspectives No. 44, Global Commission on International Migration, September.

Zoubanov, Anatoly. 2000. Population Ageing and Population Decline: Government Views and Policies. Paper prepared for Expert Group Meeting October 16-18, 2000. www.un.org/esa/population/publications/popdecline/popdecline.htm