

Determinants of Migration

Migration is driven by perceived differences in the utility of living or working in two geographical locations. Over time, such perceptions have changed in Eastern Europe and the former Soviet Union (FSU). In the aftermath of transition, migration was stimulated not only by economic motivations but also by the desire to escape conflict and relocate to ethnic homelands in many instances. As much of the diaspora migration ran its course and security risks diminished—with some exceptions such as in southern Russia—migration flows began “normalizing” and much current migration reflects perceived expectations about differences in income and the quality of life.

Despite the great variation in the migration patterns across the region and the extremely complex combination of microeconomic and social motivations for migration, similar motivations seem to underpin the decisions to migrate throughout the region. The most recent labor flows in Europe and Central Asia (ECA) region seem largely to be a response to poorly functioning labor markets, insufficient productive capital, the low quality of life in a number of migration sending countries, and a rising demand for unskilled labor for the nontraded services sector in the labor-importing economies in the European Union (EU) and Commonwealth of Independent States (CIS). As the neoclassic or Harris-Todaro approach argues, differences in real income or expected income clearly drive the supply of migra-

tion in a large number of cases. Yet, income differentials explain only a portion of the story. There is evidence that migration between two countries with unequal average real wages can remain low when there is an expectation that aggregate “quality of life” is improving in the lower-income country. Significant portions of any country’s workforce may, all else being equal, prefer to remain at home rather than take on the risks of moving abroad and leave family and friends. Yet, many households agree to leave their familiar surroundings when their home countries do not provide for their physical protection from attack or abuse, or have poor public-service delivery and governance at the local and national level, an uncertain business investment environment, or high unemployment.

On the demand side, the migration of unskilled labor to the EU and the resource-rich CIS primarily reflects a need for labor in non-traded services resulting from rising incomes, the growth of the middle class, and the increasing number of women participating in the labor force. This demand for labor can be met by migrants for whom the market-clearing wage is superior to opportunities back home. As per capita incomes and mandated wages rise, unskilled local workers are increasingly priced out of the market, while the large excess supply of migrant labor sustains demand and the prevailing wage.

This chapter seeks to understand the motivations driving migration in ECA using three methods. The first section lays out the theoretical perspective for the chapter—it undertakes a literature review of existing research on the determinants of migration, and raises the possibility that overall quality of life expectations, in addition to wage differentials, may drive migration.

The next two sections contain a comparative historical analysis of the migration experiences of the countries of the FSU in one case and of the Southern and “cohesion” European countries from the 1960s to the 1980s. These countries’ experiences in moving from net emigration to immigration countries over this period provide insights into the configurations of migrants’ expectations and economic and quality-of-life motivations that shape broader national migration patterns. A key goal of this section is to provide a more refined understanding of the migration “hump” that some have observed characterizes migration from Southern Europe and other regions, as well as to identify the role that migrants’ expectations play in shaping such hump patterns. Coming to grips with these countries’ experiences may be instructive for understanding how migration may evolve in ECA in the future.

A final section employs an economic model to simulate international labor markets and thus judge the impact of improving quality

of life in the receiving countries on patterns of migration. The simulation finds that improvements in the sending countries' policies and institutions can slow out-migration and perhaps enhance the incentives for circular migration, a form of migration where the migrant spends intermittent time at home and abroad.

Incentives for Migration: A Theoretical Perspective

The motivations for migration may be stylistically described as combinations of social, ethnic, and politically related push and pull factors (table 3.1). Yet, as chapter 1 discussed, labor migration is becoming the chief motive for migration for the majority of migrants in Central and Eastern European and Central Asian countries. This labor migration has generally been understood to be driven by differences in returns to labor, or expected returns, across markets.¹

The simplest economic models of migration highlight that migration streams result from actual wage differentials across markets, or countries for our purposes, that emerge from heterogeneous degrees of labor market tightness. Todaro (1968, 1969) and Harris and Todaro (1970) refined this simple model into the more widely applied explanation that migration is driven by expected rather than actual wage differentials. Though their model was designed to understand internal migration in less-developed economies, their approach of explicitly modeling *expected* wage differentials has been widely generalized in formal explanations of international migration because it reflects the uncertainty that migrants will be able to successfully locate better paying jobs in another location. As Todaro (1969, p. 140) explained, “[a] 70 per cent ...real wage premium, for example, might be of little consequence to the prospective migrant if his chances of actually securing a job are, say, one in fifty.”

Yet as Bauer and Zimmermann (1999) observed, the predictions made by this simple economic model have had mixed success in explaining and predicting migration across a variety of regions. These authors found that in a number of studies, wage and also employment differentials (which are linked to the probability of locating a position abroad) were statistically significant predictors of migration in the expected directions only about half the time. In a number of cases, these differentials seemed to produce the opposite of the expected effect.

