

MIDDLE EAST AND NORTH AFRICA REGION

Labor Migration *from* North Africa

*Development Impact, Challenges,
and Policy Options*

| **VOLUME 1: MAIN REPORT** |



Middle East and North Africa Region

Labor Migration from North Africa
*Development Impact, Challenges, and
Policy Options*



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by the World Bank



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The EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies undertook research and activities across a spectrum of migration related themes, including: (i) assessment of the statistical and technical capacity for monitoring and analyzing the nature, causes, and consequences of migration flows; (ii) study of the poverty, social, and labor market impact of migration; (iii) identification of good practices in the area of labor migration management and social protection arrangements for migrant workers and returnees; (iv) development of learning

activities on the functioning and roles of diasporas and returned migrants, and identification of programs that have supported their contribution to economic and social progress of countries of origin; and, (v) the activation of a network of migration practitioners from EU and Maghreb countries, and establishment of a platform for debate on findings, needs, and policy options uncovered in the action.

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The publications and outputs stemming from this three year research program, in addition to this integrated volume, include the following: (1) one technical report on statistical and technical capacity for the analysis of migration flows (*An Assessment of Sources of Data on*

International Migration in the Maghreb and Egypt, Focusing on Population Censuses and Household Surveys, Richard E. Bilborrow and Ingrid Ivins; 2009); (2) one technical report on the impact of remittances on economic growth (*Remittances and Growth in North Africa*, Richard Adams, Jennifer Keller, Lili Mottaghi, Marie Alienor van den Bosch, 2009); (3) two technical reports on the distributional impact of remittances on household welfare (*Morocco's migration: the profile and the impact on households*, Marcin Sasin, 2008; *International Migration, Remittances and Household Poverty Status in Egypt*, Rania Roushdy, Ragui Assaad, Ali Rashed, Dalia Hassanein, 2008); (4) one technical report on the role of migration in mitigating demographic and labour market imbalances (*MENA-to-EU migration and labor market imbalances*, Frédéric Docquier and Luca Marchiori, 2008); (5) two technical reports on the impact of remittances on work incentives in domestic labor markets (*The Effects of Remittances on Labor Markets: Evidence from Morocco*, Joana Silva, 2008; *The Impact of International Migration and Remittances on Domestic Labor Markets: Evidence from Egypt*, Christine Binzel and Ragui Assaad, 2009); (6) one report on the impact of highly skilled migration flows on Maghreb sending countries (*Skilled Migration from the MENA Region: Trends, Impacts and Policy Responses*, Frédéric Docquier, Sara Johansson de Silva and Abdelhamid Marfouk, 2009); (7) three country studies on the impact of the institutional framework for migration on the profile of migrants, their integration in host countries and the evolution of legal vs. undocumented migration (*Changes in Immigration in the Netherlands: Trends, Policies and Incentives*, Chris de Neubourg, 2008; *La politique migratoire française dictée par les besoins économiques*, Mouna Viprey, 2008; *Spain, A Migration Boom under a Reactive Immigration Policy*, Jose Ignacio Conde-Ruiz, Clara I. Gonzalez, and Sara Johansson de Silva, 2008); (8) two technical papers on the living and working conditions of returned migrant workers in home Maghreb countries (*Return Migrants and Small Enterprise Development in the Maghreb and An Empirical Analysis Using Data on Return Migrants in the Maghreb*,

Flore Gubert; Christophe Nordman, 2008); (9) two country studies on the impact of international migration from Maghreb to EU countries on the well-being of children and women (*Remittances, Gender Roles and Children's Welfare Outcomes in Morocco*, Catalina Herrera, Nora Dudwick and Edmundo Murrugarra, 2008; *Impact of International Migration and Remittances on Child Schooling and Child Work: The Case of Egypt*, Asmaa Elbadawy and Ragui Assaad, 2009); (10) one report assessing good practices in the area of skilled labor migration management (*The International Migration Architecture: A Survey with Lessons for the MENA Region*, John McHale, 2008); (11) one report on social protection arrangements for migrant workers and returnees (*Social Protection for Migrant Workers from North Africa to Europe*, Johannes Koettl, Marie Alienor van den Bosch, Matteo Morgandi, 2009); and, (12) one report on diasporas and returned migrants actions (*Why is Diaspora Potential so Elusive? Towards a New Diaspora Agenda in North African Economies*, Yevgeny Kuznetsov and Matteo Morgandi, 2008). In addition, this report benefited from 3 background papers on migration from North African countries: (1) *Migration, Diaspora et Développement : Le Cas de la Tunisie*, A. Ben Haj Zekri, 2008 ; (2) *Migration, Diaspora et Développement: Le Cas du Maroc*, B. Hamdouch, 2008; and, (3) *Migration, Diaspora et Développement : Le Cas de l'Algérie*. Nacer Edine Hammouda, 2008. The background papers for this volume are included in the CD mounted on the inside back cover.

This report benefits extensively from the earlier background research underlying the World Bank's report: *Shaping the Future: A Long-Term Perspective of People and Job Mobility for the Middle East and North Africa*, a study co-financed by the European Union and the World Bank. Additionally, the presentation and integration of the research findings in this report have been substantially improved by comments and suggestions offered throughout the process. Among these, the report has particularly benefited from comments from Farrukh Iqbal, Roberta Gatti, Auguste Tano Kouame, Tara Vishwanath, Leila Zlaoui, Ruslan Yemtsov, Sonia Plaza, Dilip

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Abbreviations and Glossary

2SLS	Two Stage Least Squares technique
ADR	Aged Dependency Ratio
AMGE	Association des Marocains des Grandes Ecoles
ATUGE	Association Tunisiens des Grands Ecoles
AVR	Assisted Voluntary Return Programs
CAPMAS	Egyptian Central Agency for Public Mobilization and Statistics
CEDEFOP	European Center for the Development of Vocational Training
CGE	Computable General Equilibrium
DLM	Docquier, Lowell, and Marfouk (migration dataset)
EAP	East Asia and the Pacific Region
EC	European Commission
ECA	Europe and Central Asia Region
ELMS	Egypt Labor Market Survey (1998)
ELMP	Egypt Labor Market Panel Survey (2006, 1998)
ENCDM	Moroccan National Household Consumption and Expenditure Survey
EU	European Union
EU15	EU members prior to the accession of 10 candidates on May 1, 2004: comprising Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.
EU27	Full European Union: comprising Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.
FDI	Foreign Direct Investment
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GNP	Gross National Product
GLS	Generalized Least Squares technique

HCM	Higher Committee for Migration
HIC	High Income Countries (World Bank definition)
ILM	International Labor Migration Database (ILO)
ILO	International Labor Organization
IOM	International Organization for Migration
IV	Instrumental Variables technique
LAC	Latin America and the Caribbean Region
LIC	Low Income Countries (World Bank definition)
LMIC	Lower Middle-Income Countries (World Bank definition)
MENA	Middle East and North Africa
MENA4	North African focus countries: Morocco, Tunisia, Algeria and Egypt
MENA9:	MENA4 + Djibouti, Iran, Lebanon, Libya and Malta
MIREM	Program of Collective Action to Support the Reintegration of Return Migrants in their Country of Origin
OECD:	Organization for Economic Cooperation and Development
OTE	Office of Tunisians Abroad
REAGE	Réseau des Algériens Diplômés des Grands Ecoles et Universités Françaises
SA	South Asia Region
SSA	Sub-Saharan Africa Region
TDR	Total Dependency Ratio
TIMSS	Third International Mathematics and Science Study
TFP	Total Factor Productivity
UMIC	Upper Middle-Income Countries (World Bank definition)
UN	United Nations

Overview

The subjects of this migration research program are four countries in North Africa—Morocco, Tunisia, Algeria, and Egypt. As it has for the broader Middle East and North Africa region, labor migration has played a central role in shaping these four countries' social and economic development. While there are larger migrant sending regions in the world, on a per capita basis as well as in share of GDP, worker remittances to North Africa¹ are among the highest in the world.

Despite this economic importance, there has been surprisingly little attention paid to understanding the migration phenomenon in the North Africa region. This research program hopes to fill only part of a large knowledge gap, focusing on some of the development impacts of North African migration, the challenges the region faces with regard to labor migration over the near and long term, and policy options to maximize the potential for migration to be a tool for development. At the onset, it must be acknowledged that the study of migration from North Africa is significantly handicapped by data limitations, as confirmed by nearly all studies and researchers. These difficulties permeate all aspects of the subject, including migrant stocks and characteristics, migrant flows, remittances, and others,² and prevents the answers to many of the questions one would like to ask.

In the past, migration was only viewed as a 'failure of development,' reflecting a clear lack of opportunities at the country of origin. Indeed, many of the factors that increase the push for migration—unemployment, poverty, and political

instability—are palpable evidence of development deficiencies at home.

At the same time, more and more, migration has come to be concomitantly seen as a powerful mechanism for growth and development. With migration opening the door to financial resources (in the form of remittances), investment and knowledge transfer (by returned migrants and diaspora), skills development, and networks important for business, the potential channels for migration to aid in development are numerous.

The information on stocks of North African migrants is quite dated. In 2000, North African countries had an average emigration rate (to OECD and GCC economies combined) of about 5.5 percent of the resident population, and reaching as high as 9 percent in Morocco, but the destination and the nature of migration differ for Maghreb countries and Egypt. The migrants from the Maghreb countries are often unskilled workers searching for job opportunities that allow them to settle permanently in Europe. In contrast, Egyptian migrants are more likely to be temporary migrants in other Arab countries.

The skill levels of migrants also differ, with a preponderance of low-skilled migration from the Maghreb countries (at 70 percent) and a

¹ Because of data limitations, the analysis of North Africa is limited to the four countries mentioned. Where possible or required, data for the broader MENA region is alternatively discussed throughout the report.

² World Bank 2009. *Shaping the Future: A Long Term Perspective of People and Job Mobility for the Middle East and North Africa*.

greater mix of low and high-skilled migration from Egypt (55 percent, versus 30 percent for high skill and 15 percent for medium skill). At the same time, all countries in the region exhibit high rates of high-skilled (or more appropriately, higher-educated) migration, ranging between 8 percent and 19 percent of the domestic high-skilled workforce.

North African migration, particularly from the Maghreb, has also become more feminized, largely in the context of family reunification, but also an increase in female labor market participation. This feminization of migrants has had important impacts on both North Africa and Europe. In Spain, for example, the availability of predominantly female domestic helpers has led to large increases in native female labor market participation (and growth).

And, although for obvious reasons there are no reliable data on undocumented migration, with the establishment of migration networks and changes in migration policy, the proportions of North African undocumented workers are likely to have increased. In the 1960s and 1970s, migration generally operated through official channels and had a circular character. However, as soon as networks had been established in host countries, new migrants increasingly circumvented the bureaucracy of official recruitment and an autonomous “unofficial” channel emerged, parallel to the official one. More informal migration came with the introduction of new destinations (including Spain and Italy), and the introduction of Schengen visas (increasing the difficulty of labor entry legally).

The nature of migration from North Africa has a large impact on the benefits and costs the region can realize from the migration phenomenon. Migration brings different benefits and costs to the economy along the different migration stages, but the magnitude of those costs and benefits are greatly influenced by the characteristics of migrants and the structural characteristics and incentives in both home and host countries.

The ability to analyze the impacts of migration in a systematic way is significantly handi-

capped by a lack of appropriate data throughout the region. As a result, only some few parts of the potential costs and benefits of migration could be addressed in this research program.

At the broad level, there is interest in knowing the impact of migration on growth and productivity in North Africa, particularly in light of potential declines in migration and remittances with the global financial crisis. The North African region is estimated to have experienced 10.6 percent drop in remittances over 2009. However, at an economy wide level, the migration related impacts on output from the global financial crisis are likely to have been modest: with remittances averaging only 4.3 percent of GDP and with regional remittances estimated to have declined by 10.6 percent over 2009, the net impact on GDP over 2009 was only about 0.5 percentage points (but as high as 1.3 percentage points in Morocco).

However, cross-country time series analysis of remittances and growth also reveals the interplay between remittances and the financial sector in North Africa; particularly, that remittances have a stronger effect on growth if the financial system is shallower. This is evidence that remittances act as a substitute for the financial system. Although the growth effect is small—stemming from the small magnitude of remittances in North African economies—the results confirm evidence on the weak financial sector development in MENA countries generally. Investment climate assessments in the region reveal that few private sector firms even use bank credit to finance investment, instead relying primarily on retained earnings. And outside of Sub-Saharan Africa, no region has a higher percentage of firms that identify access to finance as a major constraint to doing business. As a result, remittances exert a stronger influence on growth in MENA (and North Africa) than in countries with more well developed financial sectors. Also as a result, MENA countries are more vulnerable to sudden changes in remittances.

Because migration, relative to the population, remains small (in Morocco, an estimated 11 percent of households have a migrant abroad; in Egypt, 3.5 percent), many impacts of migration

cannot be seen at the macroeconomic level, but will be evident through the decisions and outcomes of the household. In only two countries in the region, Morocco and Egypt, do data permit the empirical analysis of the impact of remittances, migration, or both. That analysis reveals some important findings:

First, migration and remittances have reduced the level of poverty in North Africa. While remittances do benefit the better off (with 61 percent of remittances accruing to the top 2 income quintiles in Egypt, and 82 percent in Morocco), they nonetheless benefit the poor. In Morocco, for example, remittances account for more than 50 percent of the household budget of the lowest income quintile. Moreover, remittances decrease the probability of being poor by about 7 percentage points in Morocco and by about 9 percentage points in Egypt. That is to say, the presence of remittances in the household reduced the probability of being poor in Morocco from around 15 percent to around 8 percent, while in Egypt, it reduced the probability from around 20 percent to around 11 percent.

The analysis suggests that while migration can play a role in poverty alleviation, it is not a panacea for poverty reduction at the national level. In both Morocco and Egypt, the poverty alleviating impact of migration and remittances at the national level is modest. With only 3.5 percent of the Egyptian population receiving remittances at the time of the survey, the absence of remittances would have raised the overall poverty headcount by only about 0.4 percentage points. In Morocco, meanwhile, the absence of remittances would have raised the poverty headcount by less than a percentage point. Thus, the ability for migration to substantially alleviate poverty on a national level is limited.

However, for the individual household, migration is an important element of the household's coping strategy. Indeed, remittances reduce the individual probability for poverty almost in half in both countries. Moreover, migration plays an important role in providing a wider set of opportunities for both Moroccans and Egyptians, allowing households to save, cope

with crises, and simultaneously start or expand income generating activities, thus diversifying their livelihoods.

Remittances have also allowed for increased expenditures on health and education for children and reduced child labor, which over the long run are vital for setting the groundwork for higher growth. In both Egypt and Morocco, migration and remittances lead to positive improvements with regard to investments in children, and in Egypt, migration and remittances significantly reduce the probability of child work. Remittances also trigger a more equal intra-household allocation of education and food between boys and girls, offsetting a gender biased allocation in education and food expenses, and triggering gender parity in children's human capital accumulation in rural areas where girls are more marginalized.³

Another potential effect from migration relates to its impacts on labor markets, not only by the outflow of laborers, but also by potential changes in the labor market decisions of those left behind (particularly for households which receive remittances). However, the data from Egypt and Morocco suggest that the effects are modest, at best. In the case of Egypt, in fact, the results suggest a positive impact from remittances on labor supply, although most of the increase is the result of females moving into unpaid family labor. In both countries, remittances also increase the probability for self-employment at the expense of wage employment. Given the nature of the self-employment sector (predominantly low-skill), this suggests that remittances may be allotted as capital to more informal activities that provide greater employment flexibility.

The other evidence on impacts of North Africa migration can only come from descriptive evidence, which is suggestive (but not definitive) of associated costs and benefits of migration. In terms of costs, the largest potential cost to the region comes from the loss of higher-educated workers needed for growth and development—

³ Sadiqui (2004) shows that women in rural areas have been disadvantaged of urban modernization. For instance, their education and health access has traditionally been limited.

often (and inaccurately) referred to as the brain drain. While skilled emigration can increase the welfare of the individual, it can, in the general society of sending countries, lower the average level of human capital, thereby draining it of productive capacity. Additionally, since human capital can generate positive externalities through innovation and adoption of technology, result in higher fiscal revenues, and prompt better governance, it is possible that high-skilled migration may result in lower economic growth if educated persons leave a country. Shortages of skilled health personnel, teachers, engineers, and more general “institution builders” in developing countries can have impact beyond the migrants’ personal contributions to output, leading to major bottlenecks in progress toward economic and social development.

Data on stocks of migrants in OECD countries and the GCC indicate that North Africa’s skilled emigration rates are high (averaging 11 percent of the domestic stocks of higher educated laborers). But it is not possible, given data constraints, to evaluate the lost contributions of high-skilled emigrants from North Africa. However, there are at least a few conditions evident in North African labor markets that indicate that the environment for the productive use of education in the domestic economy is poor, suggesting that the actual ‘lost’ output from skilled migration is lower than might appear at first glance.

To begin, a significant portion of North Africa’s (and the broader MENA region’s) stock of higher educated laborers are unemployed. Unemployment rates for university graduates are significant and higher for university graduates than for other groups. In Egypt, while those with at least secondary education make up only 42 percent of the labor force, they account for 80 percent of the unemployed. In Algeria, only about 20 percent of the labor force has completed secondary education or more, but they account for almost twice that proportion of the unemployed, and the same is true for Morocco. In addition, the skills composition of emigration strongly mirrors the composition of unemployment. Returned migrant surveys from Algeria, Morocco, and Tunisia also point to high levels of unemployment prior to migration. If

high-skilled migrants emanate from the stock of unemployed—or alternatively, have skill sets that can be more easily replaced from the pool of unemployed in the local labor market, the true costs of high-skilled migration are lower.

Not only are North Africa’s unemployment rates high, there is considerable information to show that educated workers are not fully deployed to their most productive uses. Productivity estimates for the region suggest that North Africa and the broader MENA region suffers from persistently low productivity.

Several factors underlie the poor use of skills in North Africa. One large factor is the fact that the quantity, quality and focus of educational outcomes are not in line with the economic development objectives. MENA countries rank poorly in international tests of science and mathematics proficiency, and education systems are geared to prepare workers for civil service, rather than for jobs in a dynamic and competitive private sector.

Education reforms have focused on increasing access and improving quality, but without enhancing the motivation for the productive use of education in the economy. Among the most distortive policies inhibiting the productive use of educated labor (and all labor) in the region is the legacy of public sector employment. Despite attempts to reduce the size of the public sector, MENA (and North African) economies maintain some of the highest levels of public sector employment in the world. A body of research on public-sector employment suggests that human capital in the public sector does not contribute to economic growth, but actually reduces it.

Ultimately, the cost of skilled migration needs to be measured against whether the counterfactual holds: whether lack of skills is the binding constraint to economic development, and whether the human capital produced is productively employed in the home country. Both high unemployment and low productivity among educated workers point to the possibility that a large portion of the costs of ‘lost’ educated workers is attributable not to migration, but rather is a feature of a domestic environment

in which education is not channeled to its most productive purposes.

Much attention has been paid to the development benefits that countries can reap from migrants, through their initiatives as diasporas, and perhaps ultimately, from their return. The review of diaspora networks of migrants from the Maghreb and Egypt reveals they are already well developed in all major destination countries of Europe and North America, including such formal systems as associations of university graduates, philanthropic organizations, entrepreneurial associations, and other professional networks. However, the ability of diaspora networks to contribute fully to home country development has been hindered by the lack of responsiveness, flexibility and dynamism on the part of government. Diaspora programs and organizations are too centralized and bureaucratized to provide effective support to diaspora members and their organizations. Thus, there remains large potential for North African economies to better engage the diaspora for growth and development-enhancing investments and to create the virtuous circles for institutional change.

Return migrants represent another potentially important source of knowledge and investment to home countries. While lack of appropriate data prevents an empirical investigation of the impact of diaspora or returned migrants on growth or development in North Africa, survey data can provide a glimpse into what makes one returned migrant contribute more to the home economy than another: that is, what kind of experience abroad creates the infrastructure for the maximum contributions upon return. From analysis of the return migrant survey data, some important results emerge.

First, entrepreneurship among return migrants depends strongly on remittances. The results suggest that the higher the remittances, the lesser the budget constraint after return, an important determinant of entrepreneurial behavior. Indeed, for non-investors, access to financing is considered to be the biggest impediment in all three countries, especially in Morocco, providing further evidence of the weaknesses of financial

sector functions in North Africa. Entrepreneurship is also higher for those who received vocational training while abroad; these returnees have higher instances of being first time employers or self employed than those who do not migrate. The results suggest there is potential for small business start-up programs with market studies, micro-credit, and training components; thereby easing some of the constraints on entrepreneurship that arise from capital market imperfections or other market failures, such as lack of information.

And as important, the ability and incentives for returnees to invest or to have labor market success is significantly affected by the conditions of return. In particular, those migrants who returned for administrative reasons are less likely to experience upward job mobility, and less likely to invest once home. This suggests a potential growing importance for programs to support in the reintegration of irregular migrants in home countries.

Increasingly, it is understood that the experience of migrants abroad and the welfare gains for migration have a critical dependency on the overall policy and institutional environment toward migrants in the host country. Much of the European focus on migration has centered on security, national identity, and vulnerability associated with dependence on immigrants for entire productive sectors. Immigration is often blamed for problems in the host country such as high unemployment, the draining of government welfare programs, and for increasing inequality. As a result, there is no strong political constituency for mass immigration. At the same time, the need for less-skilled immigrants in Europe, based on labor demand, is clear.

The dichotomy between stated European migration policy objectives to control mass immigration and the ambivalence toward outcomes (at least regarding less-skilled illegal immigration), has created inherent distortions which have impacted both the incentives for migrants to return, and also the ability for North Africa's migrants—as diaspora and upon return—to contribute to home country development. Policies to limit low-skilled immigration have had little

impact on the flows, but they certainly have had repercussions on the status of migrants. In the case of Spain, rigid controls on formal labor migration have resulted in a burgeoning of irregular workers entering the country, with implications on productivity and access to social services. In the Netherlands, on the other hand, as opportunities for labor migration waned, family and asylum migration grew rapidly. In both countries, migration flows have ultimately been largely determined by labor demand conditions.

Demographic forces, which make increased North African migration virtually guaranteed, increase the need to better understand the potential impacts of migration. The long term need to replace an aging work force, especially in European countries, will require large scale population flows, without which European countries will lose hundreds of millions of workers over the next four decades and will be facing increasing strain on the productive part of the population to support both the upbringing of the young and the pensions of old. There are direct impacts on financial elements like social security.

The demographics of North Africa (and the broader MENA region) suggest that increasing migration flows from North Africa would clearly attenuate the deterioration of the European demographic structure. However, demographic analysis also shows that the ability for MENA countries to mitigate the labor market imbalances is temporary: MENA countries themselves will begin to experience serious demographic problems after 2030. Indeed, the MENA aged-dependency ratio in 2050 will approximately be equal to the current aged-dependency ratio observed in the EU.

Moreover, while MENA's demographic profile fits the European labor needs, its skills do not. Projections over the short, medium and long term suggest that labor shortages in Europe will occur across the skills spectrum, with significant demand for medium-level skills (such as nurses, intermediate business services) or even relatively low skills (retail salespersons, waiters, etc.). By contrast, jobs at low qualification levels are expected to fall.

Based upon current education levels, MENA countries (including North Africa) will provide a poor match to the projected skill needs. Since most of the additional population will have primary education levels, only a fraction of MENA's additional work force would be of interest to European countries.

Moreover, if education levels in the North Africa labor force remain low, while the demand for skills increases significantly across the Mediterranean, there is the considerable risk for the region losing scarce talent, expertise, and its educational investments to Europe—turning skilled migration into the so called “brain drain.” While there are potential positive feedback effects from skilled migration, the loss of a large portion of MENA's skilled talent is likely to have damaging impacts on growth, unless accompanying policies are put in place to mitigate them.

General equilibrium analysis can only provide scenarios, and results are determined by the assumptions underlying the model. However, the scenarios are useful for modeling the types of impacts the region (and Europe) can expect from large-scale increases in migration, whether they be low-skilled or high-skilled, and whether they are accompanied by other feedbacks and policies. These scenarios point to the increasing potential costs from large increases in skilled migration from North Africa, even in the face of diaspora contributions (although remittances and diaspora contributions mitigate some of those effects). However, these scenarios also suggest the role that accelerated human capital formation can play in the region to mitigate the effects of the brain drain.

To meet the challenge, the MENA region needs to improve their education system significantly. This would provide the region with a much needed force for economic development, and—in the face of increasing demand for skilled migrants—ensure that human capital at home is not entirely depleted. But the challenge is not only (or even mostly) quantity. It requires seriously addressing the educational quality issues at all levels of education. But also, education efforts will not pay off unless there is an enabling

environment that allows for a productive use for knowledge in the economy. And skills shortages may not, in fact, be the main problem for potential and actual entrepreneurs, whether based in the North Africa region or diaspora abroad. Political instability, corruption, high informality, and other factors seem to be just as important bottlenecks in progress toward higher productivity and growth. Indeed, these will be the very same factors that encourage some of the best and brightest to leave their country in the first place.

The agenda for improving the economic and social impacts of migration is large, and one of the central factors that will determine the ability for North African economies to make good migration policy is the existence of good data. Migration research is hampered by significant data limitations, as confirmed by nearly all studies and researchers. And, while migration is, in general, data handicapped, North Africa countries (or the MENA region more generally) are considerably more data-challenged—across all areas of economic and social information, both in terms of collection and importantly in terms of public access—than other countries of similar income levels.

Devising good migration policies and ensuring well-founded policy options requires both internal and external guidance. MENA policymakers should continue to review and assess the outcomes of international best practices in migration management and consider how good practice can be adapted to the specific national and regional circumstances. Policymakers must realize, however, that the most critical obstacle to the adaptation of international policies as practice is a lack of migration data from which to monitor the trends in the size, determinants and impacts of emigration and immigration.

Monitoring and evaluation of migration and other social and economic data is critical in order to understand the impact of different policies and adapt and improve the current policy mix. Apart from the long run implications of migration on growth and welfare, it is also essential that policymakers find a way to gauge the impact of the economic crisis on remittances and migra-

tion more broadly, the effect of those changes on household welfare (especially the poor), on inequality, and on households' livelihood, diversification and risk management strategies.

The limited knowledge base on the size of migration, its determinants and main impacts is due to two problems, on the input and output side. First, on the input side, there is a dearth of data. But also, on the output side, there appears not to exist clear strategies or approaches on how to turn data into knowledge. Much higher and better exploration of existing data will be needed.

For that reason, it is especially important for data being made widely accessible. Transparency of data and access for research is important both to find limitations or deficiencies in the data that can lead to improvements in data collection, thereby leading to improved policies—and that can help citizens and businesses plan for the future.

European policy also has an obvious role in the ability for migration to be a tool for North Africa's development. A central issue is social protection for migrants, which impacts not only the migrant condition but also the incentives for return. Social protection for MENA migrants in Europe is largely covered by the so-called Euro-MED agreements. In addition to the Euro-Med agreements, Maghreb countries enjoy more advantages through bilateral labor migration and social security agreements with several European countries.

Although much has been done and progress has been good, there are still loopholes in social protection systems. One such loophole is related to pensions exportability, which requires a ten-year minimum for the social security system, and in some cases, pensions are reduced when transferred abroad. Clearly, such provisions discourage return migration. Another inconsistency occurs in the interaction between national provisions for social protection and immigration and alien laws. Most European countries grant full social protection coverage to long-term migrants or permanent residents although the interaction between social and alien law complicates

the de facto access. For example, temporary migrants have limited access to health care and unemployment insurance, and no access to social assistance or public housing. Yet, continental European countries require up to ten years of residence before granting permanency, and in the southern European countries permanent status has only very recently become possible.

Clearly, a balance needs to be struck between fiscal sustainability, the risk of migrant attraction to generous welfare systems, and ensuring a level playing field on the one hand, and the rights of legal and irregular migrants on the other hand. If European countries wish to attract more migrant workers in the future, their specific vulnerability—when recently arrived, and in old age—must be taken into consideration, along with the risk of distorting incentives for return migration, circular migration and the labor market flexibility that migrants potentially can provide.

Finally, and ultimately, all of the policies which impact the degree to which North Africa can benefit from migration are precisely the policies that contribute to growth and development at home. The elements of the incentive framework which would increase the positive returns

from migration to the host country are precisely the elements which increase growth and development overall. High-skilled workers with skills relevant for a private sector led economy not only increase the employment potential (and remittance potential) abroad; they increase the employment potential at home. Having an investment climate which provides sufficient job opportunities for these higher educated workers at home not only reduces skilled labor flight, it also increases the contribution of human capital to growth and development. An investment climate that attracts business development from returned migrants also attracts the domestic investment for economic growth and development. Having the institutions that support diaspora engagement will also contribute to a better climate for investors domestically.

This research program can only fill a part of the knowledge gap in understanding the impacts and coming challenges from North Africa migration. It is hoped that the work sets the stage for a sustained commitment from all parties to better analyze and understand the migration phenomenon, and look for possibilities to maximize its potential benefits on both sides of the Mediterranean.

Vue d'Ensemble du Programme de Recherche

Le présent programme de recherche sur la migration porte sur quatre pays de l'Afrique du Nord – le Maroc, la Tunisie, l'Algérie et l'Égypte. Comme cela a été le cas pour la région du Moyen-Orient et de l'Afrique du Nord dans son ensemble, la migration a joué un rôle central pour influencer sur le développement social et économique de ces quatre pays. Bien qu'il y ait dans le monde des régions exportatrices de main-d'oeuvre plus importantes, sur une base par habitant et en part du PIB, les envois de fonds vers l'Afrique du Nord⁴ sont parmi les plus élevés au monde.

En dépit de cette importance économique, il est surprenant de constater que peu d'attention a été portée à comprendre le phénomène de la migration dans la région de l'Afrique du Nord. Le programme de recherche vise à combler certains aspects de l'important fossé au niveau du savoir, en mettant l'accent sur les impacts de développement de la migration nord-africaine, sur les défis auxquels la région fait face pour ce qui est de la migration de la main-d'oeuvre dans le proche et le long terme, et sur les options de politique visant à maximiser le potentiel de migration afin qu'il constitue un outil du développement. Dès le début il nous faut reconnaître que l'étude sur la migration de l'Afrique du Nord est fortement contrainte par les limitations des données, comme cela est confirmé par pratiquement toutes les études et tous les chercheurs. Ces difficultés touchent tous les aspects du sujet, y compris les stocks et les caractéristiques des migrants, les flux des migrants, les envois de fonds de l'étranger, et autres. Ceci empêche de

trouver une réponse à de nombreuses questions que l'on souhaiterait poser.

Par le passé la migration était seulement envisagée comme « un échec du développement », reflet de l'absence d'opportunités dans le pays d'origine. En effet, bon nombre des facteurs qui incitent à la migration – chômage, pauvreté, et instabilité politique – sont la preuve palpable d'une insuffisance de développement dans le pays.