To some extent, these uneven results reflect the differential drivers of migration across countries at different points in time, as well as the extreme complexity of the migration process. They might also reflect

TABLE 3.1

Motivations for Migration

	Push factors	Pull factors
Economic and demographic	Poverty Unemployment Low wages High fertility rates Lack of basic health and education	Prospects of higher wages Potential for improved standard of living Personal or professional development
Political	Conflict, insecurity, violence Poor governance Corruption Human rights abuses	Safety and security Political freedom
Social and cultural	Discrimination based on ethnicity, gender, religion, and the like	Family reunification Ethnic (diaspora migration) homeland Freedom from discrimination

Source: World Bank staff.

the poor and noisy qualities of migration data. Yet, there are a number of empirical anomalies to the Harris-Todaro framework that suggest a more fundamental weakness. For example, the accession of Greece (1981), Portugal (1986), and Spain (1986) to the European Community (EC) was accompanied by predictions of massive waves of economic migration from these Southern European countries to Western and Northern Europe as barriers to free labor movements were phased out. The income differentials between these new member states and the majority of the EC raised fears that wages would be depressed and unemployment of indigenous workers would result in the older EC states while domestic social security systems would be placed under enormous pressure. Similar “doomsday” scenarios resulted when EU membership expanded into Central and Eastern Europe in 2004 (European Commission 2006). However, in both instances, the most extreme of these fears were exaggerated because migration levels were not as elastic to wage and employment differentials as some empirical estimations of the Harris-Todaro model would predict.

These anomalies indicate the importance of including broader quality-of-life considerations in the home country as an explanatory variable. Differences in political stability, human rights situations, and the general rule of law may also affect migration, because these factors serve as a proxy for the level of individually perceived insecurity. Thus, it is possible to hypothesize that broad, quality-of-life considerations drive or even inhibit migration. Though the decision to migrate for more productive and lucrative jobs is certainly related to the search for a higher-quality life, wage and unemployment differentials alone will not explain as much migration as when combined with these broad quality-of-life concerns. Risk-averse individuals and households may

be less motivated to exploit spreads in earnings across countries if their day-to-day lifestyle is comfortable and stable. Yet, differentials in the pursuit of security may motivate those who would otherwise stay at home to search for a better and more secure life. This suggests that migration might be kept low even when income differentials are high if growth is rapid or the adoption of better institutions is underway (as with EU candidates adopting the *Acquis Communautaire*), but might increase when change is not occurring.

Thus, the policies that improve the incentives for business investment, financial deepening, and the exercise of entrepreneurship might be the same as those that reduce the incentives for migration. If “quality of life” policies are understood as a broad range of economic structural, social equity, and governance factors, then improving these policies creates the incentives necessary to maximize the benefits from existing migration flows.

Incentives for Migration: Empirical Evidence from Eastern Europe and the Former Soviet Union

As discussed above, neoclassical economic theory posits that it is differentials in wages among regions, or countries, that cause people to move from low-wage, high-unemployment regions to high-wage, low-unemployment regions. Extensions of neoclassical theory, called “the new economics of migration,” use households, families, or other groups of related people, rather than markets themselves, as their unit of analysis. These units operate collectively to maximize income and minimize risk. Thus, they often send one or more family members to other parts of the country, usually a larger city, or abroad to increase overall family income while others remain behind earning lower but more stable incomes.

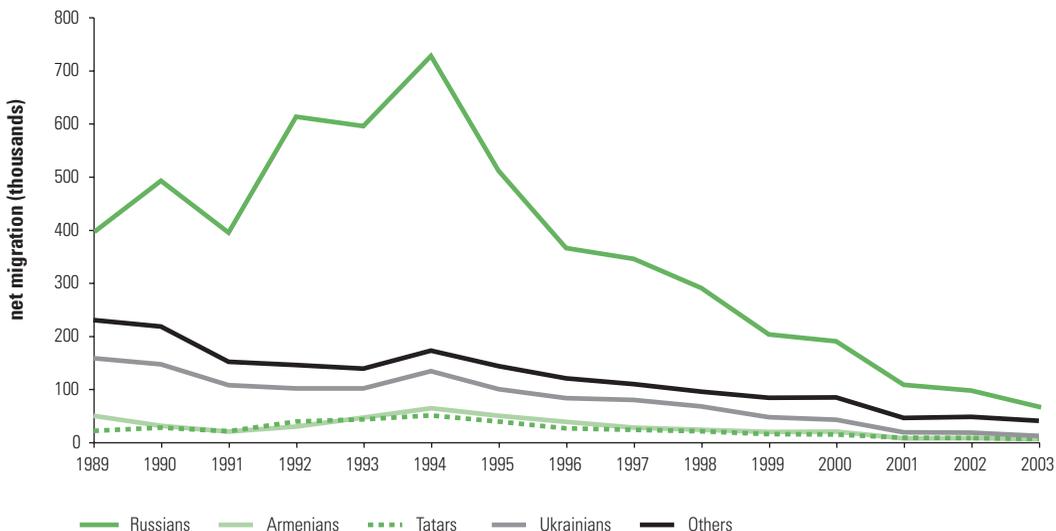
The complex system of ethnic homelands that make up the ECA countries further complicates migration patterns in several ways. For instance, when the Soviet Union broke apart, there were 53 different ethnic homelands, 15 of which became independent sovereign states. Across ECA, there were large diaspora populations living outside their ethnic homelands. Many thought that “return migration” to ethnic homelands of diaspora groups would dominate migration patterns during the early part of the transition period.

It appears from available data that these ethnic causes of migration, namely “diaspora” migration, did dominate trends in the early 1990s, but that economic motives are now becoming the major factor influencing migration. Much diaspora migration was accompanied by

ethnic violence, resulting in large refugee and internally displaced populations. Appendix table 1.3 shows the nationality composition of the ECA countries based upon the 1990 and 2000 population censuses. In all but one of the 15 countries of the FSU, the titular population increased its share of the total population. The lone exception was Russia, where the percentage of the Russian population fell slightly, likely owing to the high rate of natural decrease of the ethnic Russian population. In the eight countries of the western ECA region where data are available from both censuses, the titular population increased in only three. This result is explained in part by increases in Roma populations resulting from ethnic reidentification.