Parallèlement, et de plus en plus, la migration est par la même occasion perçue comme un mécanisme puissant pour la croissance et le développement. La migration ouvrant la porte aux ressources financières (sous forme d'envois de fonds), à l'investissement et au transfert du savoir (migrants rentrant au pays et diaspora), au développement des compétences, et aux réseaux importants pour les entreprises, les filières potentielles pour que la migration vienne en aide au développement son nombreuses.

L'information sur les stocks de migrants nord-africains n'est pas récente. En 2000, le taux moyen d'émigration des pays de l'Afrique du Nord (par rapport aux économies de l'OCDE et du CCG combinées) se situait aux environs de 5,5 % de la population résidente et atteignait 9

⁴ En raison des limitations des données, l'analyse pour l'Afrique du Nord est limitée aux quatre pays susmentionnés. Lorsque cela s'avère possible ou nécessaire, les données pour la région MENA au sens plus large sont alternativement discutées tout au long du rapport.

% au Maroc, mais la destination et la nature de la migration diffèrent pour les pays du Maghreb et l'Égypte. Les migrants des pays du Maghreb sont souvent des travailleurs non qualifiés à la recherche d'opportunités d'emploi leur permettant de s'installer en permanence en Europe. À l'inverse, les migrants égyptiens ont davantage tendance à être des migrants temporaires dans d'autres pays arabes.

Les niveaux des compétences des migrants diffèrent aussi, avec une prépondérance de migration peu qualifiée en provenance des pays du Maghreb (70 %) et de migration plus diversifiée de travailleurs peu qualifiés et très qualifiés en provenance d'Égypte (55 % contre 30 %). Parallèlement, tous les pays de la région ont fait montre de taux élevés de migrants hautement qualifiés (ou plus précisément plus éduqués), se situant entre 8 % et 19 % de la population active nationale hautement qualifiée.

La migration nord-africaine, en particulier du Maghreb, s'est également féminisée principalement dans le contexte de la réunification des familles, mais également en raison d'une participation croissante des femmes au marché du travail. Cette féminisation des migrants a eu des impacts importants à la fois pour l'Afrique du Nord et l'Europe. En Europe, la disponibilité prédominante d'employées de maison a contribué à une forte hausse de la participation des femmes autochtones au marché du travail (et à la croissance).

Et, quoique pour des raisons évidentes, il n'y a pas de données fiables sur la migration illégale, avec l'établissement de réseaux de migration et avec les changements intervenus dans la politique migratoire, la proportion de travailleurs nord-africains illégaux a vraisemblablement augmenté. Dans les années 60 et 70, la migration s'opérait généralement par le biais de filières officielles et revêtait un caractère circulaire. Toutefois, dès que les réseaux ont été établis dans les pays d'accueil, les nouveaux migrants ont de plus en plus contourné la bureaucratie du recrutement officiel et une filière autonome « non officielle » a émergé en parallèle à la filière offi-

cielle. La migration plus informelle a commencé avec l'introduction de nouvelles destinations (dont l'Espagne et l'Italie), et l'introduction de visas Schengen (rendant l'entrée légale de la main-d'œuvre plus difficile).

La nature de la migration d'Afrique du Nord a un impact majeur sur les coûts et les avantages que la région peu tirés du phénomène migratoire. La migration comporte des niveaux variables de coûts et avantages pour l'économie tout au long de ses différentes étapes, mais l'ampleur de ces coûts et avantages est largement influencée par les caractéristiques des migrants et par les caractéristiques et incitations structurelles du pays d'origine et des pays d'accueil.

La capacité à analyser les impacts de la migration d'une manière systématique est fortement entravée par le manque de données appropriées pour l'ensemble de la région. En conséquence, seule une partie des coûts et avantages potentiels de la migration a pu être saisie dans le présent programme de recherche.

Au niveau global, on constate un intérêt à appréhender l'impact de la migration sur la croissance et la productivité en Afrique du Nord, en particulier à la lumière du recul éventuel de la migration et des envois de fonds dans le contexte de la crise financière mondiale. Il est projeté que la Région de l'Afrique du Nord enregistrera une baisse de 10,6 pour cent des envois de fonds en 2009. Toutefois, au niveau de l'économie, les impacts de la migration résultant de la crise financière mondiale seront vraisemblablement peu importants : les envois de fonds ne se situant qu'à environ 4,3 pour cent seulement du PIB et dans le contexte projeté d'une baisse des envois régionaux de 10,6 pour cent en 2009, l'impact net sur le PIB de 2009 ne sera que de l'ordre de 0,5 points de pourcentage (mais pouvant atteindre 1,3 points de pourcentage au Maroc).

Cependant, l'analyse de séries chronologiques transfrontalières des envois de fonds et de la croissance indique aussi une interaction entre les envois de fonds et le secteur financier en Afrique du Nord : notamment que plus le

système financier est superficiel, plus fort sera l'impact des envois de fonds sur la croissance. Ceci confirme que les envois de fonds agissent comme un substitut du système financier. Bien que l'impact sur la croissance soit minime – en raison de la portée restreinte des envois de fonds vers les économies nord-africaines – les résultats confirment la conclusion d'un faible développement général du secteur financier dans les pays de la région MENA. Les évaluations du climat de l'investissement dans la région montrent que rares sont les entreprises privées qui font appel au crédit bancaire pour financer l'investissement, comptant plutôt et principalement sur les bénéfices non répartis. Et en dehors de l'Afrique subsaharienne, aucune région n'a un pourcentage plus élevé d'entreprises qui identifient l'accès au crédit comme étant une contrainte majeure à la marche des affaires. En conséquence, les envois de fonds ont une influence plus forte sur la croissance dans la région MENA (et l'Afrique du Nord) que dans les pays dotés de secteurs financiers mieux développés. Dès lors, les pays de la région MENA sont plus vulnérables à de soudaines fluctuations des envois de fonds.

Etant donné que la migration, par rapport à la population, demeure peu importante (au Maroc, environ 11 % des ménages ont un migrant à l'étranger ; en Egypte 3,5 %), de nombreux impacts de la migration ne sont pas visibles au niveau macroéconomique mais apparaîtront au niveau des décisions prises par le ménage et des résultats. Dans deux pays seulement de la région, le Maroc et l'Egypte, les données permettent de réaliser une analyse empirique de l'impact des envois de fonds ou de la migration, ou des deux. L'analyse fait montre de quelques conclusions importantes :

Premièrement, la migration et les envois de fonds ont réduit la pauvreté en Afrique du Nord. Si les envois de fonds bénéficient au segment le plus aisé (avec 61 % des envois de fonds allant aux deux quintiles de revenus supérieurs, au Maroc et en Egypte), ils bénéficient néanmoins aussi aux pauvres. Au Maroc, par exemple, les envois de fonds s'inscrivent pour plus de 50 % du budget des ménages du quintile de revenus

le plus bas. En outre, les envois de fonds contribuent à minimiser la probabilité de se trouver en situation de pauvreté d'environ 7 points de pourcentage au Maroc et d'environ 9 points de pourcentage en Egypte. A savoir que la présence des envois de fonds dans le ménage réduit la probabilité d'être pauvre au Maroc d'environ 15 % à environ 8 % et en Egypte d'environ 20 % à environ 11 %.

L'analyse indique que si la migration peut jouer un rôle pour atténuer la pauvreté, ce n'est pas la panacée pour réduire la pauvreté au niveau national. A la fois au Maroc et en Egypte, l'impact d'atténuation de la pauvreté de la migration et des envois de fonds au niveau national est modeste. 3,5 % seulement de la population égyptienne bénéficiaient d'envois de fonds au moment de l'enquête, l'absence de ces envois n'aurait donc relevé l'indice numérique global de la pauvreté que d'environ 0,4 point de pourcentage. Au Maroc, l'absence d'envois de fonds aurait contribué à relever l'indice numérique de la pauvreté de moins de 1 point de pourcentage. Ainsi, la capacité de la migration à alléger substantiellement la pauvreté au niveau national est-elle limitée.

Toutefois, pour le ménage individuel, la migration est un élément important de la stratégie pour faire face aux risques. En effet, les envois de fonds réduisent la probabilité individuelle de pauvreté de près de la moitié dans les deux pays. En outre, la migration joue un rôle important en offrant une plus vaste gamme d'opportunités à la fois aux Marocains et aux Egyptiens, pour permettre aux ménages d'épargner, faire face aux crises et simultanément pour lancer ou développer des activités génératrices de revenus, et donc pour diversifier les moyens d'existence.

Les envois de fonds ont aussi permis d'accroître les dépenses à la santé et à l'éducation des enfants et de réduire le travail des enfants, ce qui à long terme est vital pour forger les bases d'une croissance accrue. En Egypte et au Maroc la migration et les envois de fonds ont été à l'origine d'améliorations au niveau des investissements consentis aux enfants et en Egypte la migration

et les envois de fonds ont nettement réduit la probabilité du travail des enfants. Les envois de fonds sont également à l'origine d'une allocation intra-ménagère plus équilibrée à l'éducation et à l'alimentation entre les garçons et les filles, ce qui a contrebalancé une allocation sexiste des dépenses à l'éducation et à l'alimentation, et incité à une parité entre les sexes au niveau de l'accumulation du capital humain des enfants du milieu rural où les filles sont davantage marginalisées.

Un autre impact potentiel de la migration a trait aux marchés du travail, non seulement pour ce qui est des sorties de travailleurs mais aussi des changements intervenants dans les décisions d'emploi de ceux qui sont restés sur place (notamment pour les ménages bénéficiaires d'envois de fonds). Toutefois, les données concernant l'Égypte et le Maroc indiquent que les impacts sont, aux mieux, modestes. Dans le cas de l'Égypte, les résultats suggèrent un impact positif des envois de fonds sur l'offre de main-d'oeuvre, même si cette amélioration dérive principalement des femmes qui s'intègrent à la main-d'oeuvre familiale non rémunérée. Dans les deux pays, les envois de fonds augmentent aussi la probabilité d'un emploi indépendant aux dépens d'un emploi salarié. Tenant compte de la nature du secteur indépendant (principalement peu qualifié), ceci montre que les envois de fonds peuvent servir de capital pour des activités plus informelles garantissant une plus grande flexibilité d'emploi.

Les autres preuves d'impact de la migration nord-africaine dérivent seulement d'un témoignage descriptif, suggestif (mais non définitif) des coûts et avantages associés à la migration. Le coût éventuel le plus important pour la région est lié à la perte de travailleurs plus éduqués nécessaires à la croissance et au développement – souvent (et incorrectement) évoquée comme étant l'exode des cerveaux. Si l'émigration qualifiée peut accroître le bien-être de l'individu, pour la société, elle fait courir le risque de minimiser les perspectives de croissance, si elle contribue à faire baisser le niveau moyen du capital humain des pays d'origine et donc à les drainer de leur capacité productive. Outre la perte de capacité productive,

comme le capital humain peut générer des externalités positives par le biais de l'innovation et de l'adoption de la technologie, être à l'origine de recettes fiscales plus importantes, et inciter à une meilleure gouvernance, la migration hautement qualifiée peut avoir des impacts substantiels sur la croissance si la population éduquée quitte le pays. Les pénuries de personnel qualifié de santé, enseignants, ingénieurs et plus généralement de « créateurs d'institutions » dans les pays en développement peuvent avoir un impact allant au-delà des contributions personnelles des migrants à la production, et constituer d'importants goulets d'étranglement pour le développement économique et social.

Les données relatives aux stocks de migrants dans les pays de l'OCDE et du CCG indiquent que les taux de l'émigration qualifiée en Afrique du Nord sont élevés (en moyenne 11 % du stock national de travailleurs très éduqués). Mais il n'est pas possible, en raison des contraintes de données, d'évaluer les contributions perdues des émigrants qualifiés de l'Afrique du Nord. Cependant, il y a au moins quelques conditions évidentes sur les marchés nord-africains du travail qui indiquent que l'environnement propice à une utilisation productive de l'éducation au sein de l'économie nationale est faible, ce qui suggère que la « perte » productive réelle de la migration qualifiée est moindre qu'anticipée au départ.

Tout d'abord, une proportion importante du stock des travailleurs qualifiés d'Afrique du Nord (et de la région MENA) est sans emploi. Les taux de chômage pour les diplômés universitaires sont significatifs et plus élevés pour ces derniers que pour d'autres groupes. En Égypte, la population ayant suivi au moins l'enseignement secondaire ne représente que 42 % seulement de la population active mais elle s'inscrit pour 80 % des sans emploi. En Algérie, environ 20 % de la population active ont complété l'enseignement secondaire ou plus, mais ils s'inscrivent pour près de deux fois la proportion des sans emploi et il en va de même au Maroc. Par ailleurs, la composition des compétences des migrants traduit largement la composition des sans emploi. Les enquêtes consacrées à la migration de retour en Algérie,

au Maroc et en Tunisie indiquent aussi de hauts niveaux de chômage avant la migration. Si des migrants qualifiés émanent du stock des sans emploi – ou alternativement ont des compétences qui peuvent pas être facilement remplacées par le pool des sans emploi du marché local du travail, les coûts réels de la migration qualifiée sont moindres.

Non seulement les taux de chômage de l'Afrique du Nord sont élevés, mais une documentation considérable montre que les travailleurs éduqués ne sont pas déployés de la manière la plus productive. Les estimations de la productivité de la région indiquent que l'Afrique du Nord et la région MENA au sens large enregistrent en permanence un faible niveau de productivité.

Plusieurs facteurs expliquent le faible niveau d'utilisation des compétences en Afrique du Nord. Un des facteurs est le fait que la quantité, qualité, et l'attention portée aux réalisations pédagogiques ne sont pas alignés sur les objectifs du développement économique. Le classement des pays de la région MENA dans les tests internationaux de maîtrise des sciences et mathématiques est médiocre et les systèmes éducatifs préparent les travailleurs pour un emploi dans la fonction publique plutôt que pour un emploi dans un secteur privé dynamique et compétitif.

Les réformes du secteur de l'éducation ont mis l'accent sur un meilleur accès et sur l'amélioration de la qualité, mais sans toutefois renforcer la motivation pour une utilisation plus productive de l'éducation dans l'économie. Une des politiques les plus biaisées qui fait obstacle à une utilisation productive de la main-d'oeuvre éduquée (et de la main-d'oeuvre en général) de la région est l'héritage de l'emploi public. En dépit des tentatives en vue de réduire la taille du secteur public, les économies de la région MENA (et nord-africaines) ont toujours les niveaux les plus élevés d'emploi public au monde. Et un organe de recherche axé sur l'emploi public suggère que le capital humain du secteur public non seulement ne contribue pas à la croissance économique, mais qu'en réalité il contribue à la minimiser.

En fin de compte, le coût de la migration qualifiée doit être mesuré pour établir le bien-fondé du contrefactuel suivant : le manque de compétences est-il la contrainte la plus importante au développement économique et le capital humain produit est-il employé d'une manière productive dans le pays d'origine. A la fois le chômage élevé et le faible niveau de productivité des travailleurs éduqués soulignent la possibilité qu'une part importante des coûts des travailleurs éduqués « perdus » est une caractéristique de l'environnement national dans lequel l'éducation n'est pas orientée à ses fins les plus productives (et non pas à la migration).

Une attention particulière a été portée aux avantages de développement que les pays peuvent tirer des migrants, par le biais d'initiatives telles que les Diasporas, et peut-être en fin de compte, la migration de retour. L'examen des réseaux de Diaspora de migrants du Maghreb et d'Egypte montre qu'ils sont bien développés dans les principaux pays d'accueil d'Europe et d'Amérique du Nord, y compris dans le cadre d'associations de diplômés universitaires, associations d'entreprises, et autres réseaux professionnels. Toutefois, leur capacité à contribuer pleinement au développement a été entravée par le manque de réactivité, flexibilité et dynamisme de la part du Gouvernement. Les programmes et organisations sont trop centralisés et bureaucratisés pour assurer un appui effectif aux membres de la Diaspora et à leurs organisations. Les économies nord-africaines ont donc un important potentiel pour mieux engager la Diaspora dans des investissements axés sur le renforcement de la croissance et du développement et créer des cercles virtuels pour le changement institutionnel.

Les migrants qui rentrent au pays constituent une autre source potentielle importante de savoir et d'investissement pour les pays d'origine. Le manque de données adéquates ne permet pas de réaliser un examen empirique de l'impact de la Diaspora ou des migrants qui rentrent au pays sur la croissance et le développement en Afrique du Nord, mais les données d'enquête peuvent donner un aperçu de ce qui fait qu'un

migrant rentrant au pays peut contribuer plus à l'économie de son pays qu'un autre, à savoir : quel est le type d'expérience acquise à l'étranger qui contribue à créer l'infrastructure requise pour une contribution maximum lors du retour dans le pays d'origine. Des résultats intéressants émergent de l'analyse des données d'enquête auprès des migrants rentrant au pays.

Tout d'abord, l'esprit d'entreprise des migrants qui rentrent au pays dépend largement des envois de fonds. Les résultats indiquent que plus les envois de fonds sont importants, moindres seront les contraintes budgétaires au retour, un déterminant majeur du comportement entrepreneurial. En effet, pour les non investisseurs, l'accès au financement est considéré comme étant l'obstacle le plus important dans les trois pays, en particulier au Maroc, ce qui ne fait que confirmer les problèmes du secteur financier en Afrique du Nord.

L'esprit d'entreprise est également plus développé pour ceux qui rentrent au pays avec une expérience antérieure d'employeurs ou d'indépendants, et pour ceux qui ont suivi une formation professionnelle au cours de leur séjour à l'étranger. Et, tout aussi important, la capacité et les incitations de ceux qui rentrent au pays à investir ou à remporter un succès sur le marché du travail sont fortement influencées par les conditions de leur retour. En particulier, les migrants qui sont rentrés pour des raisons administratives ont vraisemblablement moins de possibilité de mobilité d'emploi en amont et seront moins susceptibles d'investir à leur retour.

De plus en plus, il est entendu que l'expérience des migrants à l'étranger et les gains de bien-être pour la migration ont une dépendance critique sur la politique globale et l'environnement institutionnel envers les migrants dans le pays hôte. Une grande partie de l'axe européen sur la migration s'est centré sur la sécurité, l'identité nationale et la vulnérabilité apparente à la dépendance des immigrants pour des secteurs entiers de la production. L'immigration est souvent blâmée pour les problèmes dans le pays hôte tels que le chômage élevé, l'épuisement

des programmes d'assistance sociale du gouvernement et pour l'accroissement des inégalités. Par conséquent, il n'y a pas de groupe d'intérêt politique fort pour l'immigration de masse. Dans le même temps, le besoin d'immigrants moins qualifiés en Europe, en fonction de la demande de main-d'œuvre, est clair.

La dichotomie entre les objectifs déclarés de la politique de migration européenne pour contrôler l'immigration de masse et l'ambivalence vis-à-vis des résultats (du moins en ce qui concerne l'immigration illégale moins qualifiée), a créé des distorsions inhérentes qui ont eu un impact sur les incitations au retour des migrants mais aussi sur la capacité des migrants d'Afrique du Nord –en tant que diaspora et au retour – à contribuer au développement du pays d'origine. Les politiques qui limitent l'immigration à faibles qualifications ont eu peu d'impact sur les flux, mais elles ont eu certainement des répercussions sur le statut des migrants. Dans le cas de l'Espagne, les contrôles rigides sur la migration formelle de la main-d'œuvre ont eu pour résultat un foisonnement de travailleurs irréguliers entrant dans le pays, avec des implications sur la productivité et l'accès aux services sociaux. Aux Pays-Bas d'autre part, alors que les opportunités pour la migration de la main-d'œuvre diminuaient, la migration de la famille et l'asile se développaient rapidement. Dans les deux pays, les flux de la migration ont en dernier ressort été largement déterminés par les conditions de la demande de main-d'œuvre.

Les forces démographiques, qui virtuellement garantissent une migration nord-africaine accrue, ne font que renforcer la nécessité de mieux comprendre les impacts potentiels de la migration. La nécessité à long terme de remplacement de la population active vieillissante, en particulier dans les pays européens, impliquera des mouvements de population à grande échelle, sans lesquels les pays européens perdront des centaines de millions de travailleurs au cours des quatre prochaines décennies et auront à faire face à des tensions croissantes sur le segment productif de la population pour venir à l'appui de l'éducation des jeunes et des retraites des

personnes âgées. Les impacts sont directs sur des éléments financiers tels que la sécurité sociale.

Les démographiques de l'Afrique du Nord (et de la région MENA dans son ensemble) montrent que des mouvements croissants de migration en provenance de l'Afrique du Nord atténueraient la détérioration de la structure démographique européenne. Toutefois, l'analyse démographique montre aussi que la capacité des pays de la région MENA à mitiger les déséquilibres du marché du travail est temporaire : les pays de la région MENA eux-mêmes commenceront à avoir de sérieux problèmes démographiques après 2030. En 2050 le rapport de la population non adulte à la population adulte de la région MENA sera approximativement égal à celui observé dans l'UE.

En outre, alors que le profil démographique de MENA s'aligne sur les besoins en main-d'œuvre de l'Europe, il n'en va pas de même pour les compétences. Les projections pour le court, le moyen et le long terme montrent que les pénuries de main-d'œuvre en Europe se produiront sur l'ensemble du spectre des compétences, avec une importante demande pour les qualifications de niveau intermédiaire (infirmiers/infirmières, services commerciaux intermédiaires) voire même pour les qualifications de niveau relativement faible (vendeurs au détail, serveurs/serveuses, etc.). A l'inverse, les emplois à faible niveau de qualifications devraient enregistrer du recul.

Sur la base des niveaux actuels d'éducation, les pays de la région MENA (et de l'Afrique du Nord) seront mal positionnés pour faire face aux besoins projetés en compétences. Etant donné que la majorité de la population additionnelle n'aura qu'un niveau d'enseignement primaire, seule une fraction de cette population active additionnelle présentera un intérêt pour les pays européens.

Par ailleurs, si les niveaux d'éducation de la population active de l'Afrique du Nord demeurent faibles, alors que la demande pour des compétences augmente fortement dans la Méditerranée, le risque est considérable de voir la région perdre ses investissements pédagogiques

et le peu de talent et d'expertise dont elle dispose et en faveur de l'Europe – à savoir « l'exode des cerveaux ». Les études macroéconomiques antérieures ont montré que « l'exode des cerveaux » commence à faire montre d'impacts nuisibles sur le développement lorsqu'il excède un seuil de 10-15 %. Bien qu'il y ait un retour d'information d'impacts potentiels positifs de la migration qualifiée, la perte d'une large proportion du talent de MENA aura vraisemblablement des impacts préjudiciables sur la croissance, sans politiques d'accompagnement pour les atténuer.

L'analyse d'équilibre général peut uniquement fournir des scénarios et les résultats sont déterminés par les hypothèses sous-jacentes au modèle. Toutefois, les scénarios sont utiles pour modéliser les types d'impacts que la région (et l'Europe) peut anticiper d'une croissance à grande échelle de la migration (qu'elle soit peu ou très qualifiée, et qu'elle soit accompagnée d'autres retours d'information et de mesures de politique). Ces scénarios soulignent la probabilité d'une hausse des coûts qu'entraînerait une forte croissance de la migration qualifiée en provenance de l'Afrique du Nord, même à la lumière des contributions de la diaspora (même si les envois de fonds et les contributions de la diaspora atténuent certains de ces impacts). Cependant, ces scénarios montrent aussi le rôle que l'accélération de la formation du capital humain peut jouer dans la région pour mitiger les effets de l'exode des cerveaux.

Pour relever le défi, la région MENA doit améliorer son système éducatif. Ceci doterait la région d'un atout essentiel pour le développement économique, et – au regard de la demande croissante pour des migrants qualifiés – veillerait à ne pas épuiser entièrement le capital humain du pays. Le défi ne se situe pas seulement (ou principalement) au niveau de la quantité. Il implique aussi de remédier aux problèmes liés à la qualité de l'éducation à tous les niveaux. Mais aussi, les efforts d'éducation ne seront pas couronnés de succès sans un environnement propice permettant une utilisation productive du savoir dans l'économie. En fait les pénuries de compétences peuvent ne pas s'avérer être le principal

problème pour les entrepreneurs potentiels et établis, basés dans la région de l'Afrique du Nord ou qu'il s'agisse de la Diaspora à l'étranger. L'instabilité politique, la corruption, le haut niveau d'informalité et d'autres facteurs semblent être des goulets d'étranglement tout aussi importants pour une productivité et croissance supérieures. Ce sont en fait les mêmes facteurs qui, en premier lieu, encouragent certains des meilleurs et des plus brillants à quitter leur pays.

L'agenda pour améliorer les impacts économiques et sociaux de la migration est vaste, et l'un des facteurs clés qui déterminera la capacité des économies nord-africaines à adopter une politique de migration judicieuse est l'existence de données adéquates. Si, en règle générale, les données sur la migration sont insuffisantes, celles des pays de l'Afrique du Nord (ou de la région MENA au sens large) le sont encore nettement plus – dans tous les domaines de l'information économique et sociale, à la fois pour ce qui est de la collecte et, plus important encore, pour ce qui est de l'accès public – que celles d'autres pays à revenus similaires.

L'élaboration de saines politiques de migration et la garantie d'options de politique bien fondées impliquent un encadrement interne et externe. Ainsi, bien que les décideurs de MENA devraient poursuivre l'examen et l'évaluation des résultats des pratiques internationales performantes et non performantes en matière de gestion de la migration et envisager comment adapter les pratiques performantes aux circonstances nationales et régionales spécifiques, l'obstacle le plus critique à l'adaptation des politiques internationales à la pratique est l'absence de données sur la migration sur la base desquelles assurer le suivi des tendances de l'importance, des déterminants et des impacts de l'émigration et de l'immigration.

Le suivi et évaluation de la migration et des autres données sociales et économiques sont essentiels pour appréhender l'impact de différentes politiques et adapter et améliorer leur dosage actuel. Mises à part les implications à long terme de la migration sur la croissance et le

bien-être, il est aussi essentiel que les décideurs trouvent un moyen de mesurer l'impact de la crise économique sur les envois de fonds et la migration plus généralement, l'impact de ces changements sur le bien-être des ménages, les pauvres en particulier, sur l'inégalité, et sur les conditions de vie des ménages, la diversification et les stratégies de gestion du risque.

La base de connaissances limitée de l'ampleur de la migration, de ses déterminants et de ses principaux impacts a deux raisons : les intrants et les extrants. Premièrement, sur le front des intrants, les données font défaut. Mais aussi sur le front des extrants, il semble ne pas y avoir de stratégies ou approches claires quant à la manière de traduire les données en connaissances. Une analyse plus détaillée et plus précise des données existantes est nécessaire.

Pour cette raison, il est particulièrement important que les données soient largement disponibles. La transparence et l'accès aux données pour la recherche sont importants pour déterminer leurs limitations ou lacunes et améliorer leur collecte afin de renforcer les mesures de politique et d'aider les citoyens et les entreprises à planifier pour l'avenir.

La politique européenne a également un rôle évident à jouer pour que la migration devienne un outil du développement de l'Afrique du Nord, et un enjeu central est la protection sociale des migrants, qui a un impact non seulement sur la condition du migrant mais aussi sur ses incitations à rentrer au pays. La protection sociale des migrants de MENA en Europe est principalement couverte par les accords Euro-Med. Outre les accords Euro-Med, les pays du Maghreb bénéficient de plus d'avantages dans le cadre d'accords bilatéraux sur la migration de la main-d'oeuvre et la sécurité sociale avec plusieurs pays européens.

Bien que les réalisations aient été nombreuses et les progrès satisfaisants, les systèmes de protection sociale comportent toujours des failles. Un de ces failles consiste de l'exportabilité des retraites, qui implique une affiliation de 10 ans minimum au système de la sécurité sociale,

et dans certains cas, les retraites sont réduites lorsqu'elles sont transférées à l'étranger. Il est clair que de telles dispositions découragent la migration de retour. Une autre inconsistance se situe au niveau de l'interaction entre les dispositions nationales de protection sociale et la législation sur l'immigration et les étrangers. La plupart des pays européens accorde une couverture intégrale de protection sociale aux migrants de long terme et aux résidents permanents mais l'interaction entre la législation sociale et celle régissant les étrangers en complique de facto l'accès. Par exemple, les migrants temporaires ont un accès limité à l'assurance maladie et chômage et aucun accès à l'assistance sociale ou au logement public. Et pourtant, les pays de l'Europe continentale imposent 10 années de résidence avant d'accorder le statut de résident permanent et dans les pays du Sud de l'Europe le statut permanent n'est possible que depuis peu.

Il est évident qu'il faut trouver un équilibre entre la pérennité budgétaire, le risque que le migrant soit attiré par de généreux systèmes de bien-être, et la garantie d'une homogénéisation des règles d'une part et les droits des migrants officiels et illégaux d'autre part. Si les pays européens souhaitent attirer plus de migrants à l'avenir, leur vulnérabilité spécifique – arrivés récemment ou âgés – doit être prise en considération ainsi que le risque de distorsions des incitations à la migration de retour, la migration circulaire et la flexibilité des marchés du travail que peuvent éventuellement garantir les migrants.

Enfin, toutes les politiques qui influent le degré auquel l'Afrique du Nord peut bénéficier de

la migration sont précisément celles qui contribuent à la croissance et au développement du pays d'origine. Les éléments du cadre incitatif qui stimulerait une hausse des rendements positifs de la migration pour le pays d'accueil sont précisément ceux qui contribuent à une croissance accrue et au développement. Les travailleurs hautement qualifiés dotés de compétences pertinentes pour une économie induite par le secteur privé non seulement augmentent le potentiel d'emploi (et des envois de fonds) à l'étranger mais augmentent aussi le potentiel d'emploi dans le pays d'origine. Un climat d'investissement qui garantit suffisamment d'opportunités d'emploi aux travailleurs éduqués dans leur pays d'origine, non seulement réduit le risque de fuite de la main-d'oeuvre qualifiée mais il augmente aussi la contribution du capital humain à la croissance et au développement. Un climat de l'investissement propice au développement entrepreneurial des migrants rentrant au pays stimule aussi l'investissement national à la croissance économique et au développement. Les institutions qui viennent à l'appui de l'engagement de la diaspora contribuent également à améliorer le climat interne pour les investisseurs du pays.

Le programme de recherche ne peut combler qu'une partie du fossé du savoir pour comprendre les impacts et défis futurs de la migration nord-africaine. Il faut espérer que le programme prépare la voie d'un engagement durable de toutes les parties concernées à mieux analyser et comprendre le phénomène de la migration et qu'il se penche sur les possibilités de maximiser ses bénéfices potentiels des deux côtés de la Méditerranée.

A Heightened Urgency for Understanding International Migration

International migration has occupied an important space in the social, economic, and cultural development of North Africa. For more than half a century, the broader Middle East and North Africa region⁵ witnessed some of the largest population movements of any geographic region in the world—a result of extensive transit migration, labor migration, family reunification, and large and protracted situations of refugee migration. Labor migration comprises only one, but important element of these large people movements, developing gradually as a major economic phenomenon in the 1940's following the discovery of oil. By the 1970's, labor migration from MENA—to destinations both within the region and externally—was among the most extensive in the world.

North Africa's migration corridors have been shaped by geography, cultural, colonial and historical ties, trade, conflict, and migration policy. One corridor comprised the draw of workers from Egypt (along with the Levant, West Bank and Gaza, and Yemen), who primarily migrated to oil-rich Gulf countries, as the need for both skilled and unskilled labor swelled with oil production. The other major corridor comprised the labor migrants from North Africa's Maghreb countries—Morocco, Algeria, and Tunisia—who overwhelmingly migrated to Western Europe. The main European receiving countries, France, Germany, Belgium, and the Netherlands, needed low-skilled labor during their post-war reconstruction industrial boom. Many migrants were recruited from outside Europe through

guest-worker programs in Austria, France, and Germany. Bilateral migration agreements and conventions were signed between the Maghreb and Europe, and large-scale labor migration occurred between the mid-1960s and mid-1970s.

By the mid-1970s, however, with stagflation and unemployment growing in Europe, the migration agreements were terminated, and family reunification, family formation, and asylum became the only channels for legal migration from North Africa. The change in migration policy not only impacted the nature of labor migration, it also impacted the geographic destination. Because most legal channels for economic migration to Europe had been closed, other forms of migration took over. Since the mid-1970s, predominantly Maghreb migrants have instead entered the European Union through family reunification, family formation, and asylum, and increasingly as irregular migrants. In France, the average entry of Maghreb migrants fell from around 70,000 per year in the mid-1970s, to less than half that amount in the 1980s. In addition, Maghreb North African migration has increasingly shifted from Northern Europe to Southern European countries. Italy and Spain in particular have become entry countries for North African

⁵ The MENA region, for the purposes of this report, comprises Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, the United Arab Emirates, West Bank and Gaza, and Yemen. Because of data limitations, the study of North Africa, for the purposes of this report, is generally limited to Morocco, Tunisia, Algeria, and Egypt.

migrants, as their demand for low-skilled labor has increased with a sustained economic boom. Their long coastlines along the Mediterranean have also provided easier access to Europe for undocumented migrants from North Africa and Sub-Saharan Africa (SSA), as well as for Asian migrants who use the North African countries as transit ports on their way to Europe.

Changing migration policies and circumstances also impacted Egyptian migration. Migration from Egypt also started to slow by the early 1980s, with the Iran-Iraq war causing oil revenues to decrease and forcing many Egyptian migrants in Iraq to return home. In addition, continuous declines in oil prices starting from the late 1970s along with new policies towards hiring nationals to substitute for foreign workers in the Gulf reduced Egyptian migration flows.

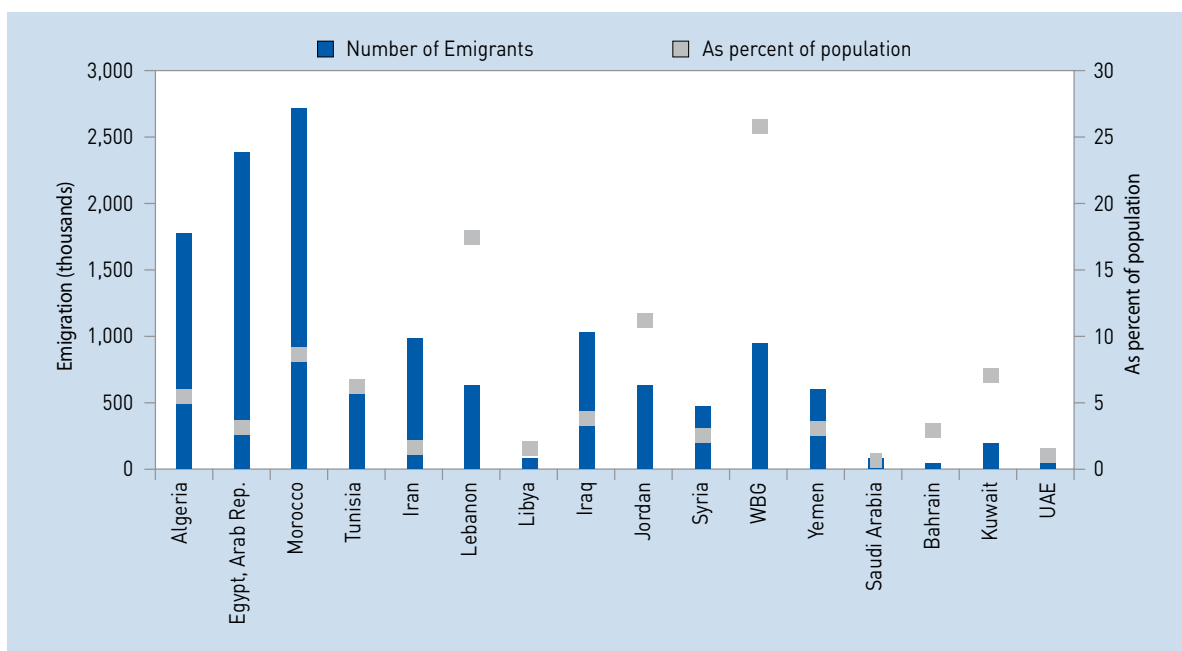
Yet, despite more restrictive migration policy over the past two decades, the scope of migration from the combined North African countries (Morocco, Tunisia, Algeria, and Egypt) remains impressive. Of the top-thirty emigration coun-

tries in the world in 2005, three were North African⁶ (Morocco, with 2.7 million emigrants, amounting for about 9 percent of its total population; Egypt, with 2.4 million, accounting for more than 3 percent of its population; and Algeria, with 1.8 million, and accounting for 5.4 percent of its population.) Even Tunisia’s migration is higher than world averages, with more than 620,000 migrants, accounting for more than 6 percent of the population (Figure 1.1). At the same time, with many countries of the world experiencing out-migration rates far in excess of those of North Africa, it is also clear that the migration is not a phenomenon unique to this region.

Perhaps most importantly, migration has served as a critical outlet to the region’s disappointing labor market conditions at home. For more than two decades, the region has struggled with visibly poor labor market outcomes, with both declining real wages and high unemploy-

⁶ <http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/Top10.pdf>.

Figure 1.1: Middle East and North Africa Region Emigration 2005



Source: World Bank, Development Economics Group data.

ment, which first emerged following the oil price collapses in the late 1970s and early-1980s. North African countries, along with the broader MENA region, pursued models of development that were heavily state-led, with nationalization of private assets, state planning of economic activities, and industrial development through protected local markets. Wealth was redistributed through public expenditures directed at social development and large-scale public sector employment. With significant oil-related wealth and revenues, this development model was able to ensure near full employment from the 1960s through the early 1980s, with the public sector acting as the employer of last resort for the labor force.

When oil prices collapsed, and with a rapidly expanding labor force, the ability for the public sector to absorb laborers was significantly diminished, and unemployment began to rise to unprecedented levels. Over the 1990s, labor force growth in North Africa averaged close to 3 percent a year.⁷ By the year 2000, unemployment in North Africa averaged more than 17 percent of the labor force, accentuating a growing difference in economic opportunities between North Africa and migration destinations, and increasing the push for work abroad.

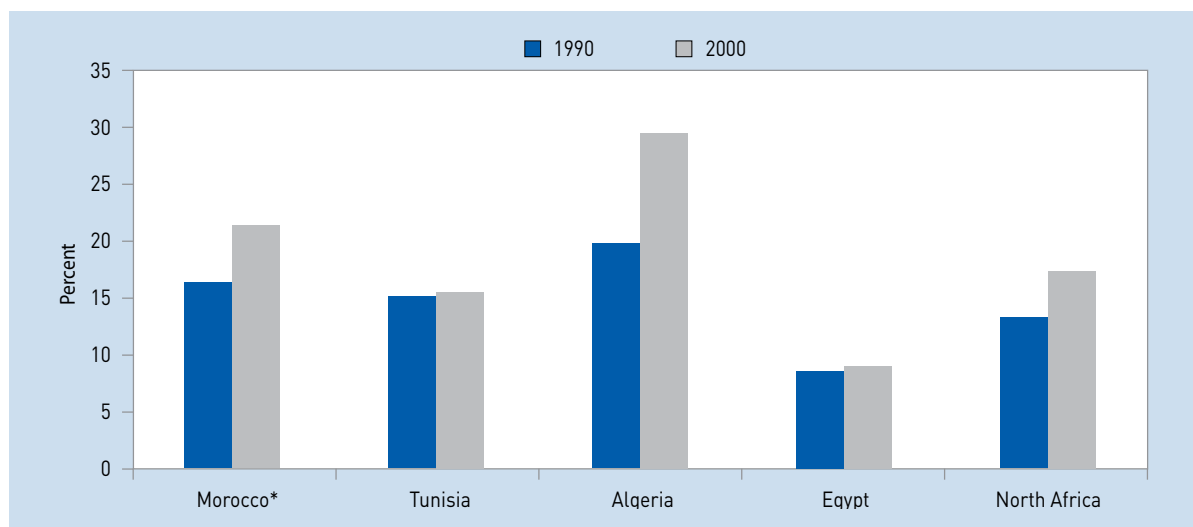
Three Forces Heightening the Interest in North African Migration

The urgency for better understanding the dynamics of migration—its determinants, its impacts, and the effect that policies have on migration—has heightened. While migration research is not new, it was relegated to a relatively minor role in both research and in country policy, even while it was a sizable and growing phenomenon (not only for the North African region, but worldwide). But a greater pressure has developed in recent years to better understand how migration fits into the broader development context. As a result, migration is capturing an increasing focus from development practitioners and researchers, including the United Nations Development Programme (UNDP), which made migration the theme of its Human Development Report in 2009.

This increased focus reflects, in part, the growing internationalization of the production of goods and services, reduced communications and transportation costs, and rising demographic imbalances worldwide, which

⁷ Includes Morocco, Tunisia, Algeria, Egypt, and Libya.

Figure 1.2: Rise in unemployment in North Africa from 1990 to 2000



Source: World Bank data from country sources.

* Urban areas only.

together imply increased immigration flows over the coming decades. Also reflected by this surge in research is a growing awareness that mismanaged migration can be costly to both sending and receiving countries across a multitude of policy areas, including education, integration, social protection and financial services. More immediately, an important factor intensifying the research on migration is the recognition that the global financial crisis will inevitably create significant impacts on migrant labor flows and remittances.

A global economic downturn with strong effects on migration

A major impetus for the imperative to better understand migration is the global financial crisis, which has spotlighted the dependence of many economies on migration and worker remittances, and the vulnerability to a sudden decline in both. Worldwide, migration and remittances are estimated to have declined sharply over 2009 and 2010 as a result of deterioration in the economic and employment situation in the migrant-destination countries worldwide. World Bank projections suggest that remittances worldwide declined by 6 percent over 2009, with regions like Europe and Central Asia particularly affected (Table 1). North African economies are

likewise expected to have seen a downturn in remittances, estimated at over 10 percent between 2008–2009.

The impact of this decline in remittances in North Africa may be large, due not only to the size of the decline, but also to the magnitude of the region’s dependence on them for the economy. Not only have North African economies been hard hit in terms of the projected percent decline in remittances (particularly for Morocco), the region’s dependence on remittances is greater than many other regions, which heightens the potential impact of this shock on the regional economy. On a per capita basis, as well as a share of GDP, the dependence on remittances in North Africa is greater than in any other region of the world. As a result, the interest in better understanding what this will mean for North African economies has risen.

How North African countries are impacted by this remittance downturn will depend upon how remittances work through the economy. Sending regions experience diverse outcomes from the impacts of migration and remittances on macroeconomic balances, on poverty, inequality, investments (both physical and human), institution building, labor market outcomes, and overall development. The migration shock

Table 1.1: Projected workers’ remittances, 2008–2011 (credit, \$U.S., billions)

Country/Region	2008	2009	2008–2009 change
Algeria	2.20	2.19	-0.4%
Egypt	8.7	7.8	-10.3%
Morocco	6.9	5.7	-17.0%
Tunisia	1.9	1.9	-0.5%
East Asia Pacific	86.1	84.8	-1.5%
Europe Central Asia	57.8	49.3	-14.7%
Latin America Caribbean	64.7	58.5	-9.6%
Middle East North Africa	34.7	32.2	-7.2%
North Africa 4	19.7	17.6	-10.6%
South Asia	73.3	72.0	-1.8%
Sub-Saharan Africa	21.1	20.5	-1.8%
World	337.8	317.2	-6.1%

Source: Dilip Ratha et al. 2009. Migration and Development: Brief 11, November 3.

Table 1.2: Remittances per capita and as a share of GDP, 2007

Country/region	Remittances (\$U.S. billions) 2007	As percent of GDP	Per capita
North Africa	18.2	4.8	121
Algeria	2.1	1.6	63
Egypt	7.7	5.9	101
Morocco	6.7	9.0	218
Tunisia	1.7	4.9	168
East Asia Pacific	65.3	1.5	34
Europe Central Asia	50.4	1.6	113
Latin America Caribbean	63.1	1.7	113
Middle East North Africa	31.7	3.7	101
High Income OECD	85.7	0.2	89
South Asia	52.1	3.6	34
Sub-Saharan Africa	18.6	2.2	23

Source: World Development Indicators, 2009.

emanating from the global economic downturn has highlighted the lack of understanding of how these migration decisions are made, the impacts they have on sending country development, and how policy actions could influence migration decisions outcomes.

Demographic forces increasing imperative for more well-managed migration

Dramatic demographic forces also heighten the need to better understand the complex picture of North African migration. In the course of the next 30–40 years, the world population will experience major changes. Europe will age considerably, while in low-income countries the largest cohort of young people of all time will enter the labor market. Although the world population as a whole will only gradually start to age, considerable regional discrepancies in fertility will result in relatively older regions co-existing next to strongly expanding regions.

The countries of North Africa will experience a strong rise in the working age population. Table 1.3 shows the expected change in the world population between 2010–2040, by age category. Europe and other industrialized regions of the

world, and even some developing regions such as East Asian (driven by China) expect to see strong increases in the number of old, but with fewer working age persons to support them. In regions like MENA and Sub-Saharan Africa, meanwhile, the demographic transition will imply working age persons will comprise a larger share of the population over the next 30 years, and significantly larger than that which will exist in industrialized regions.

The economic effects of this demographic discrepancy are enormous. In regions with rapidly-aging populations, including Europe, changes in the demographic structure will strongly affect the population's consumption patterns, with significantly higher expenditures devoted to health, long-term care, housing and energy, and with considerably lower overall savings and investment. As a result, capital per worker will decline (with induced effects on interest rates and wages), resulting in lower GDP per capita growth, unless declining labor supply is compensated with higher productivity growth—unlikely with an older, less entrepreneurial population.

In addition, there will be strong impact on public expenditures. For governments that have a role in providing health care and social security,

Table 1.3: Expected changes in world population by age group, 2010–2040

Regions	Population in 2010, millions (and share of total population)			Population in 2040, millions (and share of total population)		
	Under 15	Age 15–65	Over 65	Under 15	Age 15–65	Over 65
World						
Western Europe	29,684 (15.7)	124,194 (65.9)	34,709 (18.4)	27,414 (14.5)	107,269 (56.9)	53,940 (28.6)
USA and Canada	69,756 (19.8)	235,835 (67.1)	45,941 (13.1)	73,760 (17.1)	265,610 (61.6)	91,995 (21.3)
East Asia and Pacific	309,350 (19.3)	1,137,704 (71.1)	152,736 (9.5)	255,651 (15.1)	1,056,722 (62.3)	384,933 (22.7)
Latin America Caribbean	162,764 (27.7)	385,130 (65.4)	40,755 (6.9)	132,549 (18.0)	472,049 (64.0)	113,436 (18.1)
Sub-Saharan Africa	365,589 (42.3)	470,544 (54.5)	27,182 (3.1)	489,361 (31.8)	976,649 (63.6)	70,453 (4.6)
MENA (all)	115,708 (30.7)	245,232 (65.1)	15,924 (4.2)	119,989 (21.9)	373,270 (68.0)	55,393 (10.1)
Morocco /Algeria / Tunisia / Egypt	48,157 (29.6)	106,494 (65.5)	8,001 (4.9)	47,077 (21.1)	151,055 (67.7)	24,907 (11.2)

Source: Docquier and Marchiori. 2009, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

the demographic transition will present them will hard choices between higher taxes (including a possible reweighting of taxes from earnings to consumption), increasing debt (which could jeopardize the welfare of future generations) or reducing the government’s role in providing health care and social security.

The challenge for high population growth countries will be job creation. High working-age population growth regions such as in North Africa, meanwhile, face the challenges of providing sufficient employment opportunities for a labor force bulge driven by both demographics as well as increasing participation of females in the labor force. These new workers will have significantly higher levels of education than previous generations, with increasing expectations for good employment..

Demographic arbitrage, in the form of migration, has the capacity to support both rapidly aging and high-population-growth regions. The unavoidable and impending demographic imbalances facing both regions also creates opportunities for demographic arbitrage through inter-regional

migration for the benefit of both the sending and the receiving region: the receiving region benefits from easing the negative consequences of aging by keeping its labor force younger and improving its old-age dependency ratios; and the sending region benefits by decreasing its current youth bulge, easing the pressure on the labor market, and reducing the potential for a future aging crisis which is certain to come once the current large youth cohorts retire in 50 years from now.

Recognition that the costs of not understanding migration are high

Avoiding adverse impacts from migration is also an impetus for change. But perhaps the greatest impetus for better understanding the dynamics of North African to Europe migration is the increasing realization that migration—unmanaged, misunderstood, and unengaged as an important element of development—can have significant costs for both sending and receiving regions. Developing countries, in particular, have a lot to gain from migration, in terms of growth, poverty reduction, human capital accumulation, and investment, but achieving these gains requires

coherent and conducive migration and development policies.

“Brain drain” is one potential result of badly managed migration. Without an appropriate policy framework, skilled migration can result in brain drain and a related loss of public investments in education and training of skilled labor, with no positive feedback for the sending economies. Previous macroeconomic studies suggest that skilled migration rates exceeding a threshold of 10–15 percent of the skilled labor force begin to exert harmful impacts on development (Docquier, 2009). High-skilled migration rates from North African economies are already at those levels, ranging from 8–19 percent of the high-skilled population. With demographic forces creating increasing pull factors for migration from North Africa, and without accompanying policies to boost higher education, the continued exodus of the region’s best and brightest laborers could have critical implications on long-term growth.

The potential costs—both to MENA and to Europe—for not getting the migration policy framework right are myriad. Restrictive labor migration policies may increase the scope for illegal migration, creating a fiscal burden on social services, with migrants accessing some social protection services (for example, health care or education services) without contributing to income taxes.⁸ Lack of portability of social security services can reduce circular migration, which can significantly reduce the overall development benefits of migration for sending countries—and also reduces the benefits to receiving countries, who stand to gain with circular migration through both meeting their labor market needs but also avoiding the political controversies surrounding

permanent immigration, especially of the unskilled. Poor and inefficient education policies, combined with lack of pre-departure training programs and job counseling for potential migrants, may accentuate skill mismatch and make the integration into foreign labor markets difficult

This report can only fill a part of the knowledge gap underlying these three imperatives. The global financial crisis is a major factor spurring migrant-sending regions (and migrant-receiving regions) to better understand how implicitly dependent they are upon migration. But understanding how they may be impacted by migration-related shocks, and how to respond to them, requires the kind of knowledge stock that is only initiated in this volume (and whose continuation and extension is required over the long term). The demographic realities worldwide make intensified migration over the next 10–30 years axiomatic, but understanding how to best prepare for it requires the type of migration modeling only touched upon in this volume (and whose sophisticated continuation is required over the long term). Migration impacts and determinants that are not understood could put both North Africa and Europe at risk to lose out on the “win-win” scenarios that are sought after by all involved. This volume does not come close to laying out a blueprint for better migration outcomes, but it provides a small foundation of the work that is needed to create and improve that blueprint.

⁸ In addition, irregular migration is often seen as a risk factor for criminal activities, labor exploitation, and human rights abuse, while contributing to xenophobia and social instability in the receiving countries.

Trends and Characteristics about North African Migration

Data Limitations for Understanding North African Migration

At the onset, it must be acknowledged that the study of migration from North Africa is significantly handicapped by data limitations, as confirmed by nearly all studies and researchers. These difficulties permeate all aspects of the subject, including migrant stocks and characteristics, migrant flows, remittances, and others.⁹

The absence of migration data is not limited to North Africa. Worldwide, there is a large gap between the growing incidence of migration and the availability of reliable, comparable data from which to conduct empirical analysis. A major constraint has been the lack of harmonized international data on migration stocks and flows by country of origin and education level. At the most basic level, there is no such thing as an agreed-upon definition of international migration. International migrants are alternatively defined according to two main criteria: the *country of birth* criterion, used by the United Nations population database,¹⁰ and according to which a migrant is a resident living in a country different from his country of birth; and the *country of citizenship* criterion, which defines a migrant as a resident that does not have the citizenship of the country he lives in. Both definitions are flawed: the *country of birth* definition implies that there is no additivity of migrants, and the *country of citizenship* criterion can be misleading when considering the impact of migration on a receiving country.

But equally important, there are no reliable and systematically computed data, and most data

only account for stocks of migrants in receiving countries. In addition to overlapping and changing categories of migrants, few statistics measure migration flows, and circular migrants are not necessarily accounted for. Data are even scarcer when it comes to transit or irregular migration.

While North Africa countries (or the MENA region more generally) are not unique in regard to limited data and study of migration, the region is considerably more data-challenged, with both data gaps across almost all areas of economic and social information, and importantly, limited public access for research and analysis.

In part because of data limitations, this report has made use of a wide array of available data sources and methodologies to better understand the nature of migration, its impacts on the North African region (as well as on host countries), and potential issues going forward. None are perfect, but combined, all allow for a better understanding of North Africa's migration challenges.

Data on stocks of migrants worldwide (from 1990 and 2000) has provided a baseline picture of the extent of international migration from the North Africa region and trends, as well as important information about the education levels and gender of migrant stocks. Our baseline picture of migration is supplemented with country information from the balance of payments on

⁹ World Bank. 2009. *Shaping the Future: A Long Term Perspective of People and Job Mobility for the Middle East and North Africa..*

¹⁰ <http://esa.un.org/migration>

remittances, although (as noted later in this chapter) remittance data also suffer from limitations. Household survey data in Morocco and Egypt permits empirical analysis of the impact of remittances on various aspects of welfare and economic outcomes including poverty, labor supply decisions, and decisions affecting children (including health, education, and child work). Those results are highlighted in Chapter 3. Specialized surveys of return migrants in three Maghreb countries allow for a glimpse into the conditions that have facilitated the reintegration of migrants upon return. Several sources of host-country data (including immigration and social protection laws and arrangements, labor force surveys, and social security records) allow for a better understanding of the institutional framework for migration, as well as the experience of North African migrants abroad (including their access to labor markets, education, housing, and the like). And finally, data on stocks of migrants worldwide (by age and education), along with demographic projections prepared by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, and information on tax-transfer profiles of migrants and natives by education level provide the foundation for examining potential consequences of migration over time, using a computable general equilibrium model.

It is important to note, however, that this report has also drawn upon the vast empirical work from other regions, as well as migration theory, to frame the issues of North African migration where direct empirical analysis is impossible. While the migration experience differs from country to country, important lessons can be drawn through the many commonalities that do exist.

Only parts of the potential costs and benefits of migration could be addressed in this research program. The analysis represents only a first step in a long road required for the North Africa and broader MENA region in elevating migration data collection and analysis—and indeed all statistics collection, analysis, access and public dissemination—to the position it needs to occupy for good economic policy making.

North African Migrant Destinations and Nature of Migration

The most complete picture of North African migration comes from 2000, relying on a data set described in Parsons et al. (2007), consisting of a 226x226 matrix of origin-destination stocks by country and territories. The data are generated by disaggregating the information on migrant stock in each destination country or economy, as given in its census. The reference period is the 2000 round of population censuses, so the data do not refer to precisely the same time period, and makes our picture of North African migration quite dated. Moreover, the data set provides *stocks* of migrants, rather than *flows*, a serious limitation for migration analysis. Thus, one of the most important areas of interest to researchers: “What has happened to migration over the past decade?” is not possible with the current data.

With a resident population amounting to 135 million, and 7.4 million emigrants living abroad in 2000, the emigration “rate” for North Africa is about 5.5 percent, almost double the world emigration rate. Morocco’s migration rate is the highest, at more than 9 percent of the population, but all four countries have higher than average rates of emigration.

Both the destination of migrants and the nature of migration differ for Maghreb countries and Egypt. The migrants from the Maghreb countries are often unskilled workers searching for job opportunities that allow them to settle permanently in Europe. Algerian and Tunisian migrants are highly concentrated into a few destination countries (with more than 60 percent of their migrants located in France), but emigrants from Morocco are more geographically dispersed (Table 2.1). But all of the Maghreb migrants are concentrated in Europe, with France the main destination of emigrants from Algeria, Morocco and Tunisia.

In contrast, Egyptian migrants (and migrants from other Mashreq countries, including Lebanon, Syria, and Jordan) are often of skilled and are more likely to be temporary migrants in other Arab countries. Though this group of countries primar-

Table 2.1: Emigration from North African countries in 2000

	Total migration			Main destination		
	Stock	Emigration Rate	Herfindahl index	Country	Stock	Share
North Africa 4	7,441,150	5.5%				
Algeria	2,070,840	6.8%	0.428	France	1,333,587	64.4%
Egypt	2,173,711	3.2%	0.232	Saudi Arabia	1,015,124	46.7%
Morocco	2,589,108	9.3%	0.131	France	759,011	29.3%
Tunisia	607,491	6.4%	0.373	France	364,498	60.0%

Source: Parsons et al (2007)

ily sends migrants to other Arab countries, it also exports workers to Western destinations (such as the United States, Europe, and Australia), but its export of workers to Western destinations tends to be permanent in nature. The primary destination of Egyptian migrants in 2000 was Saudi Arabia.

More than half of North Africa's migrants are in Europe. The regional destination of North Africa's emigrants is provided in Table 2.2. Emigration destination is distinguished by members of the OECD, including the EU15, North America, Oceania (i.e. New Zealand and Australia), the EU27 and other MENA countries (including GCC members). Migration to the OECD (South-North migration) is dominant in Algeria, Morocco and Tunisia. In all these cases, the share of EU27 host countries is important. Although Egypt's migration rate to the EU27 is low, it is high in absolute terms, with about 200,000 migrants in the EU27.

Migration flows have increased since 1990. Over the period 1990–2000, migration from

Maghreb North Africa increased in absolute terms, while migrants, as a proportion of the domestic labor force, remained relatively constant at approximately 8.9 percent.¹¹ While a comprehensive analysis of migrant stocks is not available past 2000, it is likely that the flow of emigrants from North African countries has increased further over the intervening 10-year period. On the push side, the North Africa region is facing an unprecedented challenge in labor markets. High unemployment persists in North Africa, despite significant reductions in unemployment, which have taken place in the context of rising oil prices and growth over the 2000s.¹² High population growth over the 1970s and 1980s, combined with increasing participation rates (particularly among women),

¹¹ Maghreb migrants in OECD economies as a percent of the Maghreb labor force.

¹² In Algeria, for example, the official unemployment rate was halved from 2000 to 2005 (from close to 30 percent to 15 percent), and was in large part supported through oil revenues (public works and construction associated with Economic Recovery Program).

Table 2.2: Location of North African emigrants in 2000

	OECD	EU15	NAM	PAC	EU27	MENA	GCC
North Africa 4							
Algeria	81.0%	79.0%	1.8%	0.1%	79.1%	9.2%	0.9%
Egypt	17.8%	8.7%	7.4%	1.6%	8.9%	75.8%	51.6%
Morocco	74.9%	71.9%	2.8%	0.1%	71.9%	16.5%	1.7%
Tunisia	77.7%	75.0%	2.3%	0.1%	75.1%	12.8%	2.6%

Source: Parsons et al (2007)

Legend: NAM = U.S.+Canada; PAC=Australia+New Zealand

are now contributing to a labor force growing by some 2.8 percent a year.¹³ The largest increases in the labor force have come from those with tertiary educations, who face higher unemployment rates than average, and who are younger, with significantly greater access to information and higher expectations for employment (in addition to better potential for migration, both financially and legally). In addition, environmental factors may also contribute to increased pressures to emigrate in North Africa, as all four countries are already worse off than the *severe stress threshold* in terms of renewable freshwater resources per capita. This can only get worse with future, albeit modest, population growth.

Estimates of the stock of Egyptian workers abroad confirm an increasing migration trend over this decade. According to CAPMAS there were approximately four million Egyptians living abroad, which represents about four percent of the total population of Egypt. According to the CAPMAS figures, there has been an almost 79 percent increase in the number of Egyptians living abroad in 2006 compared to the 1996 Census figures of 2.2 million (Figure 2.1).¹⁴

Remittances

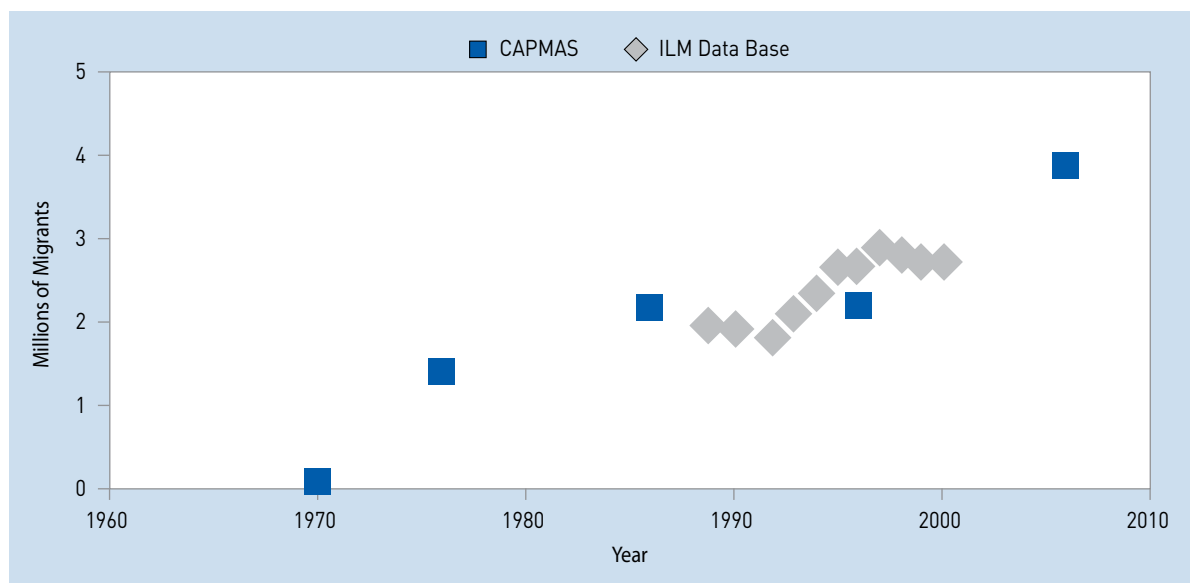
North Africa’s large population movements have in turn generated sizeable transfers of money. As a region, MENA receives about 10 percent of the world’s remittance flows, with North Africa accounting for a large portion. MENA’s remittances surpass other external flows such as ODA or FDI, making remittances the most important source of external financing within the MENA region. This is particularly true in North African economies, where remittances far surpass other financial flows.