Figure 3.1 shows the ethnic composition of migration into Russia since 1989. The share that ethnic Russians contributed to total migration into Russia peaked in 1992—the first year after the breakup of the Soviet Union—at two-thirds of total immigration. The Russian share has since declined to only half of total immigration into Russia as, presumably, those Russians who were going to leave the non-Russian states of the FSU did so in the early 1990s. As the number of Russians migrating to Russia has declined, total migration to Russia has declined and the number of non-Russians going to Russia has increased, presumably for economic reasons. The share of non-Russians would presumably be even higher if undocumented and temporary migration were included.

FIGURE 3.1
Nationality Composition of Migration to Russia, 1989 to 2003



Source: Goskomstat Rossii, Demographic Yearbook of Russia (selected years).

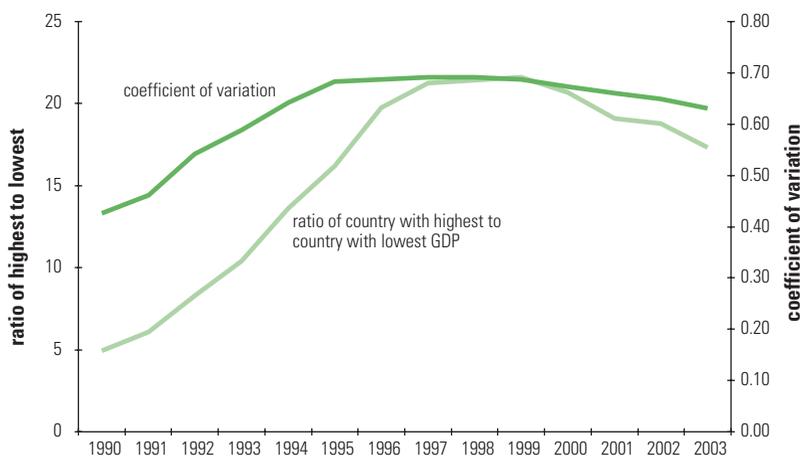
One rather simple theoretical explanation for the migration trends among the ECA countries is the widening disparities in GDP per capita. Within countries such as the Soviet Union there was an attempt to equalize incomes among both social groups and geographic regions, which was accomplished through a massive and elaborate system of subsidies, transfers, and controlled prices. With independence and economic transition, levels of GDP per capita have widened considerably among the ECA countries, and now act as a factor. Figure 3.2 shows the coefficient of variation and the high-low ratio of per capita GDP among the ECA countries for the period 1990–2002. The coefficient of variation increased from 0.43 in 1990 to 0.70 in 1997, before declining slightly. The ratio of the country with the highest GDP to the lowest showed a similar trend, increasing from 4.9 in 1990 to 21.6 in 1999, before declining slightly.

Though illustrative of the widening income levels among ECA countries during transition, these coefficients are somewhat misleading because the two countries with the highest and lowest per capita GDPs in 2002 were Slovenia and Tajikistan. Given the distance between the two and various other factors, there is not expected to be a lot of migration from Tajikistan to Slovenia. More telling are the income disparities between migration spaces of geographically adjacent groups of countries, in this case the CIS and Europe, which includes both Eastern and Western Europe. Appendix table 1.4 shows

FIGURE 3.2

Disparities in GDP per Capita in the CEE-CIS States, 1990–2002

(PPP current international dollars)



Source: World Bank, World Development Indicators.

Note: CEE = Central and Eastern European; PPP = purchasing power parity.

the income differentials between western ECA countries and Western Europe and appendix table 1.5 shows these differentials among CIS countries. Among western ECA countries, even the country with the highest income, Slovenia, has an income less than two-thirds of the Western European average. Similarly, within the CIS, the two countries with the second highest incomes, Kazakhstan and Belarus, still have incomes only about two-thirds that of Russia, while Russian GDP per capita is eight times that of Tajikistan.

The relative influence of ethnic versus economic factors partially explains the temporal trends in migration that took place across the ECA region since 1990. Yet, clearly the motivations for migration across the region have been complex and, for periods in the early 1990s, were partly driven by the dissolution of the Soviet Union. This complexity combined with the poorness of the data used for measuring these flows make the statistical estimation of the determinants very difficult. What emerges from such studies is a complex picture indicating that expected income differences, the expected probability of finding employment abroad, and expected quality of life at home play a strong role in the decision to migrate in many cases but can also be tempered by the influence of numerous other variables and the patterns vary considerably across countries (see box 3.1).²

Figures 3.3 and 3.4 show the trends in net migration rates for selected immigration and emigration countries, respectively. For nearly all immigration countries, net migration was much higher in the early 1990s than after 2000. As shown in figure 3.3, in Russia the net migration rate went from 0.1 per thousand in 1991, the last year of the Soviet Union's existence, to 5.4 in 1994 before falling back to almost the pretransition rate of 0.2 in 2003. Most of the other ECA countries that are now net recipients of migrants experienced a similar trend of either larger immigration or emigration in the early and mid-1990s as a result of ethnic reshuffling. However, much of the migration as a result of ethnic factors, whether voluntary or forced (or somewhere between the two), seems to have been a one-time event brought about by the increase in the number of states. Most of those who found themselves outside their ethnic homelands and who would migrate "back" home already have done so.