Official figures may underestimate the level of remittance monies returning to North Africa. Official remittances only include those remittances that come back through official banking channels. Many migrants, who do not trust banks, remit their money back home through informal and unrecorded means.

¹³ Includes Morocco, Tunisia, Libya, Algeria and Egypt.

¹⁴ Different sources often provide quite distinct migration figures. According to the 1996 Census the number of Egyptian migrants abroad was about 2.18 million, while the ILM provides an estimate of 2.715 million for the same year.

Figure 2.1: Estimates of the Stock of Egyptian migrants abroad, 1970–2006



Sources: CAPMAS Population Censuses and ILO, International Labor Migration Database (ILM). From Source: Roushdy, Assaad, and Rashed 2009, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Table 2.3: Inward Remittance Flows, Per Capita Remittances, National ODA and FDI, 2007

	Inward Remittance Flows (U.S.\$ million, 2007)	Per Capita Remittances (U.S.\$, 2007)	Remittances as a Percentage of GDP in 2006	ODA (U.S.\$ million, 2006)	FDI (U.S.\$ million, 2007)
Algeria	2,906	85.9	2.2	209	1,664
Egypt, Arab Rep.	5,865	77.7	5.0	873	7,620
Morocco	5,700	185.0	9.5	1,046	3,800
Tunisia	1,669	163.6	5.0	432	1,620

Source: World Bank, Migration and Remittances Factbook 2008, 2008; World Bank Data and Statistics Website.

The importance of remittances in North Africa is highest in Morocco, where inward remittance flows were five times higher than ODA, and more than one and half times the size of FDI in 2007. Algeria's remittances constitute a very small part of GDP, yet were still higher than ODA and FDI combined. The scope and long-lasting history of out-migration and remittances have made them a structural feature of many economies in the region.

At the macroeconomic level, there are numerous benefits that North Africa may realize from this important source of external finance. By insuring against income shocks, remittances may allow families, especially poor ones, to smooth consumption and better meet basic needs. Remittances may open up opportunities for families to invest in their children's education and healthcare, as well as to invest in small businesses or to build savings (savings which may provide a resource base for retirement income). Remittances can lead to poverty alleviation through their direct impact on the incomes of the poor. Remittances may generate multiplier effects—especially in poor countries with high unemployment—through expenditures linkages, if some of these funds are spent on domestically produced goods or services. There are also potential dynamic impacts of remittances. Over time, they may improve a country's creditworthiness and thereby enhance its access to international capital markets.

At the same time, the impact of remittances on North Africa's development is not guaranteed. The large inflows of remittances can cause real exchange rate appreciation as well as loss of

international competitiveness, which in turn can lead to a decline in production and manufacture of other tradeable goods. Large remittance inflows can cause an increase in inflation, which can result in an increase in poverty. Remittances may slow down growth by reducing the work efforts of remittance recipients. The impact may be particularly negative if the lost labor is concentrated in particularly important or productive sectors to the economy. Moreover, remittances may not generate those often-referred-to multiplier effects in terms of income and employment creation if they are used primarily for family consumption and investments in real estate. Remittances may also lead to increased inequality, depending upon who remits.

The Skills Composition of North African Migrants

A newly developed dataset allows for an analysis of migrants worldwide by their skill level. Until recently, such a dataset did not exist. While the Parsons et al. database can provide a good picture of overall migration flows, it does not distinguish between high-skill and low-skill migration or the gender dimension.¹⁵ A recently developed dataset by Docquier, Lowell and Marfouk (DLM), is based on the aggregation of harmonized immigration data collected in OECD host countries, where information about the birth country, gender, age

¹⁵ The need for better migration data has been strongly emphasized by international agencies and researchers. A regional conference, held in Addis Ababa in 2000, at the initiative of the UNECA, IOM, and IDRC, highlighted the lack of adequate data as a major problem for monitoring the scope and impact of brain drain in Africa.

and educational attainment of immigrants is available (see Box 2.1). Nonetheless, for the purpose of understanding skilled emigration (particularly from North Africa) OECD-based databases have some shortcomings. First, as shown in tables 2.1 and 2.2, most of Egypt’s emigration is directed not to the OECD but to the GCC. Thus, the DLM data are likely to provide a reasonable picture of skilled emigration from the Maghreb, but there is much more uncertainty as to Egypt. To mitigate this limitation, the DLM data was extended to include estimates of the immigration structure for the GCC.¹⁶

Still, there exist some limitations with the extended DLM dataset. Because census data is only collected with low frequency, the latest point in time is 2000. Thus, very recent changes, for example, in reaction to policy changes in receiving countries, cannot be traced. Third, it is not able to distinguish between those who were educated abroad and those who received their education at home—an issue with implications for public spending on education and public returns to investment. Finally, when considering the emigration of skills, it must be remembered that “education” and “years of schooling” is an imperfect measure of skills and ability. This is, of course, a generic problem in studies looking at the role of human capital in the economy.

North African migrants are predominantly low-skilled. However, the skill composition of North Africa’s migrants differs considerably for the Maghreb countries (Morocco, Tunisia, and Algeria) and for Egypt. Maghreb migrants are predominantly low-skilled workers, with more than 70 percent of migrants having primary education or less. About 15 percent of migrants have completed secondary education, and only about 15 percent of migrants are what would be termed high-skilled, with tertiary education or more. In contrast, while the majority of Egyptian migrants [55 percent] are also low-skilled, almost 30 percent have higher education (Figure 2.2).

At the same time, North Africa exhibits a high degree of high-skilled emigration. When North Africa’s skilled migrant stocks are contrasted with domestic stocks of higher educated laborers, all four countries demonstrate relatively high-skilled emigration rates (often alternatively,

¹⁶ For Saudi Arabia, the DLM database was extended through the use of labor force survey data on the age and education level of guest workers in 1990 and 2000. In the remaining GCC countries (Bahrain, Kuwait, Oman, Qatar and United Arab Emirates), the DLM data starts from Parsons et al. bilateral stocks and applies the age and educational structure observed in Saudi Arabia, giving a reasonable estimates of the educational composition of migrants to GCC nations.

Box 2.1: Notes on the DLM database on migration by education level

The database includes data, typically drawn from censuses from the 30 OECD member states for two periods (1990 and 2000), with the highest level of detail on country of birth and level of educational attainment, and age and gender. The database concentrates on individuals aged 25+ (when education is assumed to be completed).

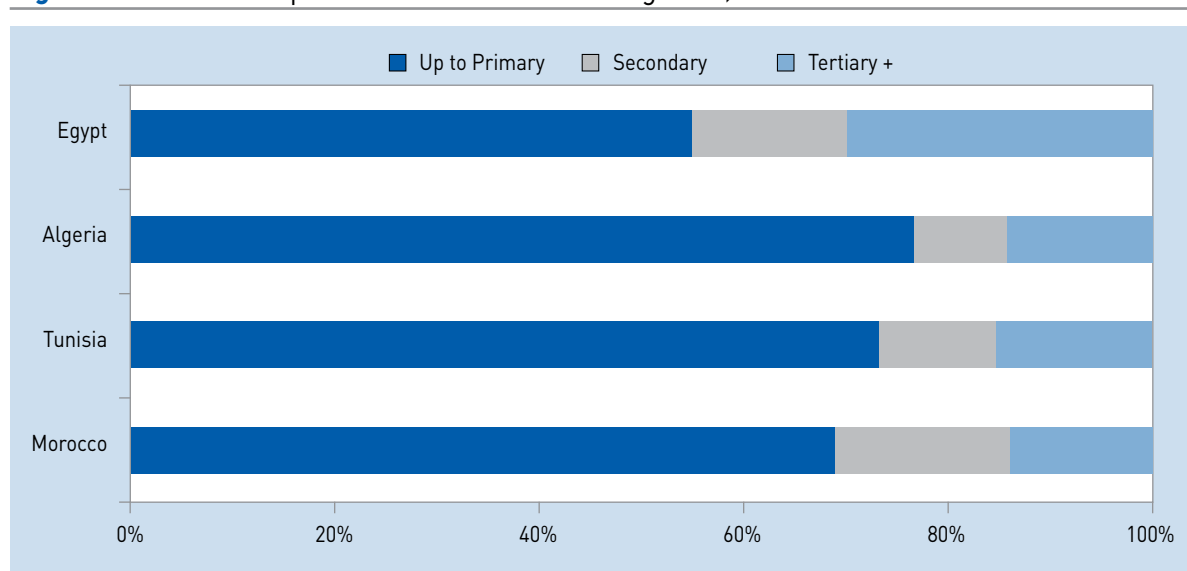
Three levels of schooling are identified: low-skilled: including lower-secondary, primary and no school; medium skilled for those with high school diplomas and high-skilled for those with tertiary education.

Higher skilled emigration rates are obtained by comparing the emigration stocks to the total number

of people born in the home country and belonging to the same educational category. Calculating the skilled emigration rate as a proportion of the total educated labor force is more appropriate to evaluate the pressure imposed on the local labor market.

Selection rates, in contrast, represent the share of skilled migrants in total emigration stocks. It is quite possible for a country to have comparatively high-skilled emigration rates but low selection rates—Morocco is an example—if the human capital base is weak.

Source: The World Bank, 2009. “Skilled Migration from the MENA Region: Trends, Impacts and Policy Responses.” An output of the EC-Funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

Figure 2.2: Skills composition of North African migrants, 2000

Sources: Calculations from DLM database 2007.

and incorrectly, referred to as “brain drain”). Table 2.4 highlights the skilled emigration rates (the percent of the domestic stock of high-skilled labor who emigrate) for the period 2000. Relatively high in all four countries (with skilled emigration rates significantly exceeding overall emigration rates, from Table 2.1), the issue of skilled emigration is of particular relevance to Morocco, with almost 20 percent of its skilled workforce living abroad. This can be contrasted to a level of 9 percent for the entire MENA region, 11 percent for the Latin American and Caribbean countries, and 12 percent for Sub-Saharan Africa as a whole. Thus, from the receiving country perspective, Maghreb countries (and to a lesser extent, Egypt) offer largely low/medium skills.

Yet, from the sending country perspective, emigration still involves a significant outflow of human capital because of a weak skill base in the sending country.

The reasons for departure of the highly educated are not only high wage differentials between Maghreb and Europe, but also general labor market and social conditions, such as high unemployment rates among the highly skilled, lack of career opportunity, etc.

Skilled emigration from North Africa has grown significantly between 1990 and 2000—by 90 percent for the North African region overall, and by 45 percent for Egypt, 64 percent for

Table 2.4: Skilled emigration rates of North African countries in 2000

	Total	to EU27	to NA	to GCC	to OECD	EU27%
North Africa 4						
Algeria	9.6%	7.1%	2.1%	0.2%	9.4%	73.7%
Egypt	8.3%	0.9%	3.5%	3.8%	4.5%	11.3%
Morocco	18.5%	13.3%	4.3%	0.6%	17.9%	72.0%
Tunisia	12.9%	9.6%	2.3%	0.6%	12.3%	74.6%

Source: Source: Calculations from DLM, 2007

Tunisia, 78 percent for Morocco, and 205 percent for Algeria. This compares with low-skilled emigration growth of only 21 percent for the North African region as a whole, 10 percent for Egypt, 4 percent for Algeria and Tunisia, and 45 percent for Morocco. Although skilled emigration has grown faster than low-skilled emigration over the 1990s, *skilled emigration rates* have fallen throughout North Africa (save Algeria), reflecting an overall increase in educational attainment in the individual countries.

Recent Changes in North African Migration

The motivation behind migration decisions has evolved over time

North Africa's first migrants, who originated mostly from poor rural areas, emigrated for economic reasons, seeking to improve the standard of living of their families (World Bank, 2006). Emigrants included even (or mostly) those people who were employed (Collyer, 2004). In Egypt, most of the migrants to Arab countries were farmers along with skilled and unskilled workers. Evidence suggests that even migration through family regroupings hides a certain element of economic rationale, whereas marrying into a migrant family provides a way for more economic and social opportunities (World Bank, 2006). The strong correlation between economic growth and migration flows (officially for family reunification/formation reasons) in the Netherlands over the 1980s and 1990s also suggests that there are economically motivated reasons.

However, although economic reasons continue to be main motivation, the current situation is more nuanced. For example migration is less indiscriminate with respect to labor market status. Currently, much more so than in the past, it is the unemployed and the inactive that migrate, thus helping to ease labor market pressures in the home country. In the survey of Eurostat and NIDI (Netherlands Interdisciplinary Demographic Institute, 2000), just over a half of men were non-employed at time of migration, and almost all had a job after migration (van der Erf

and Heering, 2002).¹⁷ A survey of returned migrants in Morocco, Algeria and Tunisia suggests that as late as 2007, between 10–17 percent of returned migrants were unemployed at the time of migration.¹⁸

Migration has become more feminized

The gender composition of North Africa migrants has also changed. In the early times, North African migrants were male and single. With the introduction of family reunification programs (and later ongoing family formation), however, the gender balance of migration has shifted, with increasing numbers of women migrating to join their spouses. As a result, the proportion of females in the migrant stocks has steadily risen. Among OECD economies, the share of female migrants from Morocco increased in relation to total migrants from 40 percent to 42 percent between 1990 and 2000, while in Algeria, the female share in total migrants increased from 38 percent to 41 percent.

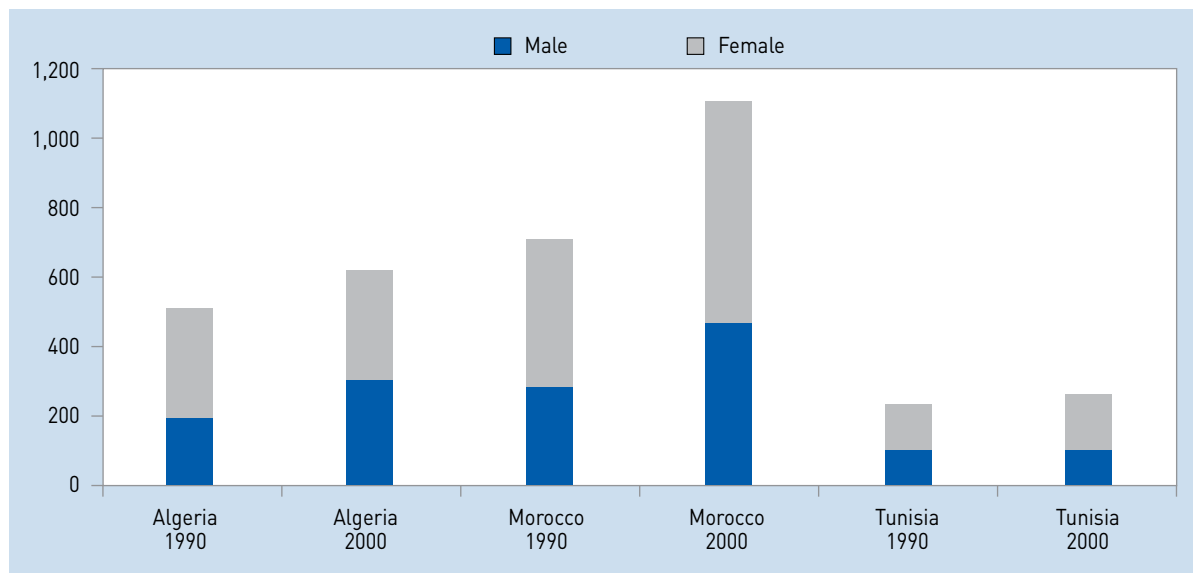
Women have generally migrated in the context of family reunification. For example, 80 percent of women interviewed in a study of Moroccan migrants (van der Erf and Heering, 2002) were married at time of migration. Although the primary purpose of migration may have been family reunification, it has served as a side door for labor migration. In particular, the opening of opportunities in both the domestic help sector and in certain lighter agriculture activities has attracted many female migrants, particularly to Spain.¹⁹

¹⁷ As regards women, 77% of them were doing household work before migration, compared with 66% after migration. Employment rate among them grew from 2% (pre-migration) to 28% after migration (van der Erf and Heering, 2002).

¹⁸ Gubert and Nordman 2008a. "Who Benefits Most from Migration? An Empirical Analysis Using Data on Return Migrants in the Maghreb," an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

¹⁹ Moroccan female migration as well as its impact on gender roles, intra-household allocation and children's welfare receive more attention in a companion paper: Herrera, Dudwick and Murrugarra 2008 "Remittances, gender roles and children welfare outcomes in Morocco."

Figure 2.3: Growth in migrant population in OECD countries, 1990–2000
(Total migrant stock, thousands)



Sources: Calculations from DLM database.

Surveys in host countries find an increasing labor market participation rate among migrant women. Between 30 percent and 50 percent of active Moroccan migrants in European countries are females (a 45 percent increase over the last two decades (World Bank, 2006)).

The feminization of international migration raises specific economic issues related to the gendered determinants and consequences of migration. In particular, the migration of higher educated women is likely to affect sending countries in a very peculiar way. Many studies have emphasized the role of female education in raising labor productivity and economic growth, suggesting that educational gender gaps are an impediment to economic development.²⁰ Klasen (1999) and Dollar and Gatti (1999) demonstrated that gender inequality acts as a significant constraint on growth in cross-country regressions, a result confirmed by Blackden et al. (2006) in the case of sub-Saharan Africa. As a result, societies that have a preference for not investing in girls or that lose a high proportion of skilled women through emigration may experience slower growth and reduced income.

North Africa has increasingly become a destination region for migrants (both permanent and transit)

North Africa is not only a sending region for migrants, it is also a receiving region, and in-migration has become increasingly important over the past decade. Since the mid 1990s, Morocco has developed into a transit migration country for thousands of sub-Saharan Africans. Although most consider Morocco a country of transit on their way to Spain and other destinations, many who fail to enter Europe settle in Morocco on a longer-term basis, rather than return to their more unstable and substantially poorer home countries.²¹ In 2007, the Ministry of the Interior estimated the flow of illegal migrants in Morocco at 15,000 (this, in addition to the 60,000 legal foreign residents), but that flow has been as high as 36,000 in 2003.²²

Morocco is not the only transit country for migrants. An estimated 65,000–120,000

²⁰ See Coulombe and Tremblay 2006.

²¹ de Haas 2005a.

²² Di Bartolomeo et al. 2009.

sub-Saharan Africans enter the Maghreb yearly, of which 70–80 percent are estimated to migrate through Libya.²³ Libya’s current migrant population has been estimated as high as a million persons, of whom some half may be illegal. Thus, North Africa itself increasingly faces the same challenges as traditional North African migration destination countries.

Managed and official migration has become increasingly undocumented

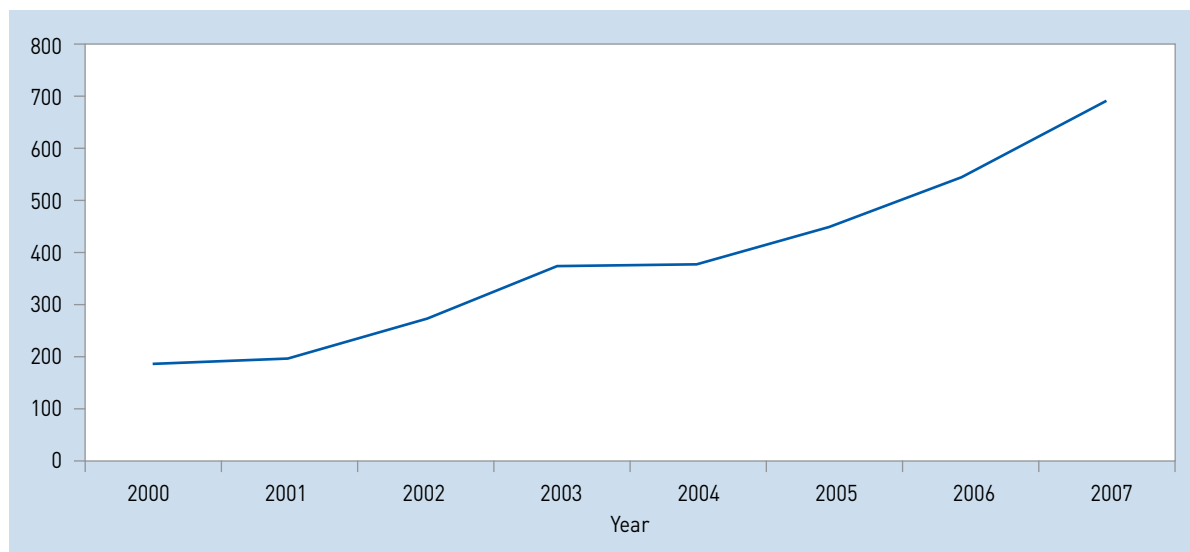
Finally, the official nature of North Africa’s migration has also changed with the establishment of migration networks and with changes in migration policy. Although for obvious reasons there are no reliable data on undocumented migration, the proportions of undocumented workers are likely to have increased, largely due to a change in destination. In Morocco, for example, during the period of bilateral labor agreements of the 1960–70s, migration generally operated through official channels and had a circular character. However, as soon as networks had been established in host countries, new migrants increasingly preferred to circumvent the hassle of official

recruitment and an autonomous “unofficial” channel emerged, parallel to the official one (de Haas 2007c). The surge in informal migration came in the 1990s with the introduction of new destinations (Spain and Italy). The convenience of migrants’ networks, the sustained high demand for flexible, cheap labor, and a large degree of informality in sectors where North African (in particular Moroccan) migrants work make it easy to find job without formal intermediation. The introduction of Schengen visas and the increasing restrictiveness of immigration policies in Europe seem to have further contributed to making migration “irregular” as both demand and supply of migrant work continued to be strong, but no options existed for labor migration.

Currently the most common form of Moroccan migration to southern Europe is overstaying a tourist visa (58 percent of surveyed Moroccan migrants in Eurostat and NIDI, 2000), followed by entering a country clandestinely, without proper authorization or documents (13 percent). The stock of undocumented migrants has on several

²³ de Haas 2006.

Figure 2.4: Moroccan immigration in Spain, 2000–2007
(Total migrant stock, thousands)



Sources: Conde-Ruiz, Gonzalez, and de Silva 2008, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

occasions reached level at which host country governments felt compelled to embark on regularization campaigns, through which many Moroccan migrants gained residency rights.

Much about North African migration is unknown

While the statistics provide a baseline picture of North African migration, the picture is far from comprehensive. There is limited information about the conditions of migrants prior to migration. There is no information on migrant flows. Thus, the very basic question about how North African migrants has changed over the last decade, in terms of their education, in terms of their gender, and so forth cannot be answered. And

importantly, there is virtually no information to link the various characteristics of the migration experience, be it employment, education, wages, training received, legality, entrepreneurship abroad, family, and so on, with the experience of families back home. Almost all our information on the development impact of migration is based on the characteristics of the migrant family left behind, not the actual migrant.

Nonetheless, with household level data available in two countries, Morocco and Egypt, there is the potential to examine several dimensions of migration and remittances, in terms of their impact on the economy. In the following chapter, some of these effects that migration has had on development in North Africa are explored.

The Development Impact of North African Migration

In the past, migration was only viewed as a “failure of development,” reflecting a clear lack of opportunities at the country of origin. Indeed, many of the factors that increase the push for migration—unemployment, poverty, and political instability—are palpable evidence of development deficiencies at home.

Today, migration has come to be concomitantly seen as a powerful mechanism for growth and development. With migration opening the door to financial resources (in the form of remittances), investment and knowledge transfer (by returned migrants and diaspora), skills development, and networks important for business, the potential channels for migration to aid in development are numerous.

The development impact of migration varies worldwide. Understanding the potential for migration to aid in development, a pressing question among development practitioners has been why migration has seemingly promoted economic development in some cases but failed to do so in others. One of the difficulties in arriving at an answer to that question is the sheer number of complex and sometimes divergent channels through which migration contributes to (or detracts from) development. Migration entails the loss of workers and skills, at least temporarily, who might otherwise contribute to growth and development. However, if those workers were unemployed or severely underemployed, their economic contributions might be limited. Remittances sent home by migrants can provide families left behind with opportunities which would otherwise be unavailable, including investments

in health and education, into businesses, or into savings which may reduce vulnerability to economic shocks. They can smooth consumption and help families, especially poor ones, meet basic needs. However, they can also cause real exchange rate appreciation and loss of international competitiveness, and they may result in reduced work efforts of remittance recipients. Return migrants may make important contributions to development through knowledge-transfer and investment. Or migrants may return at the end of their working life cycle to retire, and the costs of their return (economically) may be higher than their contributions.

This section presents a shutter view into what is known about North African migration, and the many ways in which migration has changed the economic and social landscape in North Africa. However, as already mentioned, the ability to analyze the impacts of migration in a systematic way are handicapped by a lack of appropriate data throughout the region. As a result, only parts of the potential costs and benefits of migration can be addressed herein.

In two countries, Morocco and Egypt, data permits the empirical analysis of the impact of remittances or migration, or both. The analysis reveals some important findings:

First, migration and remittances have reduced the level of poverty in North Africa. While remittances do benefit the better off (with 61 percent of remittances accruing to the top 2 income quintiles both in Morocco and Egypt), they nonetheless do benefit the poor. In Morocco, for

example, remittances account for more than 50 percent of the household budget of the lowest income quintile. Moreover, remittances decrease the probability of being poor by about 7 percentage points in Morocco and by about 9 percentage points in Egypt. That is to say, the presence of remittances in the household reduced the probability of being poor in Morocco from around 15 percent to around 8 percent, while in Egypt, it reduced the probability from around 20 percent to around 11 percent.

Remittances have also allowed for increased expenditures on health and education for children and reduced child labor, which over the long run are vital for setting the groundwork for higher growth. In both Egypt and Morocco, migration and remittances lead to positive improvements with regard to investments in children, and in Egypt, migration and remittances significantly reduce the probability of child work. Remittances also trigger a more equal intra household allocation on education and food between boys and girls, offsetting a gendered bias allocation in education and food expenses, and triggering gender parity in children's human capital accumulation in rural areas where girls are more marginalized.²⁴

Another potential impact from migration relates to its effects on labor markets, not only by the outflow of laborers, but also by potential changes in the labor market decisions of those left behind (particularly for households which receive remittances). However, the data from Egypt and Morocco suggest that the effects are modest, at best. In the case of Egypt, in fact, the results suggest a positive impact by remittances on labor supply, although most of the increase is the result of females moving into unpaid family labor. In both countries, remittances also increase the probability for self-employment at the expense of wage employment. Given the nature of the self-employment sector (predominantly low-skill), this suggests that remittances may be allotted as capital to more informal activities that provide greater employment flexibility.

There is also descriptive evidence that is suggestive (but not definitive) of associated costs

and benefits of migration. In terms of costs, the largest potential cost to the region comes from the loss of higher-educated workers needed for growth and development—often (and inaccurately) referred to as the brain drain. North African countries have high rates of high-skilled migration, but over the 1990–2000 period the rates of skilled migration dropped, not because of drops in the number of skilled workers going abroad, but because of a general increase in education levels. Though lack of data makes estimations of the costs of brain drain in North Africa impossible, what can be said is that the environment for the productive use of education in the economy is poor. That could suggest that the lost earnings from the act of migration are somewhat lower than might be suggested, if those high-skilled migrants were from the ranks of the unemployed or easily replaceable in the domestic economy by the unemployed. But ascertaining this would, in the end, require information that is not available. What is certain is that the region is already bearing large costs of lost education domestically.

A Framework for Understanding the Development Impact of Migration

At the household level, the benefits from migration are revealed through preference. Migration is a decision that is made at the household level, made by households evaluating their individual family benefits and family costs. The benefits are often economic, but there are often non-economic benefits as well, including family and security. Revealed preference confirms that for those who have migrated, the expected benefits exceed the expected costs.

The impacts on the broader economy are more difficult to predict. While the migration decision may consistently generate positive outcomes at the household level, there is significant heterogeneity across the world in terms of the way migration (and remittances) impact growth, poverty, and development for the broader

²⁴ Sadiqui (2004) shows that women in rural areas have been disadvantaged of urban modernization. For instance, their education and health access has traditionally been limited.

economy. With the myriad transmission channels through which migration and remittances can contribute to development, including through income, consumption, investment, government policies, potential parental absence, and removal of potential entrepreneurial individuals from the community,²⁵ countries can realize substantially divergent benefits (and costs) from the migration phenomenon.

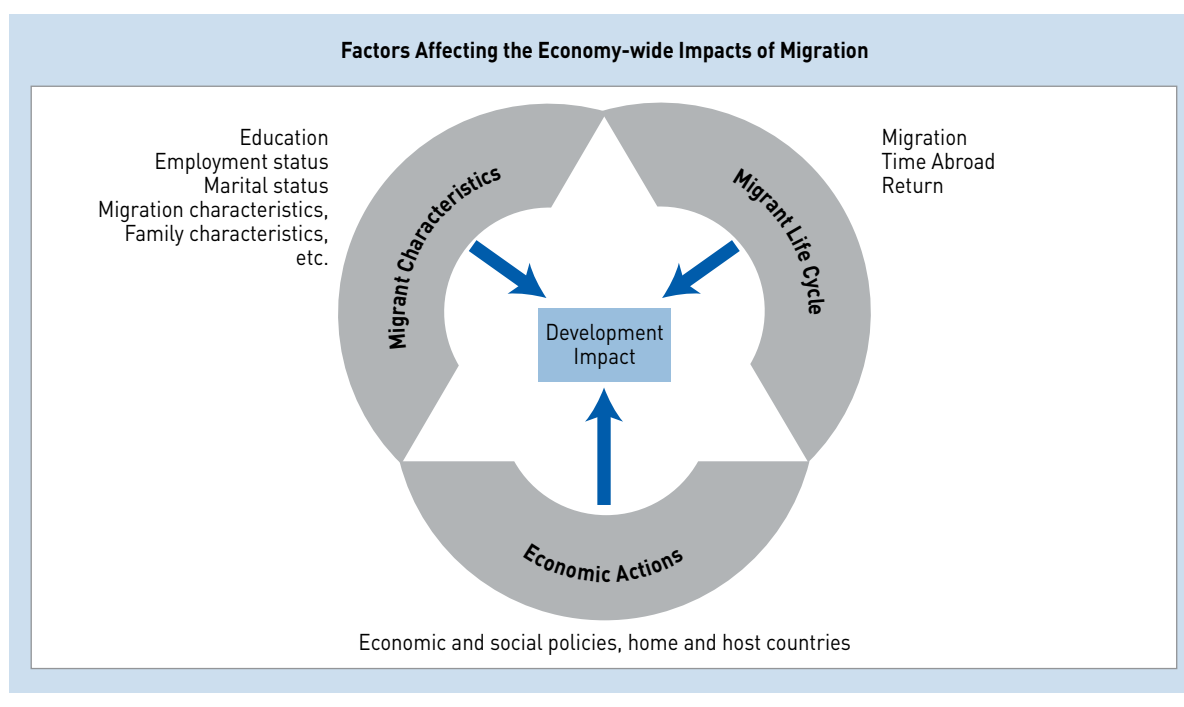
The economy-wide impacts of migration can be conceptualized as the interaction of three key factors: the stage of migration, the characteristics of migration, and the characteristics of both the sending and host country. To understand both the ways in which migration can generate gains to sending countries, as well as how countries differ in terms of these gains, it is important to center the discussion around a basic framework of the transmission channels of migration to the country of origin. How migration impacts sending countries can be conceptualized as the interaction of three basic factors: the lifecycle of the migrant, the individual characteristics of the migrant, and

the actions or policies taken (either by origin or destination countries) which may impact migrant decisions (Figure 3.1).

Migration brings different benefits and costs to the economy along the different migration stages. The migrant lifecycle represents the various stages of the life of the migrant, each of which brings different economic value to the sending country, or could result in different economic or societal costs. The first stage in the lifecycle is at the point of migration, where migration itself has a cost (benefit) to the economy, but it has potential benefits, with the ultimate sign based on the discounted value of the person's contribution to development had he/she stayed (earnings and otherwise), less the discounted value of the societal resources the migrant would have absorbed had he/she stayed, plus the discounted value of any effects that the act of migration has on the people who

²⁵ Sasin and McKenzie. 2007. "Migration Operational Vehicle: Operational Note 1; Migration, Poverty and Human Capital."

Figure 3.1: Migration's Development Impact Prism



remain (positive or negative).²⁶ To be more precise, the impacts from the first stage in the migrant life cycle can be considered the pure effects of migration as a result of time of absence, and not considering subsequent contributions from the migrant, but allowing for impacts on the actions of those remaining. For example, the migration act may induce non-migrants to invest in education and skills accumulation in the expectation of future prospects abroad (whether or not they actually migrate), which contributes to growth over the long run. During the second stage in the migrant lifecycle, the period of residing abroad, the migrant can add economic value to the home country, primarily through international remittances and the myriad actions which have come to be grouped as “diaspora initiatives,” but migrants may also incur costs to the home country. Some high migrant-sending countries, for example, devote extensive resources toward the protection and management of their migrant community abroad. Also, there are the potential social costs of family dismemberment. Finally, there is the stage of return, where the migrant’s net contributions to society can be evaluated relative to the net contributions had the migrant stayed. In addition, there may be costs associated with re-integrating the migrant back into the home country.

Migrant and structural characteristics determine the magnitude of those costs and benefits. Table 3.1 elaborates the positive and negative potential impacts that migration can have on sending countries throughout the migration process. However, these impacts are purely hypothetical. The magnitudes of these positive and negative impacts are undetermined, conditional upon both the characteristics of the migrants (and the migration decision), as well as structural characteristics in both sending and receiving countries, which both impact the effectiveness of these channels and the responses of migrants to these incentives. The characteristics of migrants—all the characteristics which have bearing on the contributions the migrant and/or migrant family could make to development, including aspects of education, employment, the nature of migration (permanent or temporary; single or family, etc)—will obviously have an impact on the ultimate benefits/costs from migration to the home country.

²⁶ Although the impacts on decisions made by family members or others remaining in the home country are not occurring precisely at the same time of migrant exit (and may not occur for years after), this is a convenient manipulation to separate out the effects that can be considered mainly the result of migration (for example, effects on the labor market conditions, effects on changed gender roles in the household) and not the result of subsequent actions taken by migrants while abroad (such as those made possible through the receipt of remittances).

Table 3.1: Channels of Development Impact over the Migration Lifecycle

Migrant characteristics/Economic actions ↓	Migration	Time abroad Channels ↓	Return
Migrant characteristics: [Education level, Occupation, Employment status and prospects]; migration characteristics [single or family, expected temporary or permanent]; Family characteristics [Ages, income, schooling, etc]	Positive: Societal resources not consumed while abroad; positive impacts on decisions made by those remaining	Positive: Remittances; investment home while abroad; tourism revenues; knowledge transfer while abroad; positive impacts on decisions made by those remaining/receiving remittances.	Positive: Increased earnings capacity upon return; knowledge transfer; investment upon return; effect on growth-enhancing institutional reforms upon return.
Structural characteristics in home/host countries which impact present and future earnings of migrants (job prospects, wages, training) and may impact the decisions of migrants/potential migrants	Negative: Lost economic contributions while abroad; negative impacts on decisions made by those remaining.	Negative: Societal resources consumed while abroad (reverse remittances); negative impacts on decisions made by those remaining/receiving remittances	Negative: Societal resources consumed upon return; negative impacts on decisions made by non-migrants

An unemployed worker with poor employment prospects at home, for example, will entail fewer lost economic contributions than an employed worker with continued strong employment prospects. A high-skilled migrant, other things equal, will entail higher lost economic contributions to the sending country than a lower skilled migrant. But also, structural characteristics in home and host countries will impact the ultimate development impact of migration. For example, the cost of transferring remittances in host countries will impact the value of remittances sent home by migrants, while a strong investment climate will impact the potential for investment by returned migrants.

Therefore, the degree to which sending countries can benefit from migration will depend implicitly on the migrants themselves and the incentive framework *within the home country*.²⁷ And many of the elements of the incentive framework which would increase the positive returns from migration to the host country are precisely the elements which increase growth and development overall. High-skilled workers with skills relevant for a private-sector-led economy not only increase the employment potential (and remittance potential) abroad; they increase the employment potential at home. Having job opportunities for these higher educated workers at home not only reduces skilled labor flight, it also increases the contribution of human capital to growth and development. An investment climate that attracts investment from returned migrants also attracts the domestic investment for economic growth and development.

The Evidence of the Development Impact of Migration

While it is analytically convenient to view migration impact over various stages and through various channels, a host of analytical challenges make measuring the true impact of migration and remittances impossible.

The largest impediments to measuring impact center on the endogeneity of migration decisions (discussed in the following section) and data constraints (not only in the region, but

worldwide). Besides a general lack of detail on migrants, existing national statistical systems are not designed to collect information on the situation of migrants *prior to migration*. This is a fundamental requirement for investigating the consequences of migration for international migrants and their households, communities of origin or destination, and countries of origin or destination. Population censuses record data on persons in enumerated households, which should include international migrants present in the household (however defined), *at the time of the census* only. Since there is no data on their living conditions prior to migrating, it is impossible to measure the consequences for the migrant or his/her household resulting from migration.

For most countries, the household survey is the foundation of information for monitoring and analyzing migration. Good household surveys have the capacity to collect extensive information about migrants, but they are only able to do so from households in which someone remains behind who can provide information about the emigrant. Thus when the *entire household* has emigrated, there is no one left to provide data about them (neighbors can rarely provide detailed, reliable data). This is a significant shortcoming, to the degree that most emigrants from the country migrate as households rather than individuals (leaving a household behind), and the characteristics of those who emigrate as households are generally not similar to those who emigrate as individuals (those who depart as individuals are more likely to be young, single adults, and perhaps mostly males, as is the case of individual emigrants from the countries of North Africa, in contrast to a much broader age-sex distribution of persons in families leaving).

The analysis of migration impact in North Africa is limited to Morocco and Egypt, where nationally representative surveys permit the analysis of conditions of families with migrants versus families without migrants. But data sources have limitations, discussed later in this

²⁷ The incentive framework in the home country, in addition to the incentive framework in the host country, when combined determines the differential in opportunities.

report, which limit their ability to underpin policy recommendations.

The Impact of Migration on Growth

At the broadest level, there is interest in knowing the impact of migration on growth and productivity in North Africa, particularly in light of declines in migration and remittances with the global financial crisis. With regard to migration, and with an absence of information on migration stocks, this central question cannot be answered. What can, however, be examined is the role of remittances in output and growth in the region.

The North African region is estimated to have experienced a 10.6 percent drop in remittances over 2009. What effect did this have on output and overall growth in North Africa? There are two ways to evaluate the decline in remittances to the region: first to simply to look at remittances through its role in the national accounts as a component of GDP, and see what the drop in remittances meant in terms of total economic output. Table 3.2 presents the size of remittances in all four North African countries as a share of GDP in 2008. Remittances accounted for an average of 4.33 percent of GDP in North Africa in 2008. The World Bank estimated remittances in the region declined by 10.6 percent, with the largest remittance declines in Egypt and Morocco (with estimated declines of 10.3 percent and 17 percent, respectively). As a result, the

net effect on GDP from the remittance decline was about 0.5 percentage points ($0.433 * 0.106$) [alternatively, simply subtracting the envisaged remittance decline would reduce GDP by 0.5 percent], with the largest estimated decline in Morocco (1.3 percentage points of GDP).

But the other way in which to look at remittances is not through their contribution to GDP, but through their role in growth. If remittances are spent *differently* than other sources of finance—for example: if they are channeled into expenditures that fuel long-term growth (such as education or productive investments); if they improve country creditworthiness (increasing access to international capital); if they generate multiplier effects through expenditure linkages—then remittances may additionally raise economic growth, although some growth effects may not be visible for some time.

However, the overall impact of remittances on growth is not a priori positive. The impact of remittances on an economy depends largely on the structure of the receiving economy and its capacity to absorb large financial inflows. And the academic literature on growth and remittances has found mixed results, with most finding that remittances have benefited at the microeconomic level, but have not or only marginally contributed to larger economic growth.²⁸

²⁸ Pradhan et al. 2004.

Table 3.2: National Accounting: Impacts of Remittance Decline on GDP

Country	Remittances 2008	GDP 2008	Remittances as a share of GDP 2008	Expected decline in GDP as a result of remittance decline	Projected GDP growth 2009	Projected GDP growth without remittance decline
Algeria	2,202	178,882	1.2	0.0	2.2	2.2
Egypt	9,476	162,818	5.8	0.6	3.8	4.4
Morocco	6,730	86,329	7.8	1.3	5.0	6.3
Tunisia	1,870	40,180	4.7	0.0	3.0	3.0
North Africa	20,278	468,209	4.3	0.5	3.4	3.9

Source: World Bank, 2009, "Remittances and Growth in the Middle East and North Africa," an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Three reasons may explain the inconclusive findings in the academic literature. First, there are fundamental measurement problems associated with evaluating macroeconomic impacts of remittances. Not only is the causality difficult to disentangle (with remittances both impacting growth and also being impacted by growth), but the actual direction of the relationship fluctuates. At the aggregate level, however, it would be difficult to disentangle these effects. More generally, measurement is hindered by the lack of a suitable model for dealing with the complex and simultaneous channels through which remittances can impact growth.

Second, large sets of accurate data on the allocation of remittances are scarce, making it difficult to analyze their broad impact on consumption, savings, and investments. Not only are the data scarce, they are also suspect. In fact, the way remittances are reported to be spent may not reveal the likely difference in patterns of expenditure allocation with and without remittances.

Third, the impact of remittances on a country's economy depends largely on the structure of the receiving-economy and its capacity to absorb large financial inflows. As noted by Kireyev, *"There is no obvious blueprint for establishing unambiguously the direction of the macroeconomic impact of remittances. Their ultimate macroeconomic impact will depend on the structural characteristics of a particular economy, the country-specific transmission mechanisms, and elasticities, primarily the marginal propensities to import, consume and invest."*²⁹

One of the more important characteristics that can determine the ultimate impact of remittances is the development of the financial sector. A body of emerging research has evolved that looks at the role remittances play in easing domestic credit constraints. Given the difficulties associated with borrowing and getting insurance in developing countries, particularly in rural areas, migrant remittances can substitute for a lack of financial development and hence promote economic growth. One recent study examining the impact of remittances in the presence of differing levels of financial development found that

remittances have a greater (positive) impact on growth in less financially developed countries, with remittances acting as a substitute for credit from the financial sector. In financially developed economies, on the other hand, because credit is more easily available and people need not wait for remittances for investment purposes, the impact on growth is smaller.³⁰

Empirical estimation of impact of remittances on growth

An analysis of the impact of remittances on growth in North Africa was conducted, using the framework developed by Ramirez and Sharma (2008) in their study of remittances and growth in Latin America. In that paper, the authors estimated the impact of remittances on economic growth in selected upper income and lower income Latin American and Caribbean countries, using a recently developed panel unit root and panel cointegration tests and the Fully-Modified OLS (FMOLS) methodology.

The North African analysis focuses on four North African countries (Egypt, Morocco, Tunisia, and Algeria) with annual data for the period 1980–2007. To explore the relationship between remittances, financial development and growth, two models were estimated. First the model was estimated without the interaction of financial development variables. However in the second model, remittances were allowed to interact with one of the financial development variables. This enables the determination of the impact of remittances on growth through the financial development variables. The method used for estimation was the Panel system Generalized Methods of Moments regressions (GMM) to control for endogeneity and serial correlation, following Arellano and Bover (1995) and taking into account time specific effects. A description of the methodology is included in Appendix 8.

Table 3.3 presents the estimation results. The results suggest that remittance flows have a positive and significant impact on economic

²⁹ Kireyev 2006.

³⁰ Giuliano et al. 2006.

Table 3.3: Estimation results: Impact of remittances on per capita growth in North Africa

Dependent variable: per capita growth	Without financial development variable		With financial development variable	
	Coefficient	t-stat	Coefficient	t-stat
Lag growth (-1)	-0.40	-3.19	-0.48	-2.93
Lag remittances (-1)	0.01	2.46	0.05	2.01
Capital	0.06	2.96	0.08	2.38
Labor	0.07	8.24	0.27	1.68
Credit			0.07	2.41
Remittances*credit			-0.06	-2.31

Source: Adams, Keller, Mottaghi, and van den Bosch 2009, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Note: All variables are represented in natural logs. The model includes common time dummies.

growth in both models, but the introduction of the financial sector variable significantly increases the impact that remittances has on growth, similar to the results from Latin America. In particular, a one percentage point increase in remittances as a percent of GDP, all other things being equal, increases GDP growth per capita by 0.05 percentage points.

The sign of the coefficient on the interaction term (remittances*domestic credit) is negative, implying that remittances act as a substitute for credit in North Africa, offering response to the needs for credit and insurance that the market has failed to provide. And indeed, the weaker is the financial sector, the greater is the growth impact from remittances.

As in many developing regions, North Africa’s financial sectors are generally underdeveloped, with limited access by households and firms to financial services. A recent World Bank report highlights the financial sector challenge:³¹ Few private sector firms in MENA even use bank credit to finance investment, relying instead primarily on retained earnings (Figure 3.2). More than 38 percent of firms in the North Africa identify access to finance as a major constraint to business, higher than for all other regions but Sub-Saharan Africa. There are fewer bank branches in North Africa than in other emerging economies (per 1000 people).

As a result, remittances play a relatively large role (relative to developed economies) in

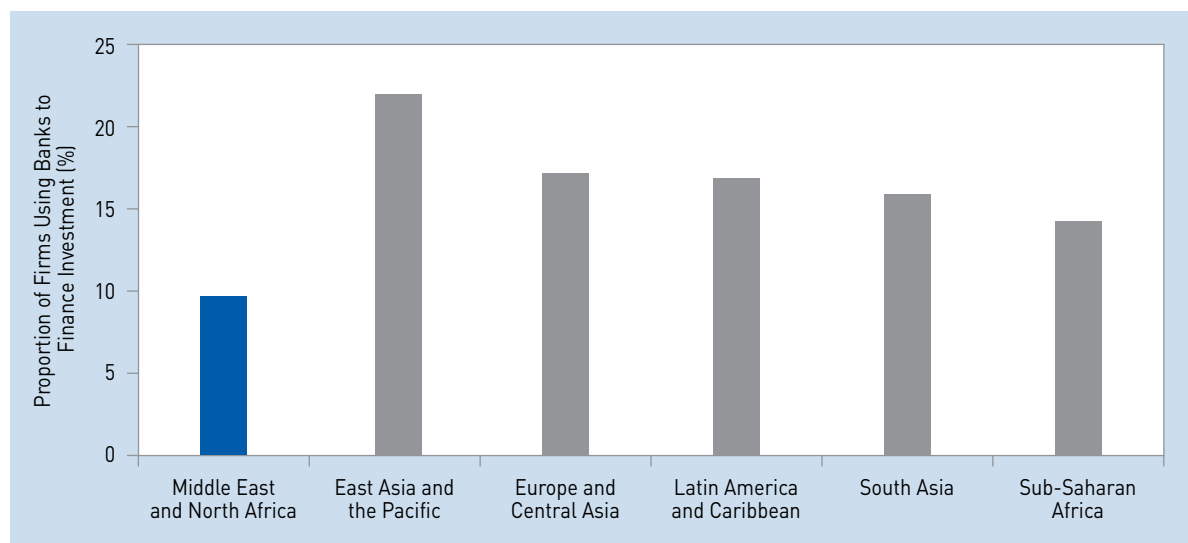
helping firms and individuals circumvent these credit constraints. While the impact on growth in North Africa is small, the degree to which remittances act as a substitute for a well-developed financial sector highlights the fact is that the lack of such well developed financial sector is one of the region’s vulnerabilities. Because the financial sector cannot provide diversified funding sources for both individuals and enterprises for mitigating risk and insuring vulnerability, nor can households and firms can borrow from the financial sector to smooth the consequences of an economic downturn, therefore remittances are having to fill a central role—that of coping with and managing shocks. In the face of shocks to remittances themselves, the region is particularly at risk in the absence of other mechanisms for smoothing consumption and investment.

Moreover, and as will be further discussed in Chapter 6, growing demographic imbalances worldwide create the potential for significantly higher migration flows from the North African region over the coming decades. Under these circumstances, the vulnerability to remittance shocks is likely to increase in the absence of better functioning financial markets.

Measuring Migration’s Impact at the Household Level

Because migration, relative to the population, remains small (in Morocco, an estimated 11 percent

³¹ World Bank, MEDP 2009.

Figure 3.2: Use of Bank Credit by North African Firms

Source: MENA Economic Developments and Prospects 2009.

Note: Regional averages unweighted

of households have a migrant abroad; in Egypt, 3.5 percent), many effects of migration cannot be seen at the macroeconomic level, but will be evident through the decisions and outcomes of the household. In the following section, the analysis from the North African region is discussed.

Data sources for analyzing remittance-receiving households in North Africa

Household surveys with specific questions on remittances are only available for two of the North African countries: Morocco and Egypt.³² Both surveys, while very useful for understanding some of the characteristics of migration or receiving remittances in North Africa, also have important limitations.

The nationwide Egypt Labor Market Survey (ELMS) data is one of the first true nationwide longitudinal surveys to be carried out in Egypt. It attempted to track households and individuals first interviewed in 1998 as part of the Egypt Labor Market Survey of 1998 (ELMS 98) and re-interview them in 2006. The Egypt Labor Market Panel Survey (ELMPS) 06 and ELMS 98 provide detailed information on household housing conditions, ownership of durables, ac-

cess to basic services and the neighborhood infrastructure. It also contains a great deal of information on the household members' education, employment status, time allocation, job mobility, earnings, migration and household enterprises. With regard to migration questions, each round of the Egypt Labor Market Surveys (ELMSs) contains information on internal and international migration history (e.g., place of birth, year leaving place of birth, and the place and date of the previous two moves if different from the current place of residence). ELMS 98 includes only one (yes/no) question on whether the household receives remittances from relative(s) living abroad. However, in ELMPS 06, a new module on current migrants and remittances was added and it includes questions on whether the household receives remittances from household

³² Tunisia carried out a *Household Consumption Survey* in 2005, on a sample of 13,000 households. On the household roster is a question identifying the residence status of all persons, including both permanent residents and temporarily absent members, but there is no specification of where the absent person is. The only other information related to international migration is a question on whether the person providing the *main* source of economic support for the household lives with the household or elsewhere. The number of households identified as including an emigrant was considered too low to be statistically useful, so the data from these questions were not analyzed or published.

members living abroad, the amount and type of these remittances, and which household member receives the remittances. ELMPS 06 also includes information on the place and reason of migration for individuals who were in the household in 1998 but were not found in 2006 because they migrated between the 1998 and 2006. Although a rich source of information on labor market dynamics and individual and household characteristics, the ELMPS was not designed to measure migration. Migration is largely network-driven, with significant clustering of migrants among certain communities. While the ELMS is nationally representative, the sample frame was not designed to obtain accurate trends of migration and remittances flows that would coincide with official estimates. However, to the best of our knowledge, the ELMPS 06 is the only recent national household survey that collects information on incidence of international migration and remittances.

Morocco's 2000/01 ENCDM survey is a multi-purpose household survey, covering 0.3 percent of the population. The module on household transfers contains a question about the source of transfers, for which "family living abroad" is an option. For many purposes, the ENCDM survey is relatively good. For instance, total household consumption recorded in the survey is 253 billion dirham, compared with 299 billion dirham recorded by the National Account Statistics for the period of the survey. However, remittances in the survey add up to only 2.3 percent of total consumption (or 2.8 percent, when including foreign pensions) against the Balance of Payments figure of 12 percent. Even assuming that not all private transfers from abroad "pass" through household budgets (e.g., some can be directly invested in real estate or stock exchange and some may be money of migrants currently residing abroad, who are not included in the sample) it seems that remittances in the survey are underestimated.

Impacts on Poverty and Inequality

One of the most important ways in which migration can impact development in sending countries is through its effect on poverty alleviation. But the relationship between migration

and poverty is multifaceted and indeterminate. Poverty can both create increased incentives for migration, but it also can hinder the ability to migrate. Likewise, while voluntary migration almost always lowers poverty at the individual level, the impact of migration on families left behind can be either positive or negative, with factors such as lost earnings balanced against remittances the migrant may be able to send home.

Worldwide, most studies suggest that international remittances reduce poverty. The reason for this finding is simple: in most developing countries the amount of remittances received from a migrant working abroad is between two and five times the amount of money that worker could receive from wages earned working at home. Since international remittances are so much larger than "home earnings," the receipt of remittances serves to increase the incomes of remittance-receiving households. Since some of these remittance-receiving households are "poor" before the receipt of remittances, the receipt of remittances helps to reduce the number of households living in poverty. But it is also important to note that not all migration—perhaps very little of it—results in remittances. Migrants who settle abroad with their families are less likely to contribute to development through remittances.

There are alternative ways of looking at the impact of remittances on poverty. Within the lifecycle of migration, understanding the impact of remittances can be looked at two different ways. On the one hand, it is possible to treat remittances as a simple exogenous transfer of income by migrants. When treated as an exogenous transfer, the research question becomes: How do remittances, in total or at the margin, affect the observed level of poverty and inequality in a specific country?

The analysis of remittance impact in North Africa treats remittances as a substitute for domestic (home) earnings. When treated as a potential substitute for home earnings, the question becomes: How does the observed level of poverty and inequality in a country compare to a "counterfactual scenario" without migration

and remittances but including an imputation for the home earnings of migrants had those people stayed and worked at home? This is the more interesting, but also more challenging economic question, and requires econometric techniques to compare the level of poverty in a country with and without remittances. That analysis is complicated by the problems of selection and endogeneity. The problem of selection concerns the issue that migrants may differ in unobserved characteristics from non-migrants, and attempts to estimate the impacts of migration on the basis of the observed outcomes of non-migrant households will be subject to bias. Endogeneity, meanwhile, reflects the issue that decisions on migration, remittances, labor supply, expenditure allocations, school attendance, and other household choices are made simultaneously, and hence the characteristics which explain migration may also shape other household decisions (see Box 3.1).

*A profile of migrant-sending, remittance-receiving households in North Africa*³³

According to the surveys, 11 percent of Moroccan households received remittances in 2001, while 3.5 percent of Egyptian households received remittances in 2006.

While Europe has absorbed most of Morocco's migrants, the Gulf region has always been the main destination of Egyptian migrants, followed by other Arab countries. Overall, through 2006, 46 percent of Egyptian migrants have been to Gulf Countries, 41 percent to other Arab countries and only 3 percent have been to the rest of

³³ The following two sections are drawn from Sasin 2008, and Roushdy, Assaad and Rashed 2008, outputs of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Box 3.1: A note on measuring migration/remittance impact

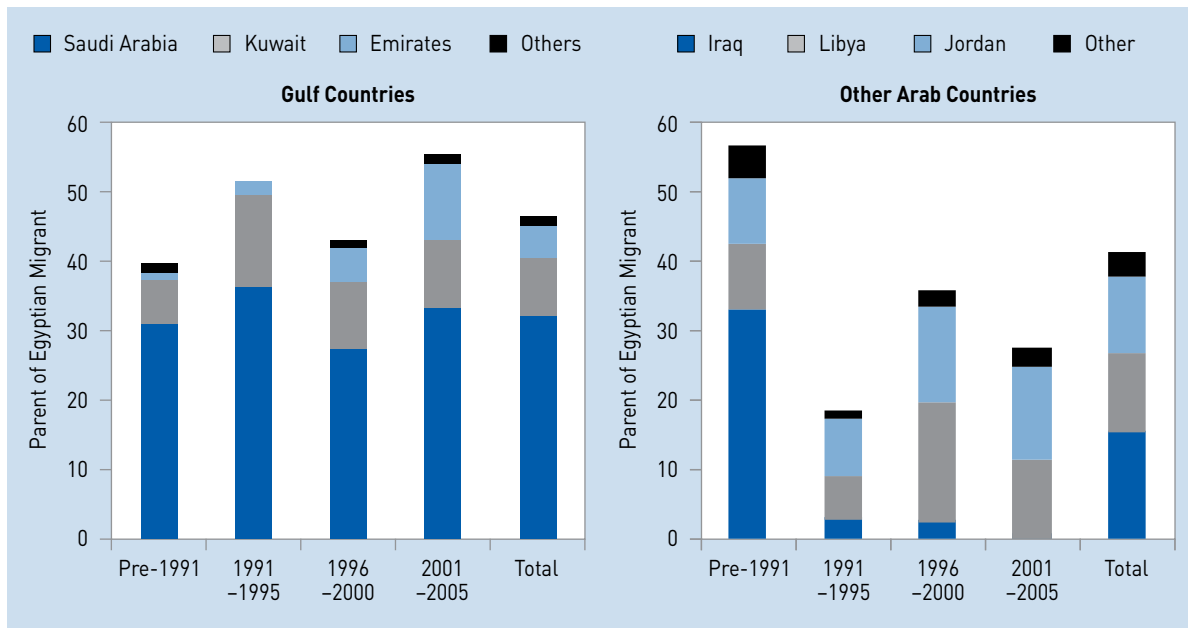
Measuring the impact of migration and remittances is hindered by methodological problems. First, a key empirical problem is self-selection, which is due to the fact that the pool of either migrants or remittance-recipient households is not a random sample of the population. Migrants' families can systematically differ from those of non-migrants along several observable (e.g., age, education, marital status) but also unobservable preferences and characteristics (e.g., income shocks, ability, talent, risk aversion). As a result, evaluating the impact of migration on development outcomes based simply on association would yield erroneous results: for example, migrant families systematically save and invest more than non-migrant families, thus from the start they are more able to exit from poverty or to develop risk management strategies to avoid falling into poverty.

Second, other methodological problems are frequent, including endogeneity, reverse causality bias, measurement errors, and omitted variable bias. These factors challenge the consistency of models to evaluate the impact of migration by rendering the migration

and remittances variables correlated with unobserved determinants of household poverty status. Reverse causality is a big challenge when investigating the effect of migration on poverty status: for instance, people falling into poverty can systematically change their migration behavior, thus causing a statistically significant correlation to be observed between poverty status and migration, but which should not be interpreted as a causal impact of migration on poverty.

To address this problem, many studies use some kind of two-stage Heckman selection model to test for selection bias in the household receipt of remittances. There are econometric techniques, such as instrumental variables (IV), which are often used as a remedy for both the endogeneity and selection bias problems. However, the IV technique requires a set of instrumental variables that are correlated with migration and remittance decisions but uncorrelated with household living standards. Such variables are often difficult to find. In the literature, historical migration rates have been occasionally used to instrument for migration and receipt of remittances, with longer lags.

Figure 3.3: Distribution of Egyptian Migrants by Year of Departure and Country of Destination



Source: Roushdy, Assaad, and Rashed 2009, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

the world. Prior to the first Gulf War, Iraq was the main destination of Egyptian migrants followed by Saudi Arabia. However, the war caused Egyptian migrants to return from Iraq. According to the ELMPS 06 sample, by 2006, there were only about 0.7 percent of Egyptian migrants in Iraq. In contrast, Kuwait saw an increase in its share of Egyptian migrants directly after its liberation, but this was followed by a steady decline thereafter. Recent trends show that, in 2006, more than 10 percent of Egyptians migrants were living in Kuwait. Saudi Arabia continued to be the main destination for both current and return migrants since the 1990s, although it experienced a decline in its share during the mid 1990s, which could be due to the fall in oil prices during that period. The United Arab Emirates started with a very small share of Egyptian migrants, but its share has increased significantly over the years (from around 1 percent before the 1990s to more than 8 percent in 2006). The share of the other Gulf countries has always been very small (less than 1 percent) throughout the period. After the Iraq war, Jordan and Libya continued to be the two main destinations for migrants among the Arab non-Gulf countries. Both countries have been

experiencing a small but steady increase in their share of Egyptian migrants.

Moroccan and Egyptian remittance-receiving households differ according to many characteristics. While remittances disproportionately accrue to urban households in Morocco (73 percent of remittance-receiving households are urban, compared with 56 percent of non-receiving households), remittances in Egypt are disproportionately directed to rural families (69 percent of remittance receiving families live in rural areas, versus 51 percent of non-receiving households). Remittance-receiving households in both Morocco and Egypt are more likely to be headed by a woman, but while in Morocco the difference is relatively modest (28 percent of remittance-receiving households are female headed, versus 16 percent of non-receiving), the difference in Egypt is considerable: 59 percent of remittance-receiving households in Egypt are female headed, versus only 16 percent of non-receiving households. In both countries, receiving households are more than usually likely to be headed by a woman, and employment rates are lower, which reflects the absence of a migrant.

In Morocco, the household head is more likely to be better educated, while in Egypt there is no substantial discrepancy between the education composition of household heads of remittances-receiving versus non-receiving households. (Table 3.4).

Importantly, in both countries, remittances accrue disproportionately to richer households. But the magnitude of disproportion is significantly higher in Morocco, where the highest quintile accounts for 61 percent of all receipts, compared with only 3 percent for the bottom

Table 3.4: Characteristics of remittance-receiving households in Morocco and Egypt

Characteristics of Household	Egypt		Morocco	
	Household does not receive remittances	Household receives remittances	Household does not receive remittances	Household receives remittances
Total	96.7	3.3	89	11
Household characteristics				
Location				
Urban	50	31	56	73
Rural	51	69	44	27
Average household size	4.5	4.5	5.9	5.5
Household wealth				
Lowest Quintile	—	8.1	—	3
Second Quintile	—	14	—	5
Third Quintile	—	16.6	—	10
Forth Quintile	—	26.2	—	21
Highest Quintile	—	35.2	—	61
Household head characteristics				
Male	84	41	84	72
Female	16	59	16	28
Education				
Illiterate	34	37	51	40
literate without any school	9	8		
elementary school	11	6		
middle school	5	4		
Secondary & post-secondary	26	36	13	20
university & above	15	9		
No. of Employed			2.1	1.6
Employment Status				
Inactive	22	47		
Wage worker	48	18		
Employer	18	17		
Self Employed	9	5		
Unpaid family worker	3	13		

Sources: Roushdy, Assaad, and Rashed [utilizing ELMPS 2006 (Egypt)]; Sasin 2008 [utilizing ENCDM 2001 (Morocco)], outputs of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

one. In Egypt, 35 percent of remittances accrue to the highest quintile, versus 8 percent for the bottom. This is not an unusual characteristic of remittances—worldwide, remittance transfers accruing disproportionately to the richer strata of the population is a common finding.