A similar pattern is seen among emigration countries in figure 3.4, where the large outflow of the early 1990s slowed considerably after 2000. Of the total migration of ethnic Russians to Russia over the period 1989 to 2002, over half took place in the first four years after the breakup of the Soviet Union—1992 to 1995. In the three Baltic states, which all had large Russian populations, three-quarters of return migration took place during this period. Now that these three

BOX 3.1

Estimating the Determinants of Migration in ECA

In this investigation of the determinants of migration in ECA, the model of migration developed by Hatton (1995) is used as a starting point (further information on the model and estimations is presented in appendix 3.1). This model, based on the concepts of individual utility maximization and migration as a form of investment in human capital, is delineated as follows:

$$U_t = \ln(w_d)_t + \gamma \ln(e_d)_t - \ln(w_h)_t - \eta \ln(e_h)_t - z_t \quad (1)$$

where w_d , w_h , e_d , e_h are the income and probability of employment in the countries of destination and origin, respectively, and z is the cost of migration.

The formation of expectations of the future utility of migration follows a geometric series of past values; the most recent utility streams are given greater weight.

$$\begin{aligned} U_t^* &= \lambda U_t + \lambda^2 U_{t-1} + \lambda^3 U_{t-2} + \dots, \quad 0 < \lambda < 1 \\ \text{or} \\ U_t^* &= \lambda U_t + \lambda U_{t-1}^* \end{aligned} \quad (2)$$

Furthermore, the immigration rate (M_t) is assumed to be a function of current and net present value levels of utility from immigration.

$$M_t = \beta(U_t^* + \alpha U_t), \quad \alpha > 1 \quad (3)$$

where β stands for the aggregation parameter, and α for the extra weight given to the current utility.

Extending this basic migration model and following Zoubanov (2004) to account for the nonlinear relationship between the cost of migration and current stock of immigrants, we incorporate the squared current stock of immigrants (MST) from a given country of origin into the equation. To account for quality-of-life considerations, the same adaptive expectations structure is used as above. The European Bank for Reconstruction and Development transition index is used to account for the quality of life in the origin country. As such, the final specification is as follows:

$$\begin{aligned} \Delta M_t &= \beta(\alpha + \lambda) \left[\Delta \ln(w_d / w_h)_t + \gamma \Delta \ln(e_d)_t - \eta \Delta \ln(e_h)_t - \varepsilon_1 \Delta MST_t - \varepsilon_2 \Delta MST_t^2 + \Delta EBRD_t \right] + \\ &+ \beta(\alpha + \lambda - \lambda \alpha) \left[\varepsilon_0 + \ln(w_d / w_h)_{t-1} + \gamma \ln(e_d)_{t-1} - \eta \ln(e_h)_{t-1} + \varepsilon_1 MST_{t-1} + \varepsilon_2 MST_{t-1}^2 + EBRD_{t-1} \right] \\ &- (1 - \lambda) M_{t-1} \end{aligned} \quad (4)$$

The dependent variable here is the change in gross migration rates (inflows from origin to destination country divided by the population stock of origin country). Explanatory variables in the model are transformed to one-year differences and 1-year lagged levels to capture short and

(Continues on the following page.)

BOX 3.1

Estimating the Determinants of Migration in ECA (*continued*)

longer-term dynamics. The real wages w_d and w_h are approximated by per capita income data (with purchasing power parity calculations applied) of the destination and origin countries, respectively. Ignoring the labor market participation, the employment rates e_d and e_h are proxied by 100 percent minus unemployment rate in destination and origin countries, respectively. The model also incorporates distance between the capitals of destination and origin countries as a dependent variable, as well as the EBRD transition index discussed above. A summary of the results is in the table below:

**Migration Rates and Current Stock of Immigrants:
Extended Basic Migration Model, 1991–2003**

Migration to	Changes				Lagged levels					
	PCI ratio	E in d	MST	EBRD	PCI ratio	E in d	MST	EBRD	M	D
Russia	+	–	–	+	+	0	–	–	–	–
Germany	0	+	+	0	0	+	–	–	–	–
United Kingdom	–	–	0	0	–	0	0	+	0	0
Austria	0	0	–	0	–	+	0	+	–	–
Sweden	0	+	0	0	0	+	+	–	–	–
Denmark	0	0	0	0	+	+	–	–	–	–

Source: World Bank staff estimates.

Note: + indicates that the coefficient was positive and significant at less than 10 percent; – indicates that the coefficient was negative and significant at less than 10 percent; 0 indicates that the coefficient was not statistically significant.

PCI ratio: Ratio of GDP per capita of host country to GDP per capita of home country.

E in D: Employment rate in destination country.

MST: Squared current level of migrants in host country (capturing network effects).

EBRD: EBRD Transition Index capturing quality of life related issues.

The model suggests that wage and employment differentials were statistically significant predictors of migration in the expected directions only about half the time. In a number of cases, these differentials seemed to produce the opposite of the expected effect.

In general, the results for the Russian model are broadly in line with our hypothesis that the migration rate is positively correlated with expected income differentials and negatively correlated with the expectations of improving quality of life at home. The significant negative effect of the stock of migrants seems to reject the commonly referred “network” effect in the models for Russia, Austria, and Denmark, suggesting instead that the existence of factors such as increased competition in the labor market of the destination country, anti-immigration policy, racial intolerance, and other factors may make migrant stock a poor predictor of future migrant flows. As was expected, distance is negatively correlated with the migration rate in all models.