While remittances benefit the better off, they nonetheless benefit the poor. In Morocco, when evaluating households according to pre-remittance income (since households may progress on the income distribution precisely as a result of remittances and migration), the percent of households in the bottom quintile benefiting from remittances rises to seven percent, with remittances accounting for more than 50 percent of the household budget (Table 3.5).³⁴

It does not appear that Moroccan families passively depend on remittances. Only for less than a quarter of them are transfers the main source of income, while two-third tend to rely on labor earnings instead, continuing to contribute economically to their communities. Other studies, such as de Haas (2006) or World Bank (2008), reach the same conclusions. In any case, remittances provide an opportunity to diversify households’ livelihoods, which is important in reducing vulnerability.

In Egypt, where the data permits separate analysis of migrant-sending households and remittance receiving families, 86 percent of families receiving remittances have a household member abroad, while only 66 percent of migrant-sending families receive remittances. This exemplifies some of the problems with attempting to measure the impact of migration through data on remit-

tances, since a potentially large portion of the migration story will not be found in remittance-receiving households.

A full description of the methodology for measuring the impact of migration/remittances on household poverty is included in Appendix 2 (Egypt) and Appendix 3 (Morocco). Instrumental variables techniques are used to correct for the fact that remittances are (i) not the only outcome of migration, and (ii) endogenous. A regression framework is utilized to explain the consumption level and poverty status of Moroccan households by their characteristics, including the migration status (proxied by remittance receipt), and controlling for other factors, such as health, gender, or family situation. Additionally, to control for endogeneity, an instrumental variable technique was used to correct for the possible bias, utilizing the share of return migrants in the population at the province level in the 1994 Census as the instrument.³⁵ In Egypt, since both poverty and migration were binary variables (poverty identified as belonging to the bottom quintile of the wealth distribution, using the information on household assets), the model estimation strategy was not a trivial choice. Both a two-stage least square estimation technique

³⁴ The ELMSs questionnaires do not include a household consumption and income module, and thus cannot provide direct measures of the share of remittances in the household budget, while the wealth status (both poverty and quintiles) was proxied following Filmer and Pritchett (2001), using factor analysis based on household asset ownership and housing characteristics.

³⁵ For full details of the empirical analysis in Morocco, refer to Sasin, 2008: an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Table 3.5: Distribution of remittances in Morocco, “adjusted” quintiles

“Adjusted” quintiles	All	Q1	Q2	Q3	Q4	Q5
Incidence (of remit. receipt)	11%	7%	8%	9%	12%	19%
Remittance share in budget	13%	52%	24%	18%	15%	8%
Per capita (in dirham per month)	140	190	110	108	126	156
Progressivity (share in total remit.)	100%	18%	11%	13%	22%	36%

Source: Sasin 2008 [Calculations utilizing ENCDM (2001)], an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

was employed (following upon Angrist (1991), which provided certain conditions under which a two-stage linear model can perform well with binary endogenous variables models (Acosta 2006)) as well as a generalized least squares model. As a robustness check, a bivariate probit (two equation probit) model was also estimated, using the biprobit command in STATA but implementing it as an IV estimation. This specification allowed for the binary nature of poverty and migration and, at the same time, dealt with self-selection and endogeneity of migration (remittances) by allowing the error terms in both the poverty and migration (remittances) equations to be correlated.³⁶

The empirical results on poverty alleviation

Empirical analysis provides supporting evidence of the poverty alleviating impact of remittances in North Africa. Remittances decrease the likelihood of household poverty by about 8.8 percentage points in Egypt, while they reduce the likelihood of household poverty by about 7.1 percentage points in Morocco (Table 3.6). That is, households receiving remittances have an 8.8 percentage point lower probability of being poor than a households that do not receive remittances in Egypt, while households receiving remittances have a 7.1 percentage point lower probability of being poor than households that do not receive remittances in Morocco. With poverty rates in Egypt and Morocco of 20 percent and 15.3 percent, respectively, remittance-receiving households have reduced their probability of poverty by close to half.

These findings are similar to those reached in other studies analyzing the impact of remittances on poverty. In their study of the broader MENA region, Adams and Page (2003, 2005) find that, in the broader MENA region, a 10-percentage point increase in the share of remittances in GDP reduces the poverty headcount by 5.7 percent and the severity of poverty by 2 percent on average, while a study of 10 Latin American countries (Acosta, Fajnzylber and Lopez 2007) found that poverty headcounts fall by no more than 5 percent with the inclusion of international remittances in household income. However, the results vary greatly depending upon the distribution of remittance-receiving households across income levels. In Mexico and El Salvador, for example, where most migrants are from low-income households, remittance flows reduce moderate poverty (\$2 a day) by 15 percent.

The analysis suggests that while migration can play a role in poverty alleviation, it is not a panacea for poverty reduction at the national level. In both Morocco and Egypt, the poverty alleviating impact of migration and remittances at the national level is modest. With only 3.5 percent of the Egyptian population receiving remittances at the time of the survey, the absence of remittances would have raised the overall poverty headcount by only about 0.4 percentage points. In Morocco, meanwhile, the absence of remittances would have raised the poverty headcount

³⁶ For further detail on the empirical analysis in Egypt, refer to Roushdy, Assaad, and Rashed 2009, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Table 3.6: Impact of Remittances on Poverty North Africa and Comparator Countries

Country/region	Reduction in probability of poverty with remittances	Reduction in poverty with 1 percentage point increase in remittances/GDP share
Morocco	7.1	
Egypt	8.8	
MENA (Adams and Page, 2003)		0.6
Latin America (Acosta, 2007)		0.4

Sources: Sasin 2008 [Calculations utilizing ENCDM (2001)]; Roushdy, Assaad, and Rashed 2009 (Using ELMPS 06), outputs of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies. Acosta (2007); Adams and Page (2003).

by less than a percentage point. Thus, the ability for migration to substantially alleviate poverty on a national level is limited.

However, for the individual household, migration is an important element of the household’s coping strategy. Indeed, remittances reduce the probability for poverty by almost half in both countries. These findings support the qualitative evidence on migration as well, which highlights the importance of economic (income) diversification, and the exceptional importance of migration and remittances as a method for moving out and remaining out of poverty. For example, “Moving out of Poverty,” (World Bank, 2008), a participatory qualitative study of poverty in Morocco based on interviews with focus groups within communities, reports that receiving foreign remittances, salaries, or pensions (especially from employment in Europe) allowed households to save, cope with crises, and simultaneously start or expand income generating activities, thus diversifying their livelihoods. In particular, the report finds that migration of one or more family members, especially abroad, appears as a key avenue of upward social mobility. Community participants mentioned migration as one of the constituting characteristics of a socioeconomic status equivalent to the highest quintile.

And within communities, the ability of migration to lower poverty and raise living standards may be very high. Migration in Morocco is geographically concentrated. Although migration has become an integral part of the Moroccan socioeconomic landscape in general, certain regions

have been particularly affected. Indeed, data from ENCDM 2000/01 confirms that migration is more significant for some areas than for others. For example, 12 provinces (out of 60+) account for a half of remittances and in as much as 10 provinces more than 20 percent of the population receives remittances. In the traditional emigration region of Oriental, and particularly in provinces of Nador, Jerada, or Taourirt, but also in places like Al Hoceima, Tanger, Tetouan, or Tiznit, migration and remittances are an extremely important element of population’s livelihoods (see Table 3.9). Similarly, as de Haas (2006) reports, in certain valleys in the Middle Atlas (Todgha) international remittances are received by as much as 40 percent of all households, for which these transfers constitute over a half of the total income. It is often from these migration belts that the anecdotal evidence on the omnipresence and importance of migration is gathered.

Moreover, migration plays an important role in providing a wider set of opportunities for both Moroccans and Egyptians to accumulate savings and to gain skills that could be useful when returning home. These benefits may well provide additional welfare effects that might not be captured by the short-term impact of migration on household poverty status. Indeed, during the past decade, households with migration experience in Morocco clearly fared better than average. ENCDM 2000/01 has asked respondents about whether their living conditions had improved compared to ten years before the survey, and the answers show an interesting pattern. Overall,

Table 3.7: Regional differences in the impact of remittances in Morocco

Region/province	Remittance Receipt	Poverty rate		
		Current-	Less remittances	Change
Country-wide	11%	15.3%	16.1%	-0.8%
o/w region: Oriental	16%	18.2%	22.2%	-4.0%
o/w province: Jerada	19%	21.9%	28.4%	-6.5%
Nador	19%	15.3%	20.3%	-5.0%
Taourirt	25%	19.7%	31.1%	-11.5%

Source: Sasin 2008, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

according to this subjective measure, there has been a general deterioration in living standards during the decade preceding the survey. Almost a half of the population claimed that their situation had worsened, compared with only 30 percent for whom it had improved. However, households with access to international migration have fared much better than the rest. Migration thus has proven to be an important livelihood strategy in uncertain times.

Impacts on Household Labor Market Decisions

Labor markets are not only affected by the outflow of migrant labor, they may also be affected by changes in labor market decisions of those left behind. Migration decisions are made at the household level, and both labor outflows and the receipt of remittances can lead to reallocation of the labor supplied by remaining household workers.

Remittances are expected, other things being equal, to exert a negative influence on the labor supply of the remittance-receiving households, insofar as it increases the reservation wage. In this way, remittances can have negative impact on output and productivity. Much of the recent research on remittances has found that migration and remittances tend to reduce household labor supply, as non-migrant household members substitute increased income for more leisure, but there are various ways in which remittances (and migration) influence labor market decisions by family members left behind.

There are two main reasons why changes can occur in the participation in the labor supply of individuals living in households that receive remittances. First, remittances constitute a new flow of non-labor income that may lift budget constraints and, therefore, raise reservation wages. Second, remittances may signal the absence of a household member (the migrant). His/her absence generally entails forgone income, and there may furthermore be significant migration-related expenses. These two income flows—remittances versus lost income—have expected opposite effects on labor force participation of non-migrant relatives.

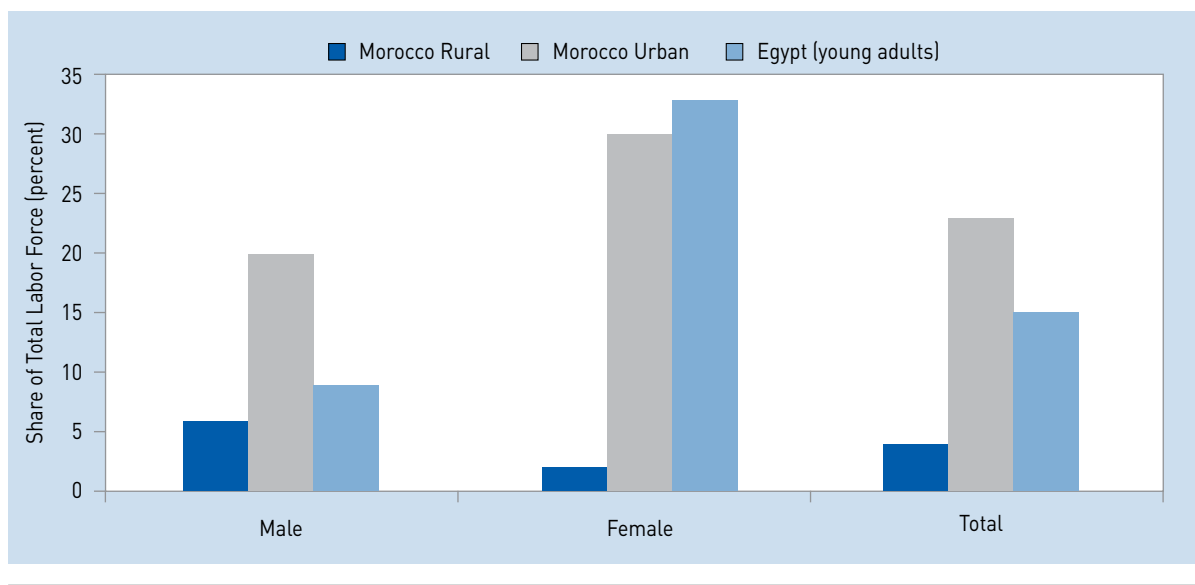
But the changes in labor supply flow through more nuanced channels as well. Remittances may contribute to increased entrepreneurship as they may alleviate credit constraints that block investment. These may lead to more investment by households in their own businesses and increasing engagement in self-employment activities. A related issue is whether this will be accompanied by a reallocation of labor supply from other forms of employment. In order to satisfy operational needs of the new businesses or the need for absorption of the absentee member's role, some household members may move from formal employment to self-employment. Empirically, this is often the case for females, as women leave formal sector employment to work either in the informal or the unpaid family sector. But this may also occur for non-migrant men.

Some descriptive statistics of labor supply and employment among migrant and non-migrant families

Before analyzing how remittances have impacted labor supply decisions in North Africa, it is useful to provide a picture in both countries of the labor conditions that spark these household decisions. As with the poverty section, the analysis on remittance-receiving households relies on the two household surveys from the region in which such analysis is possible: for Egypt, the Egypt Labor Market Panel of 2006 (ELMS 06), with the analysis focused on young men and women age 16–34 who had left school by the time of the survey in 2006/06. As Egypt's population is very young, with a median age of 23, these youth make up a relatively high share of 46 percent of the total workforce. In the case of Morocco, the data comes from the 2000/01 ENCDM, with the analysis focused on men and women aged 15 to 64.

The survey data confirms the high levels of unemployment that have beleaguered the North African (and broader MENA) region for two decades (Figure 3.4). Morocco's unemployment, while almost non-existent in rural areas, averaged some 23 percent of the labor force in urban areas in 2001. Egypt's unemployment is also high for young workers (15–34), averaging 15 percent of the young labor force in 2006. As is the case

Figure 3.4: Unemployment in Morocco (2001) and Egypt (2006)



Source: Author's calculations from Binzel and Assaad (2009) and Silva (2008), outputs of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

throughout the region, female unemployment exceeds male unemployment by large margins.

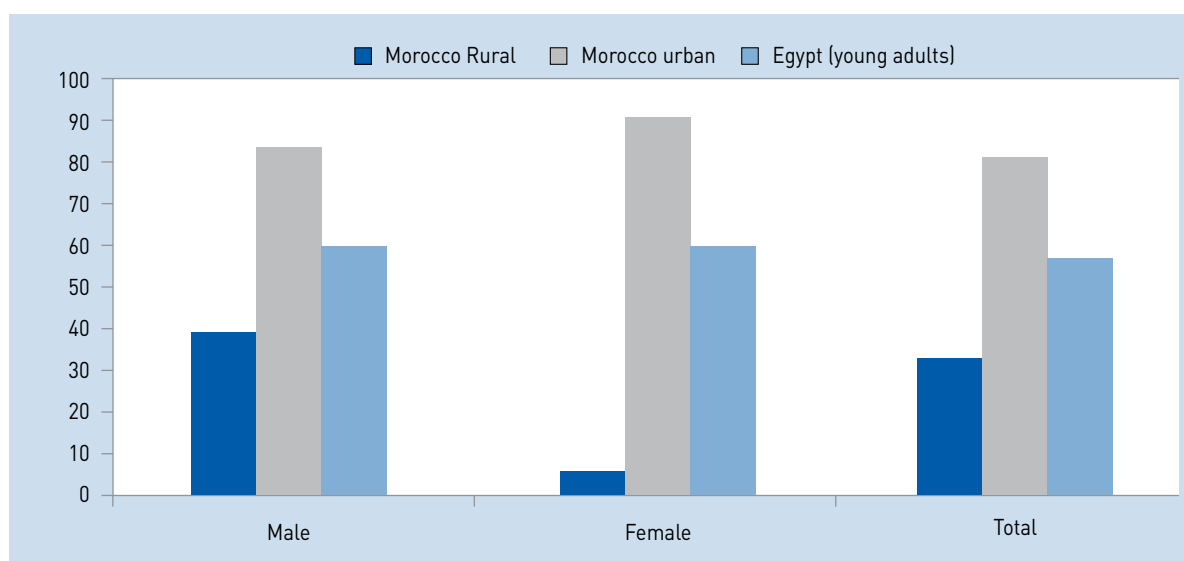
The survey data also confirms a recognized characteristic of low labor force participation among women in the region. While overall labor force participation averages about 60 percent of the working age (in the case of Egypt, young working age) population, female labor force participation is significantly lower than male. In the case of Morocco, male rates of participation are about double those of females, while in the case of Egypt, male rates of participation are nearly triple those of like-age females, with only 31 percent of young women participating in some aspect of the work force (paid or unpaid).

For both men and women, higher education is associated with worsening unemployment, but the situation is considerably more severe for women. As Table 3.8 shows, in Morocco, almost a quarter of women with higher education in Morocco are unemployed (relative to only 11 percent unemployment for those with primary schooling). Prior results from Egypt lead to similar findings,³⁷ although in Egypt the greatest concentration of unemployment occurs for those with intermediate (secondary education),

with the problem of unemployment particularly acute for females. This reflects the tendency of educated women in Egypt to work for the government / in the public sector (Assaad 2007), since it is associated with short working hours, social security, and other benefits that allow women to combine market work with domestic work including child care. Yet, job opportunities in the public sector have decreased over the last decade without an increase in similar jobs in the private sector, which has left many young and educated women unemployed (Assaad 2007).

Education also has a strong influence over the labor market choices. As Table 3.8 shows, self-employment in Morocco is significantly more likely for lower levels of education, both for men and women, suggesting that the self-employment sector consists more heavily of 'coping' activities (trade and services which don't require any skills, etc.) than entrepreneurial endeavors. It is likely that most farm work is classified under self-employment as well, as the probability of self-employment is significantly more likely in

³⁷ For example, see Galal 2002. ECES WP67: The Paradox of Unemployment and Education in Egypt.

Figure 3.5: Labor force participation rates in Morocco and Egypt by Gender, 2000 (Morocco) and 2006 (Egypt)

Sources: Silva 2009 (Morocco); Binzel and Assaad, 2009 (Egypt), outputs of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

rural areas (Table 3.9). The share of women engaged in unpaid work decreases considerably with the level of education, while the share of women engaged in wage work increases, consistent with the increased earning potential with higher levels of schooling.

Finally, in both countries, there are strong gender differences with regard to the allocation of workers across activities, with women working in predominantly unpaid subsistence activities and men working predominantly in wage or self-employed activities (Figure 3.6).

Table 3.8: Employment status of Moroccan labor force age population, by education

		Inactive	Wage earner	Self-employed	Unpaid work	Unemployed
F	None	60%	7%	9%	22%	2%
	Primary	64%	13%	6%	6%	11%
	Secondary	62%	20%	4%	1%	14%
	Tertiary	46%	27%	4%	0%	23%
	All ages	61%	10%	7%	15%	6%
M	None	9%	34%	40%	14%	4%
	Primary	16%	36%	20%	12%	15%
	Secondary	36%	32%	12%	5%	15%
	Tertiary	27%	42%	10%	3%	17%
	All ages	17%	35%	26%	11%	12%
MF		40%	22%	16%	13%	9%

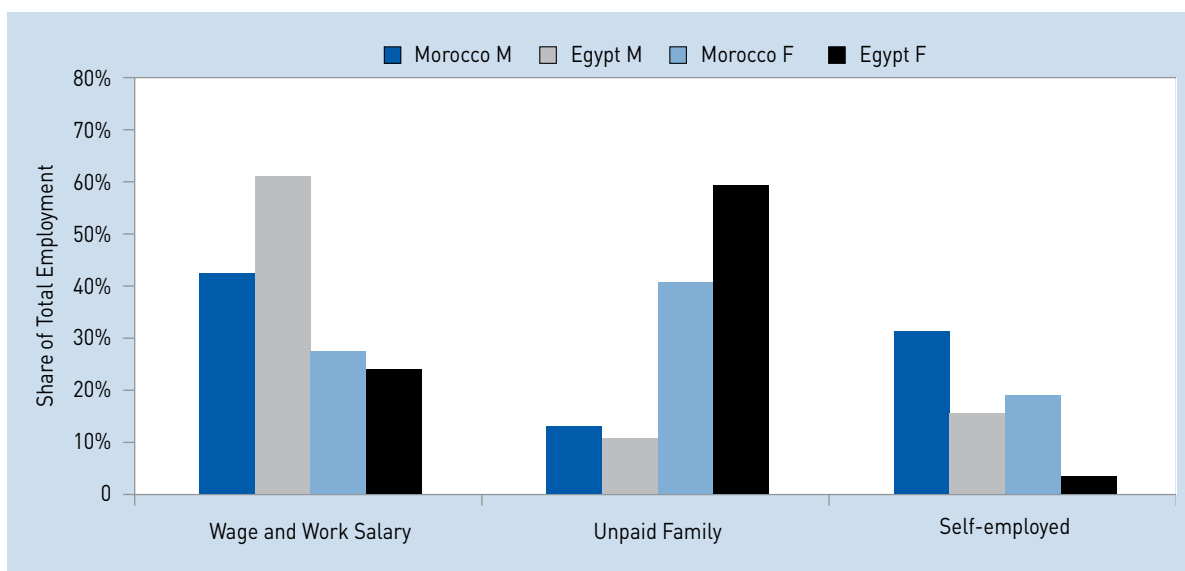
Source: Silva 2009, using 2000/01 ENCDM, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Table 3.9: Employment patterns of Moroccan non-migrants, by location

	Inactive	Wage earner	Self-employed	Unpaid work	Unemployed
R	30%	15%	21%	31%	3%
U	46%	26%	13%	2%	12%
UR	40%	22%	16%	13%	9%

Source: Silva 2009, using 2000/01 ENCDM, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Figure 3.6: Male and female employment by sector, Morocco and Egypt

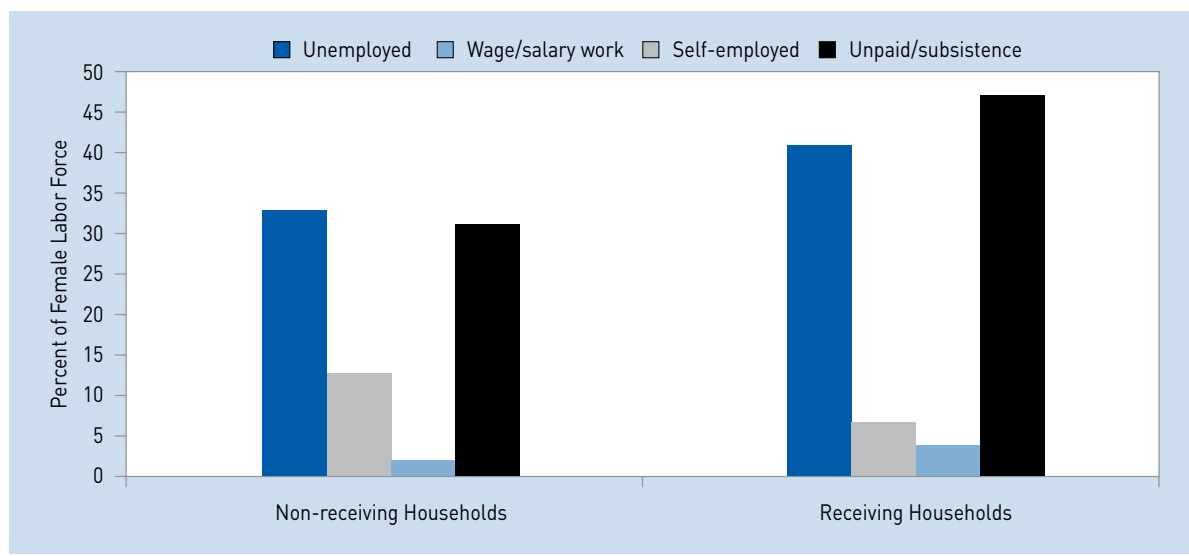


Source: Binzel and Assaad 2009 (using ELMPS 2006); Silva 2009 (Using ENCDM 2001), outputs of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

With regard to migrant versus non-migrant households, detailed summary statistics of male and female labor force participation (differentiated by remittance-receiving households versus non-receiving households; migrant-sending households versus non-sending households) can be found in Appendices 3–4. A few observations emerge from these statistics.

In both Morocco and Egypt, women in remittance-receiving/migrant sending households are less likely to engage in market work. In the case of Egypt, while labor force participation among young females is about 31 percent of the age group (16–34), whether or not the family receives remittances, the type of employment in which young women engage differs strongly for remit-

tance receiving or migrant sending households versus those without migrants abroad or receiving remittances. Women in remittance-receiving households (RRHH) are more likely to engage in subsistence work or unpaid family work, and less likely to hold a salaried job. The results are similar for households with at least one migrant abroad, and suggest that women may be driven out of wage and salary work into other types of work, such as unpaid family work and subsistence work. This might suggest that young women help replace the labor of the migrant. Labor force participation of young women increases slightly, so does, unemployment. For young women who are currently employed, migration and remittances seem to lead to a decrease in the hours worked, especially in wage and salary work (Figure 3.7).

Figure 3.7: Employment of women in Egypt, by household remittance status

Source: Binzel and Assaad 2009, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

The empirical results on labor supply decisions

The empirical analysis of remittance-receiving households in Egypt and Morocco present a mixed picture of how migration and remittances impact labor supply.

In Morocco, remittances are associated with reduced labor supply, for both men and women, in both rural and urban areas, and increased engagement in more informal activities. The magnitude of the labor reduction is small, with remittances reducing the likelihood of labor supply only by about 2.7 percent. The labor market effects are greater for females, a finding consistent with most empirical studies worldwide. In Morocco, women in remittance-receiving households are almost 3 percent more likely to be out of the labor force than women in non-receiving households, with the impact particularly strong for women in rural areas. The magnitude of this labor-effect rises with age for women, with remittances having the strongest impact on labor supply among older women, while for men the labor-effect exhibits a U-shape in relation to age. In particular, the receipt of remittances has the greatest impact on labor force withdrawal

for young men (15–24) and older men (45–64), which may suggest that remittances allow for extended schooling than otherwise (in the case of younger men) and earlier retirement.

Remittances increase the probability of self-employment. Urban females from remittance-receiving households are 6.6 percent more likely to be self-employed than counterparts from non-recipient households, while among rural females receiving remittances is associated with an increase in the propensity for self-employment of 2.3 percent. Males have lower incentive effects compared to females, ranging from 1.9–5.6 percent, depending on the area of residence. In both cases, the increased self-employment occurs along with a reduced probability for working in wage employment. Given the nature of the self-employment sector (predominantly low-skill), this suggests that remittances may be allotted as capital to more informal activities that provide more flexibility.

The receipt of remittances also increases unpaid work and unemployment, although the results differ by gender and location. Remittances increase the probability of being engaged in unpaid work (for women in urban areas and

Table 3.10: Impacts of remittances on informality in Morocco: Multinomial Logit analysis

		Inactive	Wage earner	Self-employed	Unpaid work	Unemployed
Nr Obs.		20,0775	11,223	8,062	8,083	4,439
Share		40%	23%	15%	13%	9%
Urban	Male	0.030*** (0.0005)	-0.057*** (0.0007)	0.010*** (0.0006)	-0.005*** (0.0001)	0.022*** (0.0005)
	Female	0.019*** (0.0005)	-0.032*** (0.0004)	0.014*** (0.0003)	0.001*** (0.0001)	-0.002*** (0.0001)
Rural	Male	0.015*** (0.0005)	-0.093*** (0.0013)	0.057*** (0.0015)	0.008*** (0.0011)	0.013*** (0.0005)
	Female	0.041*** (0.0011)	-0.013*** (0.0002)	0.057*** (0.00149)	-0.003*** (0.0006)	0.0003*** (0.0001)

***Significant at 1 percent level. From Silva, 2009, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

men in rural areas) or in becoming unemployed (for women in rural areas and men in urban areas). In all cases, wage employment is reduced with the receipt of remittances.

In Egypt, overall participation is *positively* impacted by migration and remittances, although for men the impact on participation is not significant. Labor choices are, however, significantly impacted by both the migration changes in household composition, as well as by the receipt of remittances. Young women react to changes in the household composition brought about by migration and help replace the labor of the migrant in the family enterprise and in subsistence work. Although it is possible that the increase in unpaid market work for women is due to an expansion of family enterprise activity due to the savings made possible by migration, it would be reasonable to expect, in that case, to observe an increase in male unpaid labor as well, which is not the case.

In terms of hours worked, migration and remittances create a situation where young women shift leisure time to unpaid family work. Since time spent on domestic work, including childcare, is not reduced, it suggests that young women's total work burden significantly increases in migrant and remittance-receiving households provided that they work unpaid for the family. There is no significant increase in domestic work, which is evidence against intra-household

specialization following migration and/or remittances. Similarly, time allocated to subsistence work increases for women living in a migrant household while remittance income does not play any significant role. If, however, a young woman in a migrant household works for a wage, she is able to reduce her weekly workload. More specifically, how many hours leisure she can substitute for market work positively depends on the value of remittances received per month. For every 100 LE received, a young woman works 6 hours per week less in the market. Whereas young women who work unpaid for the family significantly increase the number of hours worked per week, young men significantly and very strongly reduce their unpaid family work in response to having an international migrant in the household and/or to receiving remittances. Similar to their female counterparts, however, they generally work less in wage and salary work; although the impact on men's time allocation appears to be stronger than on women's time allocation.

The fact that women replace the labor of the migrant without experiencing a reduction in other chores, such as domestic work, suggests that those who leave Egypt and work abroad have been underemployed beforehand. Job opportunities especially for (male) youth on the Egyptian labor market are very limited (Assaad 2007). Hence, the fact that they work in the family business may be less a free choice and more a result of not finding a (better) job on the

Table 3.11: The association between receiving remittances/having a migrant and the probability of participating in labor markets and self-employment

	El Salvador				Nicaragua		Mexico		Morocco		Egypt	
	Rural		Urban		Males	Female	Males	Females	Males	Females	Males	Females
	Male	Female	Males	Female								
Labor force participation	-4.6%	-9.9%	-5.7%	-10.7%	-2.4%	-10.4%	-11%	-2%	-2.2%	-3.1%	2.0%	3.6%
Self-employment	0.3%	-3.3%	10.0%	-0.4%	4.3%	2.90%			3.8%	4.01%	29%	5.1%

Sources: Silva 2009; Binzel and Assaad 2009, outputs of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

market. And as men are required to contribute to the household income, they are likely to end up working in a family enterprise rather than becoming unemployed. The increase in young women's labor force participation in response to migration, which is mainly driven by the increase in unpaid family work, also suggests that young women would take up a job provided that working conditions are perceived as appropriate. Women in the Middle East and North Africa region face many restrictions when it comes to labor market participation, for instance, job mobility, commuting time and means, work time, and the type of job (World Bank 2004). Moreover, it is usually important for women that their job still gives them enough time to fulfill their domestic chores. As a result of these restrictions, women's labor force participation is very low in the region, limiting the region's economic development. In Egypt, for instance, labor force participation only reached 26.9 percent in 2006 (Assaad 2007). Hence, policies that help improve working conditions and public transportation and that help narrow the wage gap between men and women will enable and encourage women to take up a job and perhaps remain employed even after marriage. At the household level, migration (through potential temporary female headship) may also help women to gain bargaining power, which has proven to have a positive effect on household expenditures as women tend to spend more on schooling and health (Quisumbing and Maluccio 2000, Thomas 1997).

Remittances do not appear, overall, to significantly reduce labor supply in either Morocco or

Egypt. In the case of Egypt, the results suggest a positive impact from remittances on labor supply, although most of the increase is the result of females moving into unpaid family labor; while in Morocco, the negative labor effects are on the order of 2–4 percent. Similar studies of the labor market impacts in El Salvador, Nicaragua and Mexico found remittances reduced the probability of employment by as much as 11 percent, with an average labor supply effect of 7 percent. The relationship between remittances and self-employment is also generally positive, as in Morocco and Egypt.

Impacts on Decisions Affecting Children

Unlike foreign aid, most international remittances go directly to households in developing countries. For this reason, one of the most important channels for remittances' impacts on development is at the level of household. From the standpoint of economic development, the basic question is: How do these households spend their remittance earnings? Do households spend their remittances on newly desired consumer goods for the family, or do they channel them into human and physical investments?

There are at least three views on how households spend or use their remittances and the impact of these monies on economic development. The first, and probably most widespread view within the literature is that remittances are fungible and are spent at the margin like income from any other source. In other words, a household

treats a dollar of remittance income just like a dollar of wage income, and the contribution of remittances to development is the same as that from any other source of income. The second view takes a more pessimistic position, arguing that the receipt of remittances can cause behavioral changes at the household level that may lower their development impact relative to the receipt of income from other sources. For example, a recent review of the literature by Chami, Fullenkamp, and Jahjah (2003:10–11) reports that: (a) a “significant proportion, and often the majority,” of remittances are spent on “status-oriented” consumption; and (b) the ways in which remittances are typically invested—in housing, land and jewelry—are “not necessarily productive” to the economy as a whole.

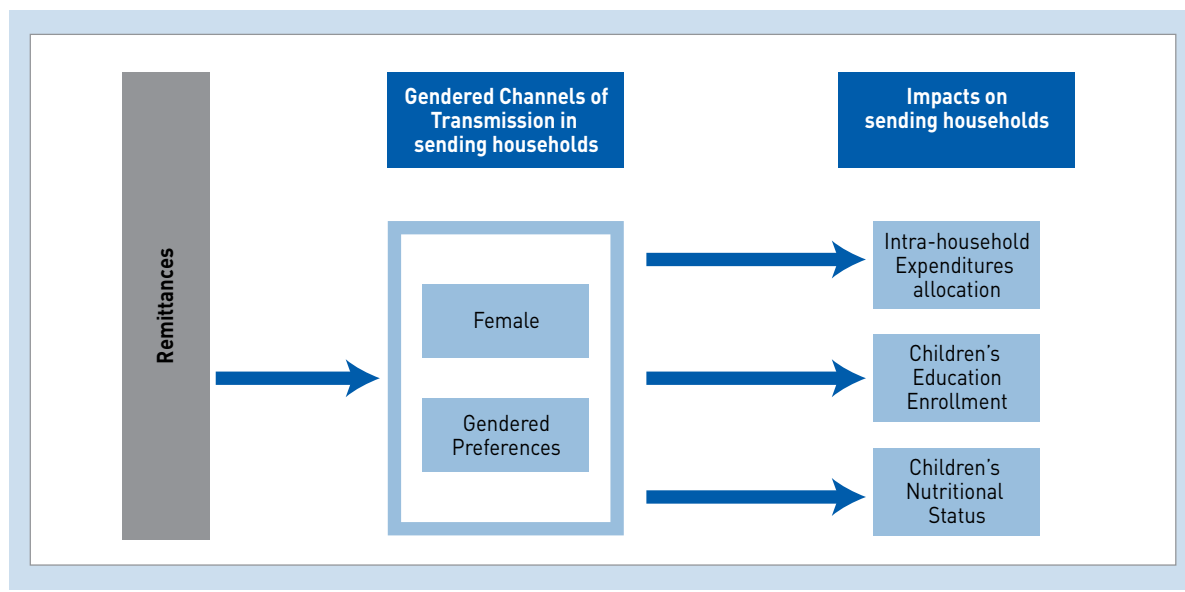
But a third, and more recent, view of remittances is more positive, arguing that remittances can actually *increase* investments in human and physical capital. One way remittances can result in increased human capital investments is because migration and remittances are not gender-neutral. Female headship is significantly more common among remittance-receiving households in North Africa. Partly because migration often results in

female household headship, household decisions on how remittances are allocated may be affected, which may have significant implications over the long term. As a result, remittances may facilitate human capital formation, contributing to higher long-term growth. Indeed, when worldwide data are examined, children in remittance-receiving households have a lower school dropout ratio.³⁸

Decisions about how to spend the money from remittances, who will benefit from the money, and the short and long term effects that remittances might have on family structure are not gender neutral (Ramirez et al. 2005). In particular, the decision over how remittances are allocated in the household budget will be determined by: i) migrants and their spouses’ allocation preferences, which are directly related to the individual’s sex and gender preferences; and ii) the bargaining power between the migrant and their spouses over the household decision-making process, in particular, the budget control (Figure 3.8).

³⁸ Ratha and Mohapatra, *Increasing the Macroeconomic Impact of Remittances on Development*, p. 4.

Figure 3.8: Conceptual framework for gendered preferences over remittances



Source: Herrera, Dudwick, and Murrugarra, 2008, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

But the effect of migration and remittances on schooling is known to be ambiguous, particularly as children supplement for missing labor in the migration process. Remittances can relax budget constraints that would otherwise limit spending on schooling particularly for girls and older children, but the absence of a parent may have a damaging effect on the family that ultimately negatively impacts school enrollment. Migration may also positively affect schooling through its effect on the returns to education: if there is a large migration prospect for unskilled labor, returns to education become lower thereby potentially reducing school attainment. Alternatively, if there is a large migration prospect for highly skilled labor, school attainment may be affected positively (the central argument of the potential for skilled migration to lead to “brain gain”).

Similarly, the final direction of the relationship between migration and child work is not clear. The income effect from remittances can reduce the need for the income generated from child work. Income from remittances can also raise the reservation wage of left-behind household members including children and possibly reduce their labor supply. In contrast, the need for children to work in a family business may increase in order to replace absent migrant household member(s). Migration can generate remittance money that can be used to start a family business or buy a farm, which may result in a need for household members, including children, to work. If children are not needed to do market work themselves, they may be needed to do more household chores to replace migrant adults or adults that work on the family business as a result of migration.

In addition to the mechanisms above, migration can affect child work through wages. If migration is occurring at a large-scale, this may increase wages due to the reduction in labor supply because of out-migration, thereby making child work more rewarding. Based on the above discussion, the effect of migration and remittances on children’s schooling is country-specific (or even province-specific) and can vary according to each country’s peculiarities.

The evidence from North Africa again relies on the household surveys for Morocco and Egypt, the only countries with a nationally representative sample including migration information. As part of this migration research program, both survey data were explored for the relationship between migration/remittances and decisions on child investment. In Egypt, the analysis focused on the impacts of migration and remittances on school attendance and child work.³⁹ In Morocco, on the other hand, the analysis focused on the correlation between remittances and household spending on health and education.⁴⁰

The empirical results on investments in children

In both countries, migration and remittances lead to positive improvements with regard to investments in children. In the case of Egypt, migration and remittances significantly reduce the probability of child work for boys in the 6–14 age range. Migration results in a moderate increase in domestic work for boys age 15–17, however, which may indicate that boys are substituting for their father or absent migrant household workers in domestic chores. Based on these results, the remittance income effect appears to be dominant for market work for young boys, while the substitution effect is dominant for older boys with regard to domestic work.

For girls, the results are less robust, but when looking at work inclusive of all types, remittances exert a negative impact on long-duration work, which appears to stem from a reduction in domestic work. Households using remittance money to purchase timesaving devices may facilitate this impact.

With regard to schooling, the findings for boys suggest that remittances have a substantial effect on school attendance for the university-aged. This makes sense given that pre-university education

³⁹ Elbadawy and Assaad 2009, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

⁴⁰ Herrera, Dudwick, and Murrugarra 2008, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

for boys is becoming a necessity in Egypt and hence is less income elastic compared to university education. As for girls' schooling, there is a positive impact on school attendance (ever-enrolling) and some positive effect on conditional attendance for girls 15–17, and a mild effect on school attendance of university-aged girls. The impacts of remittances/migration on tutoring, which is nearly a necessity in Egypt in preparation for higher education, were insignificant.

In Morocco, remittances trigger a more equal intra-household allocation for education and food between boys and girls, closing the existing gender gap in rural areas. The econometric results for the food share expenses in rural areas indicate that boys' demographic share have an increased allocation of food while the girls' do not. However, in presence of remittances this effect in favor of boys is offset, closing the gender gap for food allocation. Since female headship affects the food share among remittance-receiving households in rural areas, these results could suggest that women lead a more even distribution of remittances on food expenses between girls and boys, not revealing gender preferences. Therefore, women attempt to deal with the inequality in al-

location resources induced by male heads, which is documented in MOP (2005) "*Fathers prefer to give education and money to sons over daughters because the first ones will have a higher return, girls will marry at any point.*"

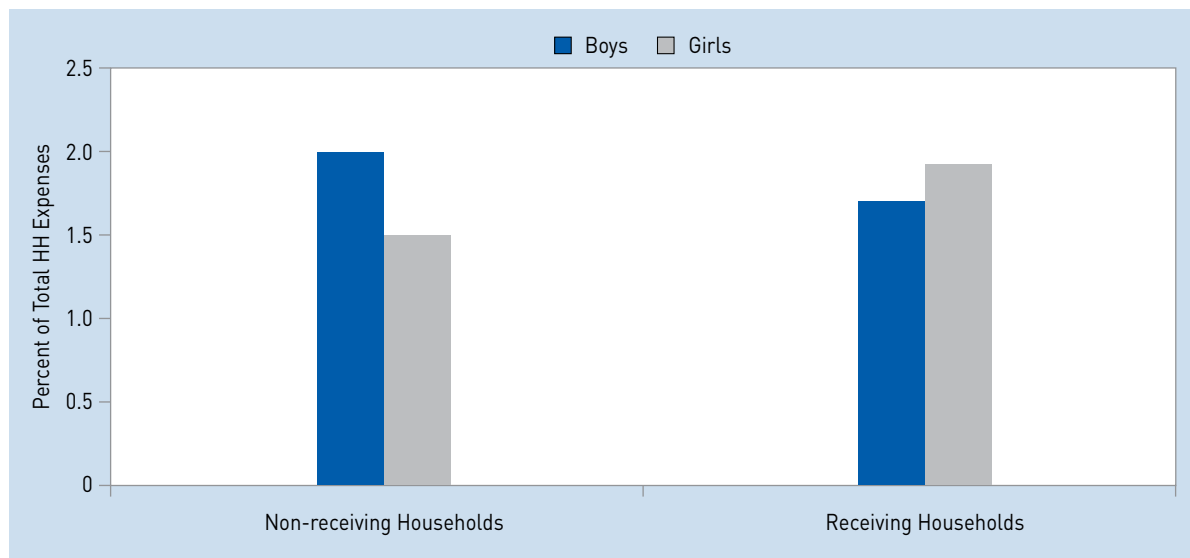
Similar evidence is found for the education share. Among non remittance-receiving households, the boys' demographic share of education household expenses is larger than girls, resulting in a gender gap for this allocation; however, this difference is smaller among receiving households. These findings indicate that remittances offset the gender bias in allocation of education and food expenses, triggering gender parity in children's human capital accumulation in rural areas where girls are more marginalized.⁴¹

The Potential Effects of High-skilled Migration from North Africa

High-skilled migration is often referred to as the greatest 'cost' of migration. High-skilled

⁴¹ Sadiqui (2004) shows that women in rural areas have been disadvantaged of the urban modernization, for instance, their education and health access has traditionally been limited.

Figure 3.9: Impact of Girls and Boys' Demographic Share on Education



Source: Herrera, Dudwick, and Murrugarra 2008, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

emigration can pose significant costs to sending countries. Skilled emigration can increase the welfare of the individual, but for the society, skilled emigration carries the risk of lowering growth prospects if it lowers the average level of human capital in sending countries, thus draining them of capacity. The new growth literature provides ample evidence of the role of human capital in, all other things being equal, fostering higher steady state economic growth (e.g., Lucas 1988, Azariadis and Drazen 1990, Romer 1990, de la Fuente and Ciccone 2003). The loss of high-skilled labor is not only the loss of productive capacity by the workers themselves. Human capital can generate positive externalities through innovation and adoption of technology, result in higher fiscal revenues, and prompt better governance—benefits that are lost if the educated persons leave. Shortages of skilled health personnel, teachers, engineers and more generally “institution builders” in developing countries can have impact beyond the migrants’ personal contributions to output, contributing to major bottlenecks in progress toward economic and social development. The loss of educated females in the home country may be associated with declines in child and maternal health.

But high-skilled emigration can also bring important benefits. Experience shows that skilled emigration may also involve positive externalities, quite separate from remittances. Emigration prospects could lead to a *brain gain*: if the foreign skill price is higher than the domestic skill price, a higher emigration rate will raise the return to human capital investment and increase the level of investment. For a strong enough induced investment effect, it is possible that a higher emigration rate will actually raise the steady-state domestic human capital stock, if not all of the educationally-enhanced people end up leaving the country. Kapur and McHale argue that while brain drain may signify a flight from weak institutions by those who have the possibility to leave, the ones who were perhaps best able to change those institutions are also likely to be the first to leave, perpetuating the flows. Moreover, and as will be discussed more at the end of this chapter, high-skilled emigration can enhance growth in later stages of migration through a well-

developed Diaspora which is plugged into both the receiving and sending country economies, spurring the diffusion of know-how, encouraging innovation and growth, or strengthening cross-border business networks. Both skilled and low-skilled migration could also result in a transfer of norms and values (e.g., importance of education, lower fertility) that have a positive impact on growth over time.

As important, the cost of skilled migration needs also to be measured against whether the counterfactual holds: whether lack of skills is the binding constraint to economic development, and whether the human capital produced is productively employed in the home country. If and when educated persons end up unemployed, inactive, or are not utilized effectively in production (either because the education system does not produce the skills needed for the economy, or because productive workers are not allocated efficiently to production), the foregone investments in education will have already been lost before migration even took place. The opportunity cost of migration would then be much lower. The cost of high-skilled migration, then, depends very much on the country’s incentive framework, which determines their productive employment at home.

The impacts of skilled migration will differ from country to country—depending on how effectively education creates productive skills, and how skills are effectively utilized in production. However, evaluating those costs is not possible given the current data. Accurately analyzing even the lost labor contributions of high-skilled emigrants would require information on the migrant prior to migration, including employment and wages, or output (which would allow for estimates of the individual projected earnings lost or projected output lost).

It is possible to provide descriptive evidence of some of the costs. On the one hand, public education absorbs considerable resources in the MENA region, and MENA countries also spend comparatively more on tertiary and secondary education than on primary education. In absolute and PPP (purchasing power parity) adjusted

Table 3.12: Public education spending is comparatively high in MENA

	1995–2003		2000 or closest Ratio of spending		2002
	Education/ GDP, %	Primary/ Secondary	Tertiary/ Secondary	Tertiary/ Primary	Tertiary spending/student PPP constant U.S.\$
Algeria	6.1	1.52			
Egypt, Arab Rep. of	5.6				
Morocco	5.9	2.56	1.88	4.81	3442
Tunisia	6.8	1.53	2.66	4.07	4065
MENA Total	5.3	1.46	2.48	3.97	4222
Asia	3.6	1.27	2.20	2.79	2606
LAC	3.9	1.15	2.15	2.47	2172

Source: Estimates based on World Bank, 2008. Asian comparators: Republic of Korea, Indonesia, Malaysia, Thailand, Philippine, China; LAC comparators: Argentina, Brazil, Chile, Mexico, Peru.

terms, spending on tertiary education in Morocco and Tunisia is thirty and fifty five percent higher than in Asian countries. Importantly, education spending is high in some countries with high levels of higher skilled emigration: Algeria, Morocco and Tunisia all spend above the regional average. In Morocco and Tunisia, tertiary level spending is especially high in absolute and relative terms. These investments are thus lost as students go abroad to work.

Moreover, MENA countries generally are not fast-growing, dynamic, or knowledge-based economies, suggesting that there is a problem in human capital formation. Economic growth has been modest over the past four decades at 4 percent, compared to 8 percent for East Asia; high technology exports make up only 4 percent of manufactured exports compared to 31 percent in East Asia, and KBE indicators like patents or scientific articles by residents are several times higher in East Asia.⁴²

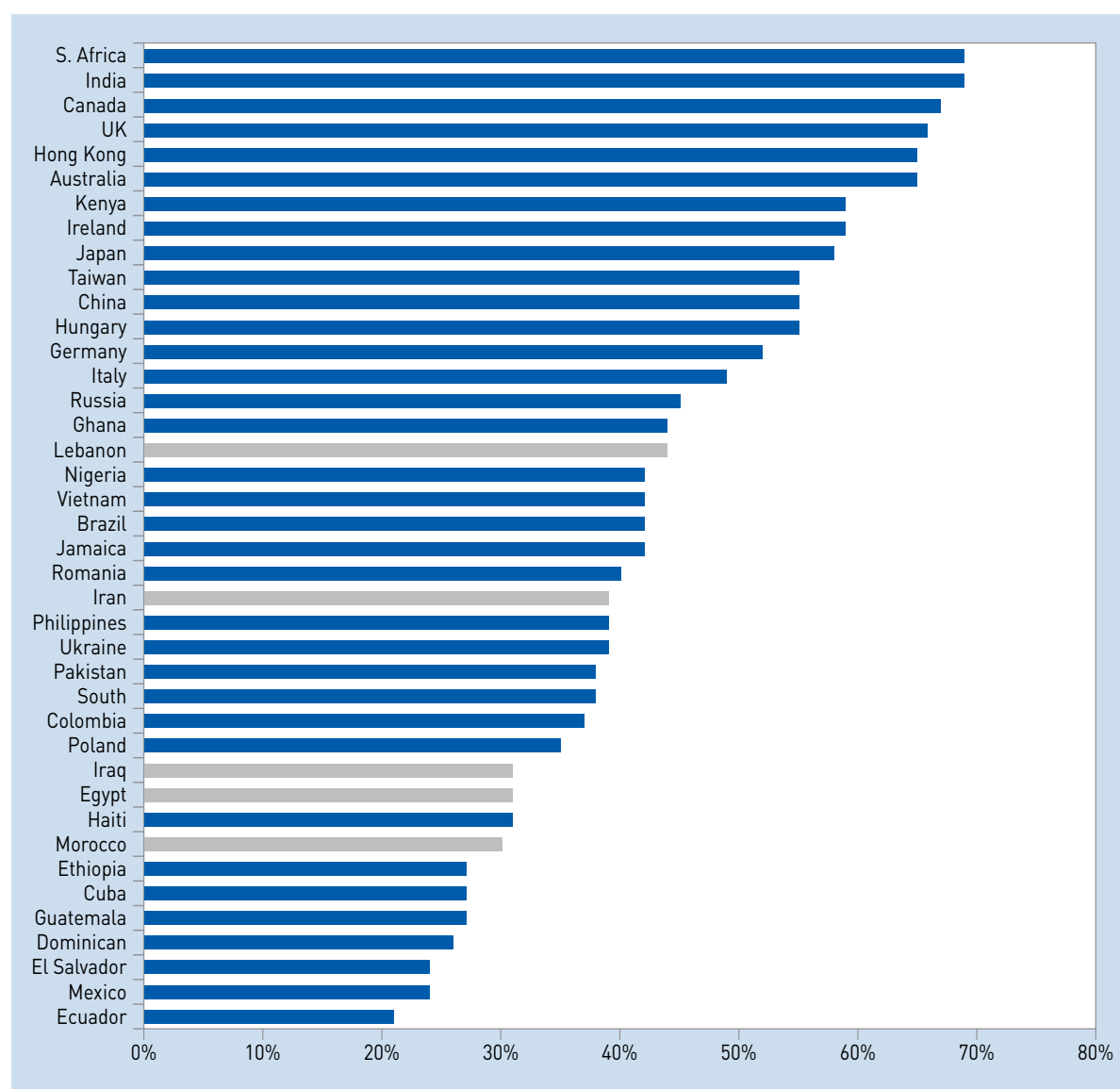
Finally, skilled migrants do not always end up in skilled jobs abroad. Skilled emigrants, tapping into host country knowledge, can help transfer such knowledge back home, upgrade their own skills, and get a higher private return on their investment in education than they would have in the home country, part of which is sent home as remittances. However, some highly educated migrants do end up in low-skilled occupations.

Such “brain waste” will have incurred the same education cost as skilled emigration (lost public investment, lost social returns to human capital)—but carries less of the potential benefits (networking, knowledge generation, high private returns to education, and remittances). For example, Mattoo, Neagu, and Ozden (2008), found that after controlling for age, experience in the U.S., and education level, highly skilled immigrants from certain Middle East and North African countries were less likely to work in skilled occupations. A large proportion of the variation can be explained by the country of origin characteristics that affect the quality of human capital of the immigrants such as investment in tertiary education and the use of English in instruction. Another study (Batalova et al. 2008) finds that brain waste generally diminished over time, and that whether they recuperate their occupational status, and how fast, depends on factors like language skills.

A numerical partial equilibrium simulation exercise combines potential positive and negative *theoretical* effects of increasing skilled emigration rates significantly (for MENA sending countries), highlighting the links between technology transfer, human capital formation, and growth. The simulation contrasts a worst-case

⁴² World Development Indicators 2009.

Figure 3.10: Probability that a foreign-educated bachelor degree holder enters a skilled occupation (2000 census)



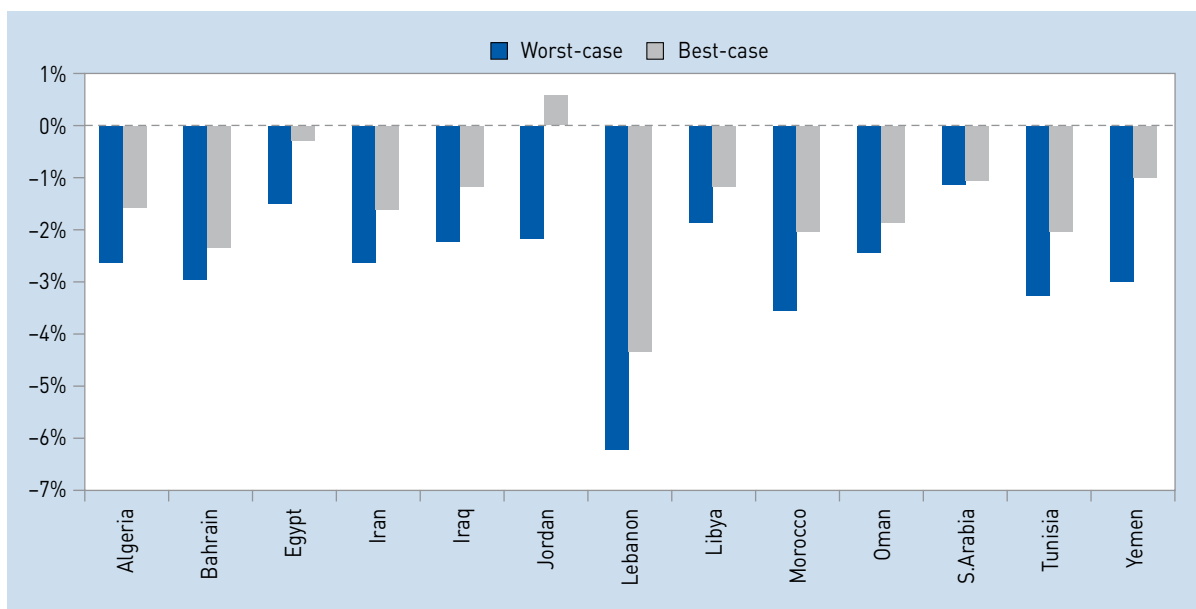
Source: Mattoo, Neagu and Ozden 2008

scenario and a best-case scenario. The worst case scenario is one in which highly skilled migrants do not remit, a large diaspora does not improve institutional quality at home or attractiveness for investors, and skilled emigration prospects do not favor human capital formation. In the best-case scenario highly skilled migrants remit the same fraction of their income as the low-skilled and there are important positive externalities in terms of human capital building at home,

improved institutional quality, and a lower risk premium for foreign investors.

The simulations suggest that an increase in skilled emigration rates might affect income per capita negatively in MENA countries, especially for countries with already high emigration rates (around ten percent). Even considering such positive effects as brain gain, high remittances, and positive feedback effects on technology and

Figure 3.11: Change in income per capita: worst-case and best-case scenarios.



Source: World Bank 2009 *High-skilled Migration in the Middle East and North Africa: Trends, Impacts and Policy Implications*, an output of the EC-Funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

institutional quality from the Diaspora, the cost is high, especially for countries like the North African countries where skilled emigration rates are high. These results are in line with Docquier and Marchiori (2009).

Conditions that suggest a lower true cost of high-skilled migration

However, the above relatively pessimistic view of skilled emigration as a “brain drain” hinges on crucial assumptions: that skills can be effectively produced and used at home and that skills shortages are a binding constraint to economic growth. This assumption may need to be qualified in the case of North African countries. Table 3.14 outlines many of the conditions that influence the ultimate impact of skilled migration on sending economies. From the table, there are at least a few conditions evident in North African labor markets which would suggest that at the actual lost output—the opportunity cost—from skilled migration is lower than might appear at first glance.

To begin with, North African countries clearly suffer from a form of “brain waste” already in

their own economies. Very high unemployment for the young and educated—a typical migrant, hence—is a feature of North Africa’s (and the broader MENA region’s) labor markets. For example, in Morocco, one in four university graduates active in the labor market is unemployed; in Algeria, one in five, and in Egypt, one in six. Unemployment rates of graduate women are also higher than those of men—twice and three times in Algeria and Egypt, respectively. In Egypt, as seen below, while those with at least secondary education make up only 42 percent of the labor force, they account for 80 percent of the unemployed. In Algeria, only about 20 percent of the labor force has completed secondary education or more, but they account for almost twice that proportion of the unemployed, and the same is true for Morocco. (Figure 3.12).

The skills composition of emigration has tended to mirror the unemployment situation in domestic labor markets. Figure 3.13 shows the composition of both domestic unemployment and migration by skill level. The composition of unemployment reflects more recent data (generally, 2005), while the composition of emigration

Table 3.14: Conditions that influence the impact of skilled emigration on sending countries

Conditions which heighten costs of skilled emigration	Conditions with lower costs of skilled emigration
Education costs	
<ul style="list-style-type: none"> If migration prospects encourage human capital formation at home (public education) 	<ul style="list-style-type: none"> If migration prospects encourage human capital formation abroad Private education
Human capital	
<ul style="list-style-type: none"> If skilled emigration reduces the supply or proportion of skilled labor If skilled emigration induces occupational shortages in strategic sectors 	<ul style="list-style-type: none"> If skilled emigration increases human capital formation, and a part of that increase remains at home (brain gain)
Economic effects	
<ul style="list-style-type: none"> If skilled workers tend to remit less 	<ul style="list-style-type: none"> Skilled emigration induces a large amount of remittances Skilled migration generates Diaspora or network externalities (trade, FDI, technology adoption) Tourism revenues
Transfer of norms	
<ul style="list-style-type: none"> If the integration of the world labor market induces wage pressure at origin 	<ul style="list-style-type: none"> If emigration improves institutions at origin through diffusion of values If migrants transfer other norms e.g., fertility, the importance of health and education investments, etc.
Employment opportunities at home	
<ul style="list-style-type: none"> Migrants would have been productively employed at home and contribute to growth and well being ("brain drain") 	<ul style="list-style-type: none"> High unemployment and inefficient high-skilled labor allocation in sending country ("brain in the drain") Accompanying institutions lacking (e.g., in health sector): binding constraint to growth not emigrating labor
Employment opportunities abroad	
<ul style="list-style-type: none"> Skilled emigrants not productively employed in receiving country ("brain waste") 	<ul style="list-style-type: none"> Skilled emigrants productively employed in receiving countries (high private returns to education)

Source: World Bank 2009. *High-skilled Migration in the Middle East and North Africa: Trends, Impacts and Policy Implications*, an output of the EC-Funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

reflects 2000, the latest year for which data is available. In Egypt, emigration tilts heavily toward medium and higher skilled migration (more than two thirds of migrants have more than secondary education), which parallels significant stocks of unemployed from that education pool. In Morocco, as well, the composition is largely reflective of the unemployment situation at home.

Returned migrants' surveys in Morocco, Tunisia, and Algeria, analyzed for the purpose of this migration research program⁴³ provide further suggestive evidence that some portion of the migration pool may come from the ranks of unemployed. In Table 3.15, the employment status prior to migration for a sample of re-

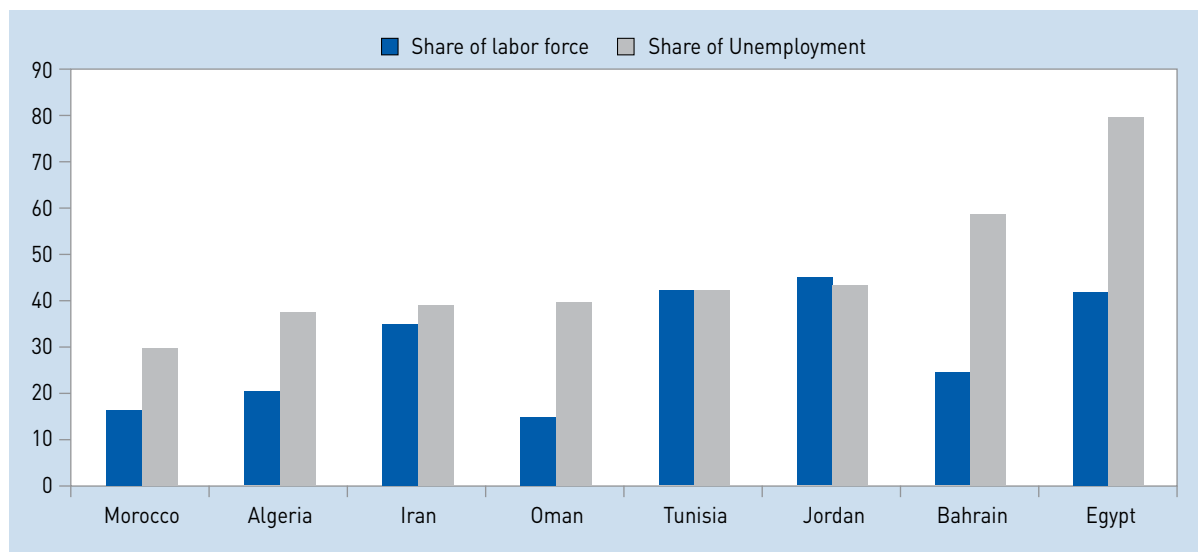
turned migrants to the Maghreb is highlighted. From those surveys, between 10–17 percent of returned migrants were unemployed at the time of migration. Moreover, the data suggest that a large proportion of returned migrants were previously working in categories for which they may have been relatively under-employed (including seasonal and family work), which would also tend to suggest a lower economic contribution.