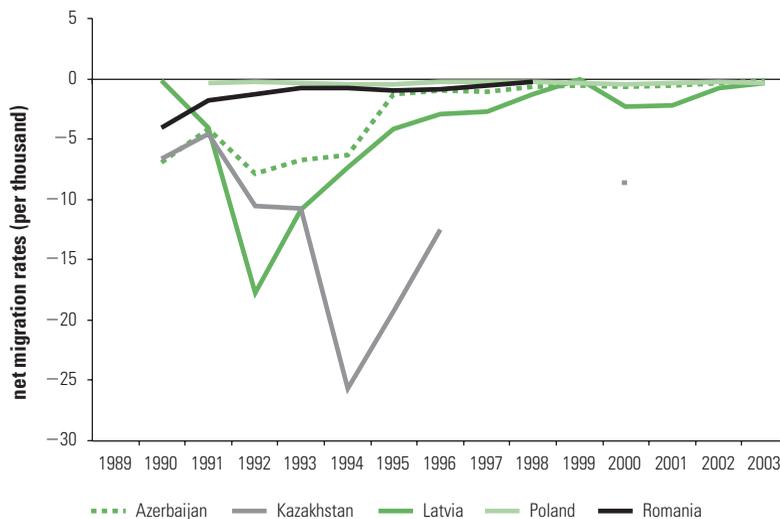
Source: World Bank Staff estimates.

FIGURE 3.3
Net Migration in Selected Immigration Countries in ECA, 1989–2003



Source: World Bank Staff estimates.

FIGURE 3.4
Net Migration in Selected Emigration Countries in ECA, 1989–2003



Source: World Bank Staff estimates.

countries have joined the EU and their economies are growing, net migration of Russians to Russia is less than 1,000 a year; for comparison, over 60,000 Russians left in 1992 alone. It appears that income differentials among countries will be the primary factor driving migration in the ECA region in the medium term, while demographic factors will play a role in the longer term (see chapter 1).

Despite this evidence, the temporal dimensions of these patterns do not clearly match up to those that might emerge if migrants' motivations were driven solely by cross-national income differences. The income disparities that persist fail to explain contemporary migration patterns in the ECA. The following section considers alternative explanations for determinants of migration, using the experiences of Southern Europe and Ireland as test cases.

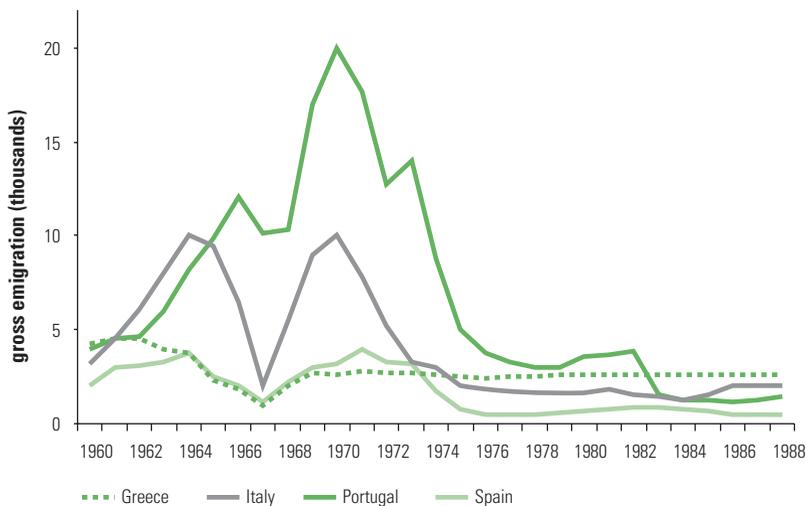
Incentives for Migration: Lessons from Southern European Countries and Ireland

The migration histories of Ireland and Southern Europe—countries that saw many of their citizens emigrate during the postwar period—are especially useful for interpreting and forecasting patterns of emigration for the countries of Central and Eastern Europe. First, ECA countries, like Ireland and all Southern European countries, are close to their respective destination countries. This proximity is not only physical but also cultural—languages and social traditions are comparable. Additionally, Southern European countries and Ireland, as we see with ECA countries now, were poorer than their destination countries. However, in both cases the differential (especially in the last century) in fact was not extreme, particularly if the quality of human capital is the measure employed, as opposed to per capita gross national product (GNP) at purchasing power parity. Thus, while there are obvious differences between the Southern European and Irish countries and the ECA countries,³ the similarities are sufficient that a study of the migration history of the former may provide a reasonable amount of evidence about current and future trends.⁴

To begin, some have observed that migration patterns in Southern Europe evolved as a “hump.” This pattern of migration, as figure 3.5 illustrates, refers to a scenario in which emigration rates accelerate as a country's wealth increases and more households are able to fund migration. Yet as a country develops further, the motives for migration diminish and emigration rates drop.

Looking at the patterns illustrated in figure 3.5, the surge in Italian emigration during the 1960s to early 1970s was due not to an increase

FIGURE 3.5
Postwar Emigration in Southern Europe, 1960–88



Source: Venturini 2004.

in poverty but to an increase in income and employment growth at the beginning of Italian industrialization (Hatton and Williamson 1994). The surge of Spanish emigration to other European countries in the period 1960–74 was the result of a growth rate higher than in the other European countries.⁵ The peak of Portuguese emigration in the 1970s also took place during a growth phase, and Greece’s emigration rates rose during the economic boom of the 1960s.

After World War II, even if the gains from intercontinental emigration were greater (given the lowering of international travel costs during this period), emigrants were affluent enough to choose a closer destination, which they viewed as a more temporary emigration solution with numerous emigrants returning home. Faini and Venturini (1993, 2001) have tested these hypotheses using gross emigration flows from Spain, Greece, Portugal, and Turkey between World War II and the end of 1980s. During that period, the per capita income differentials between these countries of origin and European destination countries were relatively stable, and increases and decreases in migration flows were due to the effects of other variables—labor market factors, the per capita income in the origin country, and the absence of a competitive business or investment environment at home. The turning point in this inverted U shape effect of the annual per capita income on the migration decision in these countries was estimated at about \$3,500, after which additional economic growth discouraged emigration decisions. Similarly, Irish emigrants ceased to prefer the

United States to Britain as a consequence of the Great Depression—80 percent of total flows went to Britain in the late 1940s—but they did not change preferences when the American economy recovered. Nor were their flows sensitive to the reduction in travel costs, which again corroborates the dominance of the effect of income after World War II (Barrett 1999).

Looking at the downward slope of migration rates in figure 3.5, Italian outflows declined to a fractional value during the 1960s, at which time the wage differential between Italy and the main destination countries was approximately 30 percent. This can be called the “cost” of migration: people no longer emigrate if the return on the investment in migration is not 30 percent higher than the wage that they can earn in the country of origin. Yet, as was discussed above, though wage differentials are a good first indicator with which to understand emigration patterns, they must be combined with employment and quality of life expectations, which are a function of the future prospects of the economy and income levels, and these are not always included in empirical estimates. It could be argued that Italians reached the level of income that, all other things equal, yields no migration incentive. The halting of Spanish and Greek emigration to Germany in the second part of the 1970s was also the result of lower incentives (the GDP per capita in purchasing power parity differential with Germany was about 42 percent) from both the restrictive immigration policies adopted in Northern Europe and changes in their own governments accompanied by positive growth expectations. Such changes created strong incentives for existing migrants to return home, and for others to postpone emigration.⁶

The history of Irish emigration is very similar to what has been described above. The Irish have long been the United Kingdom’s “*unsung gastarbeiters*” (Ford 1994, p. 67). The long-run decline in Irish migration can be accounted for by the growth of Irish income and living standards relative to those in Britain. Irish industrial earnings rose from 70 percent of those in Britain in 1950 to 90 percent in 1990 (Ó Gráda and Walsh 1994, pp. 130–1).

Boxes 3.2 and 3.3 present two of the most recent and interesting experiences of emigration among the EU member countries, and they represent the opposite ends of the skill spectrum, the highly skilled Irish and the lower-skilled Portuguese. They also represent two different patterns of emigration, though both demonstrate that migration became temporary when the home countries grew and decreased the per capita income differential with host countries.

The above discussion supports this chapter’s theory that wage or income differentials of 30 to 40 percent are probably a necessary but

BOX 3.2**Irish Migration Dynamics**

Irish emigration declined steadily until the beginning of the 1970s: the net migration rate was negative 12.7 per thousand over the period 1871–81 and declined to negative 6.3 per thousand over the period 1936–46; it increased for the last time to negative 14.0 per thousand during 1951–61, reached negative 4.0 per thousand in 1961–71, and became positive in the subsequent decade. In addition to this reversal of Ireland's net migration balance, the composition of Irish emigration changed in favor of higher skilled and educated workers.

In the late 1960s and the 1970s, the average education level increased in Ireland, and in the 1980s the workers that emigrated to the United Kingdom (44 percent), to the other EU countries (14 percent) and to the United States (14 percent, with 27 percent to the rest of the world) were better educated. As Ó Gráda and Walsh (1994) show, the proportion of emigrants among the Irish with education at the tertiary level and above was between 18 and 30 percent, while those with secondary level educations composed less than 10 percent. This was not only due to an increase in average education in Ireland, but also resulted from a more selective emigration strategy. Migration among the lower educated may have yielded returns too low to make it worthwhile, while it was still rewarding for the higher-educated as a general career strategy (Barrett 1999; Breen 1984). Thus, on the one hand, welfare discouraged emigration by the poor, while on the other, high taxes encouraged emigration by the better educated (Callan and Sutherland 1997).

As a result of trade liberalization during the 1990s and the attractiveness of foreign direct investment, the Irish economy underwent rapid growth, which induced many high-skilled emigrants to return (mainly from non-UK destinations, where the cost of migration was probably higher because of differences in culture and language). Owing to their experience abroad, return migrants were able to earn on average 10 percent more than similarly educated natives who had not moved (Barrett and O'Connell 2000). Furthermore, thanks to its rapid economic growth, Ireland became a country of immigration that attracted high-skilled EU workers and that sought to attract high-skilled ECA workers as well.

Source: World Bank staff.

not sufficient condition to determine the end of emigration. The decision to migrate depends jointly on the income differential and on other economic and noneconomic variables. However, any such discussion should be careful not to lump all migrants together; what discourages one group of migrants may encourage another. For instance, unskilled migration may be replaced by skilled, and permanent migration by temporary.

As discussed below, much of the explanation for the slowing of emigration in the mid- to late 1990s and the conversion of many

BOX 3.3**Portuguese Migration Dynamics**

The case of Portugal provides a good contrast to that of Ireland (box 3.2). Portugal has a long history of emigration, and its overseas territories have served as migrants' main destinations in past centuries (Bagahna 2003). Even after World War II, the main emigrant destination was Brazil.

This picture changed during the 1960s. In line with encouraging the industrialization of the Lisbon area, the government decided that emigration had a positive impact on the labor market and contributed to the country's progress and development. Emigration took off when the country started to grow, drawing parallels to Italy; that country's emigration reached its peak with its industrialization at the beginning of the 1900s. While the Portuguese were the last of the Southern EU populations to emigrate, they followed the pattern set by Italian and Spanish workers: first to France, then to Germany and Switzerland. In contrast to the Irish, however, the average human capital of Portuguese workers was rather low, and emigrants left the country for low-skilled jobs abroad. Little by little, the Portuguese economy grew and emigration declined.

The relationship between Portugal and Germany, a major destination country for Portuguese emigrants, demonstrates the role of interacting supply and demand in the decision to migrate. When Portugal joined the EU in 1986, the GNP per capita in purchasing power parity of Germany was double that of Portugal. As a result, Germany experienced positive net immigration from Portugal. After 1993, when free mobility by Portuguese workers began (and the GNP differential was still high at about 40 percent), there was an increase amounting to 27,000 persons and only 5,000 employees.

However, the need for Portuguese labor in Germany had not disappeared. Permanent employment emigration was replaced by contracted temporary emigration or *Werkvertragsarbeiter*. These workers were employed by Portuguese companies operating in Germany and therefore did not show up in any emigration statistics. The demand for this type of worker declined when the German government obliged foreign companies to pay German wages and social security contributions.

Source: World Bank staff.

Central European countries from net emigration to net immigration status partly reflects expectations about the improvement in the quality of life in many countries in the region. However, it is first important to recognize the role of the EU in migration trends in Southern Europe, because accession of the ECA countries (or those proximate to the region) will likely affect ECA migration patterns in the future.

European Union Accession and Migration Trends

EU participation has also certainly played a major role in European migration, but probably a role different from the one expected. First, new member countries in the period before entry into the EU were required to implement a series of reforms that increased and favored the expansion of goods production. Italian development was export led, because domestic demand was too low to absorb the new production (low consumption, high savings, and the like). Similar patterns were displayed by other countries—both Ireland and Portugal also experienced export-led development—even if such development took place later on in the 1990s. Second, transfers from the Structural Fund that countries received after entry were an additional source of growth that increased domestic demand for labor, and that also helped indirectly by increasing the ability of these countries to attract foreign investments, which in turn increased the domestic demand for labor. Finally, factors in addition to strictly economic components help predict future migration trends. Expectations of future growth may be as important as current job availability in the decision to migrate, and membership in the EU has had an important effect upon potential migrant expectations

While growth prospects have traditionally been associated with increased migration, Burda (1993) points out that the freedom to move can reduce near-term immigration, because migrants are free to put off the move until later. Whereas a potential migrant would have to have taken whatever opportunities luck presented preunification, the postunification migrant can delay moving for as long as he or she wishes. If the quality of life at home shows signs of improvement, the potential migrant may decide to wait and see.

Despite the role EU membership may play in growth opportunities and migration incentives, it is important not to overemphasize its role. The emigration rates in Southern European countries had already started declining at the beginning of the 1970s, and have never regained those previous dynamics, even after EU membership. The country most at risk for large-scale emigration was Portugal. As described in box 3.3, when Portugal joined the EU in 1986, Germany's per capita GNP at purchasing power parity was double Portugal's. After 1993, when free mobility by Portuguese workers began, temporary contracts replaced permanent immigration, and even the former slowed substantially with the Portuguese economic boom of the 1990s.

This is an important finding for the ECA emigration countries and in particular for the new EU members. Joining the EU has already

avored economic growth or expected growth for these countries, and both direct investment from the Social Fund and the indirect attraction of foreign investment will further enhance growth prospects. These factors, as well as higher expectations of a better quality of life at home and the reduced cost of postponing the emigration decision, will discourage emigration. Furthermore, entrance into the EU may further support the prediction of declining migrant outflows, because temporary movements may increase in comparison to permanent ones. Such a trend toward temporary movement is already taking place between Germany and Poland, for example.

Simulating the Determinants of Migration

One of the themes of this chapter is that spreads in per capita income cannot alone explain contemporary migration flows in the ECA. In addition to evidence from history and statistical estimation, an economic model was employed to further understand the role that expected quality of life at home can play in driving migration or restricting migratory flows in the face of constant income differentials among countries. Such a model provides an opportunity to test the reaction of migrants to changes in the quality of life.

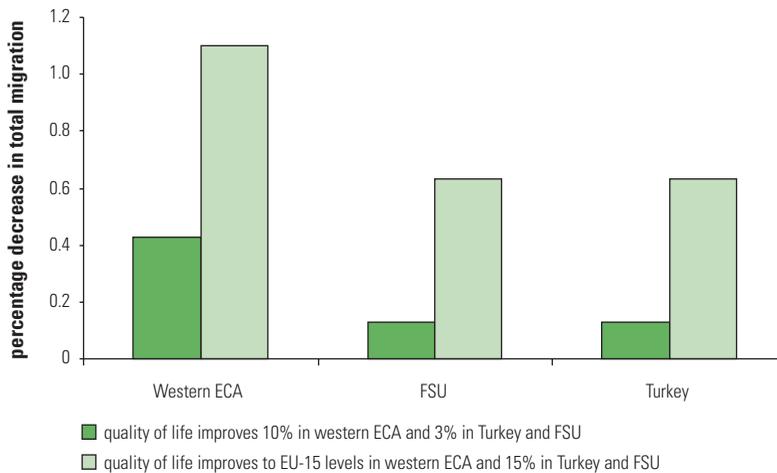
The model is an extension of GTAP, a comparative-static, multiregional computable general equilibrium model developed by the Global Trade Analysis Project (see appendix 3.2 for further information on the model). Versions of this model have been used previously to look at questions relating to the impact of international migration.⁷

An extension of the GTAP model is used to examine the impact of an improvement in the general “quality of life” in ECA countries on migration flows into the EU-15 countries. The index (known as the Country Policy and Institutional Assessment or CPIA) is a World Bank index that takes a variety of a country’s attributes into account, including macroeconomic policy, financial sector policy, trade, social equity, business investment environment, environmental policy, and political accountability.⁸

In this analysis, the CPIA index is treated as an exogenous factor that represents changes in overall quality of life. The impact of two simulations of improvement in the quality of life in the ECA migration-sending countries are illustrated in figure 3.6 for three groups of countries: (a) western ECA, (b) former Soviet Union, and (c) Turkey. The figure indicates the impact of increasing the quality of life on gross migration flows into the EU-15 for the western ECA countries by 10 percent and for FSU countries and Turkey by 3 per-

FIGURE 3.6

Percentage Decrease in Total Migration Flows into the EU Owing to Improvements in Quality of Life



Source: World Bank simulations. For more information on the simulations, see appendix 3.2.

Note: FSU = Former Soviet Union.

cent, and the impact on flows if quality of life in western ECA was identical to that of the EU-15 while Turkey and the FSU countries realized a 15 percent improvement.

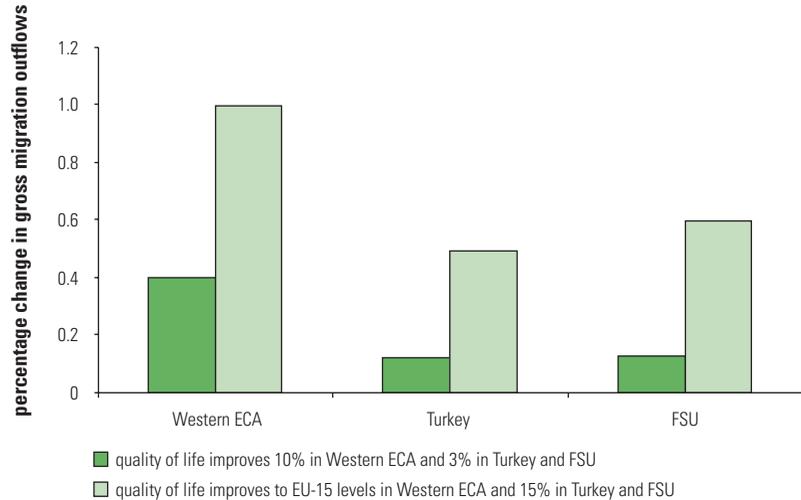
The results indicate that migration from western ECA would fall by just over 0.4 percent with the 10 percent improvement and over 1 percent if quality of life is equalized. Flows from Turkey and the FSU also fall with an improvement of 15 percent in the quality of life index. Outflows from these two fell by about 0.63 percent.

Looking at the other side of the issue, figure 3.7 presents the results of our simulation on flows from the EU-15 countries into western ECA, Turkey, and the FSU. As before, we see the impact of improving the quality of life index in western ECA by 10 percent and to EU-15 levels, and in Turkey and the FSU by 3 percent and 15 percent. The simulations find that migration outflows do increase as quality of life improves in the ECA countries. In the case of the larger shock, the improvement of western ECA's quality of life to EU-15 levels increases migration from the EU-15 by 1 percent and into Turkey and the FSU by about 0.5 and 0.6 percent, respectively. This may very well reflect return or indeed circular migration flows from natives of these ECA countries.

Though the magnitudes of change in migration flows found with these simulations are not enormous, the results show that improvements in quality of life do have the potential to shift the direction of

FIGURE 3.7

Percentage Increase in Migration Outflows from EU-15 to ECA Countries Owing to Improvement in Quality of Life in ECA



Source: World Bank simulations. For more information on the simulations, see appendix 3.2.

Note: FSU = Former Soviet Union.

migration patterns in the region in such a way that improvements in economic, political, and social policies can slow outflows and perhaps encourage return flows.

Taken as a whole, the results of our simulations and the history of migration in Southern Europe and Ireland provide qualified support to the hypothesis that the quality of life in migration-sending countries matters as a determinant of migration, even in the presence of constant income differentials. Moreover, the results suggest that these policies are even capable of creating incentives for circular migration or return migration. As is discussed in chapter 3, encouraging circular migration may represent a positive step toward enhancing the returns of migration to sending and receiving countries and migrants themselves. As further simulation results in chapter 4 will indicate, these effects are magnified when immigration policies encourage temporary or circular migration.

Endnotes

1. For summaries of the migration literature, see Lucas (2005); Bauer and Zimmerman (1999).
2. Full details on the econometric estimations of the determinants of migration in ECA are presented in appendix 3.1.

3. For instance, Ireland and the Southern EU countries have long histories of international emigration (first overseas, later in Europe). This is highly different from present ECA migration, with the exception of Poland, which has only recently seen international migration on a large scale.
4. This section draws heavily from Venturini (2004).
5. The rapid growth rate produced a reduction of 1,900,000 persons active in agriculture, and 800,000 emigrants (INE).
6. By 1974 the underemployment in agriculture in Greece was reduced; between 1963 and 1973 GNP growth was about 6 percent. It is thus not very clear whether the increase in the unemployment rate in Germany or the reduction of the unemployment rate in Greece reduced the emigration rate.
7. World Bank 2006.
8. For more information, see information on the CPIA index at www.worldbank.org.