Not only are unemployment rates high, there is considerable information to show that

⁴³ Gubert and Nordman 2008a and 2008b, outputs of the EC-Funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

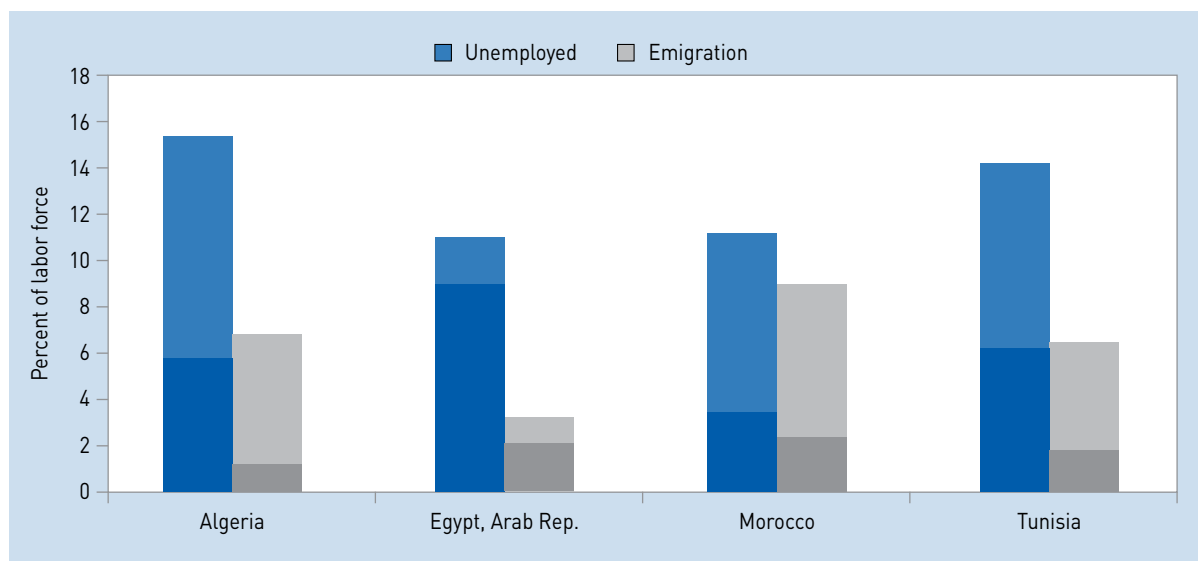
educated workers are not fully deployed to their most productive uses. MENA's private rates of return to higher education have been estimated in a number of country studies, and they indicate

Figure 3.12: MENA laborers with secondary and tertiary education, as share of labor force and unemployed



Source: World Bank 2009 *High-skilled Migration in the Middle East and North Africa: Trends, Impacts and Policy Implications*, an output of the EC-Funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

Figure 3.13: Unemployment and migration from North Africa, 2000



Source: World Bank 2009a (emigration rates; skilled emigration rates); World Bank 2008 (unemployment rates of secondary educated workers); World Bank 2007 (unemployment rates).

Note: Darker segment of bars reflect unemployed or migrants with secondary education of higher.

Table 3.15: Employment Status of Returned Migrants from the Maghreb, prior to Migration

Employment status prior to migration	Percent of total respondents			
	Algeria	Tunisia	Morocco	Total
Waged	37.5	36.6	19.0	31.3
Employer	1.8	1.2	0.7	1.3
Self-employed	15.1	14.6	15.1	14.9
Seasonal worker	12.4	15.8	9.8	12.7
Family worker	2.1	3.4	5.6	3.7
Unemployed	17.2	9.9	9.8	12.4
Retired	0.3	0.0	0.3	0.2
Student	10.3	12.7	28.9	17.0
Inactive	3.3	4.3	1.0	2.9
Other	0.0	1.2	9.8	3.5

Source: Gubert and Nordman 2008b, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies. Total reflects unweighted average of countries.

poor private and social returns to higher schooling, relative to comparator countries worldwide.⁴⁴ Total Factor Productivity (TFP) estimates for the region also suggest that North Africa and the broader MENA region suffer from persistently low productivity. While TFP is a measure of productivity across all factors of production (not just laborers, and not just educated workers) the degree to which MENA's productivity falls short of other regions suggests systemic problems with the use of human capital in production.

Table 3.16 presents TFP growth estimates for the North Africa (and MENA) region from 1970–2005 (along with the growth of other factors of production), compared with the productivity growth experienced in other regions. The methodology behind TFP estimates can be found in Appendix 1. Although North Africa's productivity improved significantly over the early 2000s, it remains below that of all other regions but Latin America, suggesting a lower overall economic contribution of educated workers from the region.

Much empirical research has been devoted to better explaining the poor returns to education in MENA and North Africa (both privately and economy-wide). One important factor underlying the poor outcomes is the fact that the quantity, quality, and focus of educational outcomes are

not in line with economic development objectives. The education systems in MENA countries differ from other regions in terms of the specializations they produce. MENA countries overall have a lower share of university students in science, engineering and technology than Asia and LAC comparators, and a considerably higher share in education, humanities, and/or social sciences. This structure is arguably reflecting a system preparing for civil service employment rather than for dynamic private sector led growth.

Moreover, MENA countries perform quite poorly in international tests of science and mathematics proficiency, reinforcing the notion that education in the region suffers from important quality deficiencies, impacting the true contributions to output at home. Figure 3.14 shows the percentage of MENA eighth graders able to meet high benchmarks in mathematics and science, according to internationally administered tests. As late as 2007, the percent of MENA eighth graders able to meet high benchmarks in science was only 8 percent, and less than 3 percent were able to meet high benchmarks in math. That compares with a world median of 34 percent in science and 26 percent in math. And indeed, some of the quality issues, together with language barriers, may

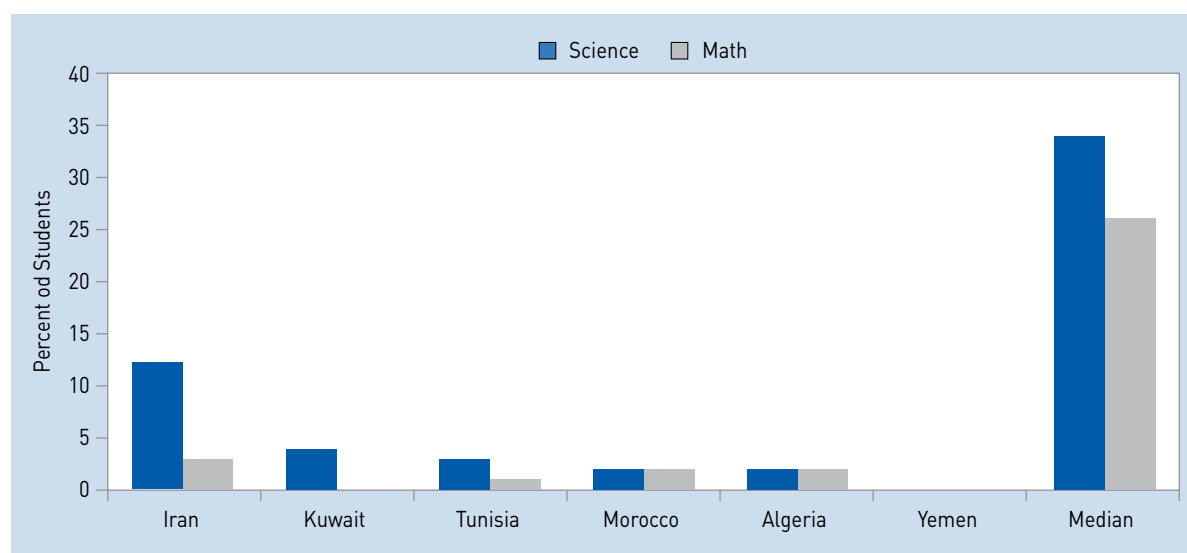
⁴⁴ World Bank 2008.

Table 3.16: GDP per laborer growth and growth of accumulation and productivity by region, 1970–2005 (% per year)

Region/ Country	Average annual GDP per laborer growth	Average annual growth of human capital per laborer	Average annual growth of fixed capital per laborer	Average annual TFP growth
Sub-Saharan Africa				
1970s	1.1	0.5	2.9	-0.3
1980s	0.2	0.6	1.3	-0.7
1990s	0.5	0.5	0.8	-0.1
2000–2005	2.4	0.5	1.2	1.7
East Asia and the Pacific				
1970s	3.8	0.9	5.2	1.2
1980s	6.1	1.0	6.0	3.1
1990s	7.2	0.7	8.5	3.3
2000–2005	6.4	0.7	8.7	2.5
Latin America Caribbean				
1970s	2.9	0.7	3.9	0.9
1980s	-1.7	0.9	0.2	-2.3
1990s	0.8	0.9	0.7	0.0
2000–2005	0.0	0.9	0.3	-0.7
Middle East North Africa				
1970s	2.6	1.1	7.2	-1.0
1980s	0.2	1.4	1.9	-1.5
1990s	0.6	1.3	-0.5	0.0
2000–2005	1.2	1.3	-0.1	0.5
North Africa				
1970s	3.4	1.0	5.1	0.7
1980s	1.5	1.5	3.2	-0.7
1990s	0.3	1.3	-0.4	-0.3
2000–2005	1.3	1.3	0.4	0.4
South Asia				
1960s	2.3	0.6	4.1	0.3
1970s	0.7	0.9	1.9	-0.7
1980s	3.4	0.9	3.2	1.6
1990s	3.6	0.9	3.8	1.5
World				
1970s	2.4	1.0	4.0	0.2
1980s	3.3	0.8	3.6	1.3
1990s	3.8	0.8	4.5	1.5
2000–2005	3.7	0.8	4.7	1.4

Note: Regional estimates weighted by population. Source: Keller and Nabli 2007 (updated for the purpose of this report).

Figure 3.14: Percent of MENA eighth graders reaching high benchmarks in mathematics and science, 2007



Source: TIMSS 2007.

explain some of the relatively lower success of some highly educated MENA migrants in foreign labor markets, especially the U.S.

Past education reforms in the region have focused on increasing access and attempted to improve quality but did not emphasize enhancing the motivation for the productive use of education in the economy. Among the most distortive policies inhibiting the productive use of educated labor (and all labor) in the region is the legacy of public sector employment. Despite attempts to reduce the size of the public sector, MENA (and North African) economies maintain some of the highest levels of public sector employment in the world, averaging 29 percent of all employment in MENA in 2000 (and 26 percent in North Africa). Most of these public sector workers come from the stock of educated laborers.

A body of research on public sector employment argues that human capital in the public sector, especially within the administrative civil service, may not significantly contribute to economic growth, and in fact, may actually reduce economic growth if government workers use some of their powers to generate rents for themselves.⁴⁵ The degree to which the region's

exceptionally high public sector employment has lowered MENA's growth is not entirely clear, but a past study estimated that the loss of GDP growth in the MENA region between 1985–1995 strictly due to public administration employment was some 8.4 percent—or close to 1 percentage point per year.⁴⁶

And although there may be shortages of adequate skills in the North African countries, lack of education does not appear to be the key binding constraint to private sector activity and job creation. According to the World Bank's enterprise surveys, the percentage of firms listing skills shortages as the main business impediment is comparatively low (in fact, lower than in ECA countries or in LAC), much below the importance given to, for example, access to finance, informal sector practice, basic infrastructure or corruption. Indeed, many of the weaknesses in the investment climate may be contributing to the flight of educated persons looking for better opportunities.

The much-debated case of emigration of health staff supports some of these counterarguments. In

⁴⁵ Pritchett, 1999.

⁴⁶ Pissarides, 2000.

Table 3.17: Skills shortages and the business environment (% of firms listing the respective area as the major obstacle to business)

Egypt		Algeria		Morocco		ECA		LAC	
Political instability	29	Access to Finance	25	Tax Rates	35	Tax Rates	18	Practices Informal Sector	18
Practices Informal Sector	17	Practices Informal Sector	20	Access to Finance	14	Access to Finance	15	Political instability	12
Tax Rates	12	Access to Land	11	Practices Informal Sector	11	Practices Informal Sector	12	Access to Finance	11
Corruption	9	Corruption	11	Access to Land	11	Political instability	10	Crime, Theft & Disorder	11
Inadequately educated workforce	6	Inadequately educated workforce	5	Inadequately educated workforce	4	Inadequately educated workforce	9	Inadequately educated workforce	7

Source: World Bank (2009) High-skilled Migration in the Middle East and North Africa: Trends, Impacts and Policy Implications, an output of the EC-Funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies

Egypt, infant mortality is six times higher than in high-income countries and only seventy percent of pregnant women receive prenatal care. At the same time, physician emigration rates are low, at some 4 percent (much lower than in, for example, Lebanon or Iran) and the physician density in Egypt more than fulfills the WHO's recommendation of 20 doctors per 10,000 inhabitants. A review by the WHO suggests that in Egypt, the specialization of physicians is poorly matched with needs on the ground (rural facilities, family medicine, primary care) and with some complementary health staff such as midwives and nurses (for whom emigration rates, by the way, have been low). Thus, the lack of an enabling health service

system seems to be a more important factor than the lack of doctors, per se.

In the end, both factors—high unemployment and low productivity among educated workers—point to lower than expected contributions by educated workers in the domestic economy, which in some sense also means that the true costs from skilled migration might be lower than that suggested by high-skilled migration rates alone. At the same time, and as importantly, there *are* significant costs to lost education. The MENA region is bearing those costs, at least in large part through a domestic environment in which education is not channeled to its most productive purposes.

Further Contributions of Migrants to Host-Country Development, While Abroad and At Return

While remittances provide a major vehicle for development impact of migration while abroad, remittances are not the only channel. Diaspora—the migrant community abroad—can be a potentially valuable ‘second’ human capital stock for the home country. This stock is valuable (relative to truly foreign human capital) to the extent that diaspora members retain disproportionate connections to the home economy. These connections support economic transactions such as: trade, direct investment, financial investments, remittances, tourism, and knowledge exchange.⁴⁷ They can also be used as bridges for transactions with foreign nationals, bridges that may be especially important in international trading environments fraught with search, monitoring, and other transaction costs.⁴⁸

Return migrants, like the diaspora, are also increasingly recognized for their potential to provide technological, managerial and entrepreneurial know-how back at home. In addition to potential financial resources, the work experience abroad and connections to both the host and home economy make established migrants (either from the diaspora or upon return) potential engines of innovation, employment, and economic growth at home.

This section reviews the diaspora networks of migrants from North Africa, evaluates their potential for contributing to development, and discusses some of the factors that hinder their full contribution. It also recommends policy actions for North African countries to better engage the

diaspora for growth and development-enhancing investments and to create the virtuous circles for institutional change. While the foundation for successful diaspora contribution to development exist throughout North Africa, the lack of responsiveness, flexibility, and dynamism on the part of the government hinders the ability of diaspora networks of migrants from the Maghreb and from Egypt to contribute fully to development. Diaspora programs and organizations are too centralized and bureaucratized to provide effective support to diaspora members and their organizations.

This section also reviews the experiences of return migrants to North Africa, using survey data, which allows for a view into what makes one returned migrant contribute more to the home economy than another: that is, what kind of experience abroad creates the infrastructure for the maximum contributions upon return. The analysis suggests several key features of the migration experience are integral to successful integration upon return (both in terms of labor market success and business investment). First, the conditions of return play a significant role in the ability for return migrants to experience either occupational improvements back home or to become entrepreneurs. Forced return of irregular migrants makes the potential for their successful

⁴⁷ Gould (1994) and Head and Ries (1998) use a gravity equation framework to show that larger diasporas are associated with greater trade.

⁴⁸ See Kapur and McHale (2005a).

contribution—either through occupational mobility or through entrepreneurship—to the home economy significantly less likely. Many receiving countries have instituted assisted voluntary return programs (AVR) to increase the return rates for irregular migrants and provide (financial) support for their return, but to date, the evidence has not confirmed their success. Second, training received in the host country significantly improves the probability of entrepreneurship upon return. And third, savings brought with the migrant upon return significantly improve the potential for migrants to experience either upward job mobility upon return and to be able to become entrepreneurs. The results suggest the potential for several policies in both home and host countries to improve the contributions of migrants at return.

The Role (or Potential Role) of North African Diaspora

The traditional fear of skilled migration is that the loss of society's best and brightest, hurts economic growth and development at home. Yet, evidence is emerging that skilled diaspora can be a potentially valuable “second” human capital stock for the home economy, promoting development at home. With connections to both home and sending countries, diasporas can support many important economic transactions, including trade, direct investment, financial investments, remittances, tourism and knowledge exchange. They can also be used as bridges for transactions with foreign nationals, bridges that may be especially important in international trading environments fraught with search, monitoring and other transaction costs. And, through their continued interest and involvement in the home country, the diaspora can also help to effect institutional changes important for growth.

Although diasporas can have a major role to play in development, empirical investigations into their impact on sending countries are limited. Most studies have concentrated on the diasporas' impacts on trade flows and investment. Using gravity models to analyze the determinants of trade flows, most studies have found that bilateral trade flows are positively related to the number of overseas nationals. But while the empirical

literature confirms that diasporas can have a positive influence on trade and investment, there is surprisingly little empirical investigation into what makes one country's diaspora more effective in supporting the sending country trade and investment than another's.

Diasporas worldwide have at times made startling contributions to home countries, with some common elements. The often-mentioned case of Taiwan is useful for understanding the potentially large contribution diaspora can make (and the potential for North African diaspora to do the same). When the Taiwanese government decided to promote the venture capital (VC) industry in the beginning of the 80s, it had neither the capabilities, nor a blueprint to do that. However, through a process of intense interactions with the Taiwanese diaspora in Silicon Valley, new institutions such as the Pilot Fund provided matching capital contributions to private venture capital (VC) funds. Once the first venture funds proved successful, domestic IT firms created their own VC funds.

The first element of this successful engagement was a search network, consisting initially of key dynamic and forward-looking members of the Taiwanese government, as well as leading overseas Chinese engineers in Silicon Valley. This network did not have a blueprint, yet it did have a role model (Silicon Valley) and a clear idea of “what to do next.” By defining each subsequent step along the road, the network became wider and eventually incorporated skeptics and opponents.

The extension of projects of diaspora entrepreneurs from co-founding joint firms in home countries to co-creating institutional infrastructure so that these firms can flourish is natural, and almost matter-of-fact. The initial objectives in the Taiwanese case were clear: to advance their professional interests by setting up technology firms at their home countries. Yet as the constraints of the home country institutional environment became apparent to them, they engaged in advancing institutional reform to remedy some of the constraints. Successful growth of knowledge-based firms and creation of appropriate institutional environment became

two sides of the same coin. Innovation entrepreneurship has blossomed into institutional and policy entrepreneurship.

But diasporas are not always successful as agents for change. For every success story of diaspora achievements, such as from Taiwan, there are many more cases where diasporas have tried but failed to make a contribution to their home country. Ultimately, the ability for diasporas to effectively contribute to development depends on several key factors, including the size of the diaspora group, their motivation, and the government's view of the political and economic relevance of the diaspora community, and its willingness (and capacity) to tap into their resources.⁴⁹

Description of North Africa's diaspora

Diaspora contributions to development can come from many segments of the diaspora population, and the types of interventions they can make can also vary. But for practical purposes, the analysis of diaspora groups with potential to make important contributions to home development generally concentrates on first-generation skilled migrants. Skilled migrants are significantly more likely to have both the financial resources and knowledge to develop business ventures in the home country. First-generation migrants, meanwhile, are the most likely to remain connected to their home country, sharing the same social networks and idiosyncrasies associated with shared experiences of going to the same school and university.

From a purely quantitative perspective, North African diasporas are not particularly different from those of other mid-size middle-income countries. Stocks of tertiary educated expatriates from North Africa's economies are not insignificant, and even if they do not reach the mass of historically successful diasporas such as Taiwan, China and India, there are sufficient examples worldwide of smaller diasporas of skilled migrants who are just as productive for home country development as large ones.

The OECD database on migrants stocks, though referring to the year 2000, is still very

valuable to gauge the absolute and relative size of skilled diasporas, and the economic sectors in which change and interaction with home countries is most likely to take place.

In 2000 France was the main receiving country of first-generation North African migrants, followed by Spain and Italy (Figure 4.1). However in terms of more highly educated migrants stocks, France is the largest recipient, but the United States and Canada follow (Figure 4.2). Finally, among the largest receivers of North African migrants (Table 4.1) the United States, Canada, and (to a lesser extent) the UK, Switzerland and Australia host the diasporas with highest education level relative to their number. These are the countries where the probability would be higher to find some of the kinds of over-achievers that produced lasting institutional changes in other regions.

Considering professional occupations,⁵⁰ North Africa countries display concentrated groups of skilled diaspora in some of the key sectors that have hosted change-makers from other regions of the world. For instance, in year 2000 around 9,600 Algerians, 7,000 Moroccans and 3,100 Tunisians with tertiary degrees worked in science and engineering profession in France alone, with Canada at the second place (Table 4.2). Egyptians highly skilled in sciences were especially concentrated in the United States, again with Canada at the second place. To place these figures into perspective, in the same period about 12,400 Argentineans and 6,700 Chileans with tertiary degrees worked in the United States in science, technology, engineering, business, finance, IT and health combined (Table 4.3). Therefore, on a purely quantitative perspective, diasporas from North Africa—even if not as large as Indians or Chinese—are not particularly different from other diasporas from mid-size middle-income countries that have been shown in the literature to be capable of having a remarkable impact on their country of origin.

⁴⁹ Owusu 2006.

⁵⁰ In order to partially control for "brain-waste" and inactivity, we consider in this section high-skilled foreign-born (e.g. first generation) migrants who were actively employed in selected professional occupations at time of the census.

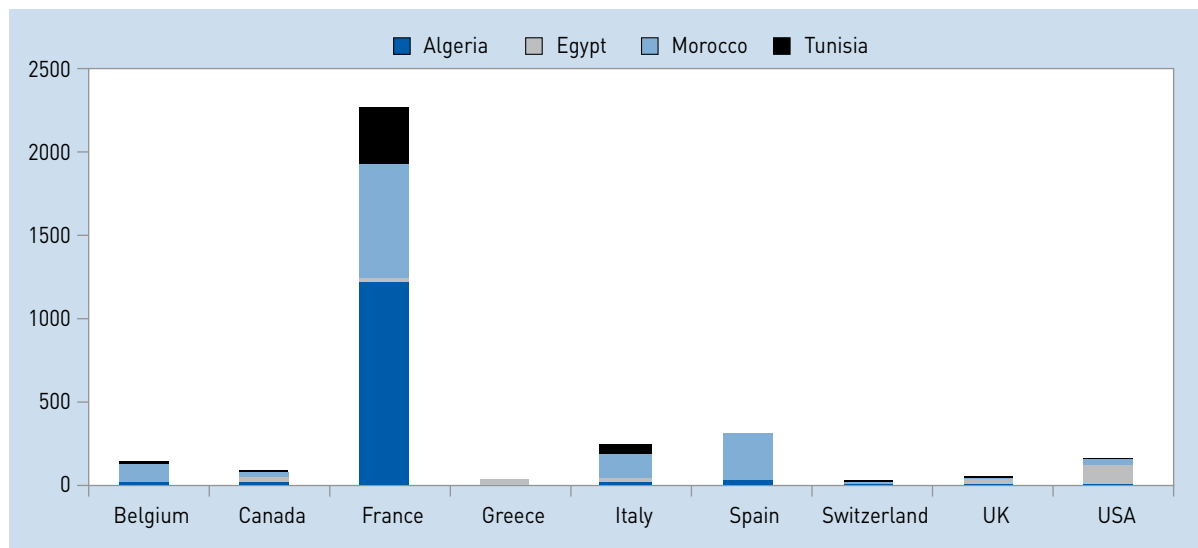
Qualitative evidence of North African diaspora achievements

North Africa also demonstrates some success stories with diaspora initiatives. Diaspora networks of migrants from the Maghreb and from Egypt are already well developed in all major destination

countries of Europe and North America. These groups are the basis of the “search networks” described before.

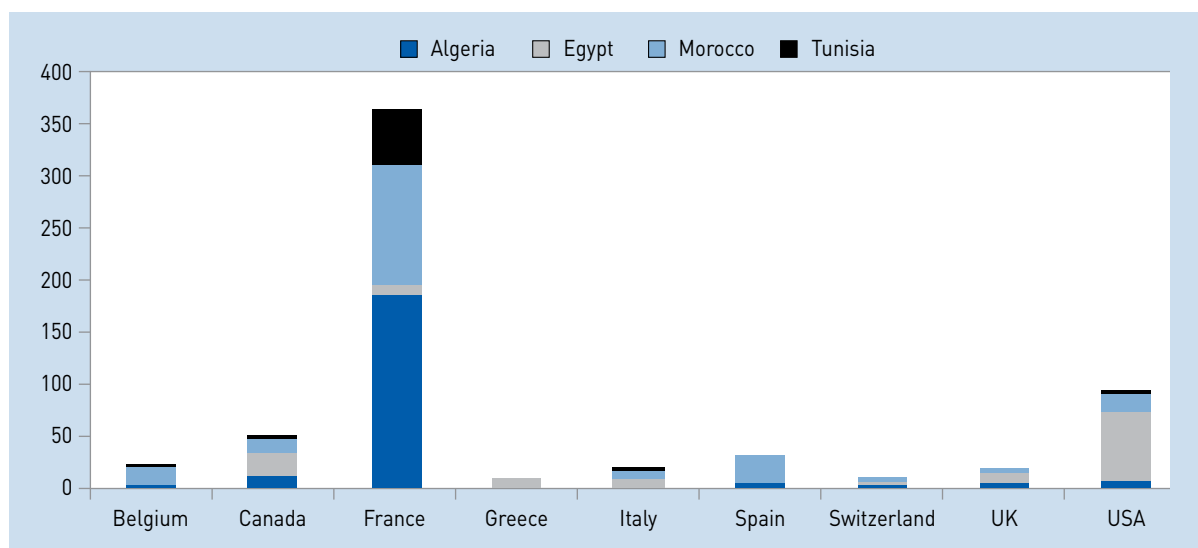
One example within North Africa includes the associations of university graduates, stemming from the fact that French leading universi-

Figure 4.1: Stock of North African migrants in select OECD economies



Source: Kuznetsov, Yevgeny and Matteo Morgani. 2008.

Figure 4.2: Stock of North African Tertiary-Educated Migrants in Select OECD economies



Source: Kuznetsov, Yevgeny and Matteo Morgani. 2008.

Table 4.1: Share of migrants with tertiary education in the top 7 destination countries of the OECD

Country of residence	Algeria	Egypt	Morocco	Tunisia
Australia	33%	31%	27%	14%
Belgium	14%	41%	10%	19%
Canada	62%	65%	52%	63%
France	15%	43%	17%	16%
Greece	31%	26%	26%	22%
Italy	12%	22%	5%	5%
Spain	12%	33%	10%	24%
Switzerland	31%	51%	25%	24%
UK	37%	44%	24%	26%
USA	53%	63%	43%	49%
OECD - Total	16%	47%	14%	16%

Source: Kuznetsov, Yevgeny and Matteo Morgani. 2008. "Why is Diaspora Potential so Elusive? Towards a New Diaspora Agenda in North African Economies." An output of the EC-funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

Note: Table includes the top 7 OECD destination countries of Egypt and the Maghreb, except for Germany (6th destination country for Moroccans) for which data was not available in the same database.

Table 4.2: Active foreign-born tertiary educated migrants in selected OECD countries, selected occupations (2000)

	Algeria	Egypt	Morocco	Tunisia	Algeria	Egypt	Morocco	Tunisia
12 Corporate managers				22 Life science and health professionals				
Australia	4	773	30	4	10	1003	5	0
Belgium			0				0	
Canada	0	0	0	0	190	1575	270	35
Switzerland	104	142	174	98	94	85	56	24
Spain	520	60	4840	60	40	60	1300	0
France	21681	582	12828	5778	15052	458	7828	3581
UK	565	1455	640	234	45	1496	32	24
Greece	2	753	13	4	0	356	5	2
Total	22888	3991	18563	6213	15444	5180	9504	3671
21 Physical, mathematical and engineering science professionals				23 Teaching professionals				
Australia	14	646	16	0	34	755	22	4
Belgium			682				0	
Canada	1305	2160	1055	465	755	1385	1040	285
Switzerland	166	147	234	123	94	71	88	61
Spain	120	40	920	20	240	40	2700	20
France	13428	429	8986	4219	17062	235	11560	2707
UK	300	433	170	39	460	799	288	104
Greece	4	495	14	3	3	624	10	3
Total	15368	4473	12111	4889	18671	4029	15769	3203

Source: Kuznetsov, Yevgeny and Matteo Morgani. 2008. "Why is Diaspora Potential so Elusive? Towards a New Diaspora Agenda in North African Economies." An output of the EC-funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

Table 4.3: Active foreign-born tertiary educated migrants in United States, selected occupations (2000)

Occupations:	Algeria	Egypt	Morocco	Tunisia	Argent	Chile	China	UK	India	Iran	Mex	Philp
Management	500	6490	1960	345	5430	2850	40145	47690	55460	19570	28665	32440
Business & financial operations	209	3475	704	139	2140	1165	31890	17465	31475	7085	15700	42185
Computer & mathematical science	355	2070	904	204	1639	825	63670	16705	128535	7570	8230	22405
Architecture & engineering	365	3095	564	165	1690	990	35830	13990	38365	11410	11700	20205
Life, physical, & social science	230	1430	360	130	1590	925	37605	9630	20720	3095	3930	7860
Total	1659	16560	4492	983	12489	6755	209140	105480	274555	48730	68225	125095

Source: Kuznetsov, Yevgeny and Matteo Morgani. 2008. "Why is Diaspora Potential so Elusive? Towards a New Diaspora Agenda in North African Economies." An output of the EC-funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

ties (Grandes Ecoles) still remain the preferred option for tertiary education of Moroccan elites. Three associations⁵¹ perform similar functions for each one of the Maghreb diasporas: they link together perspective students with French universities, enhance alumni networks with private companies interested specifically in diaspora graduates, and they offer cultural and social events.

Based on a similar concept (but with a more specialized focus) the NGO Maroc Entrepreneurs was founded in France by seven self-starting students of Business Administration, with the purpose of fostering entrepreneurship, particularly back in Morocco. Nine years after its foundation, the organization is still run by volunteers, but now counts a network of about 3,000 students and 7,000 Moroccan graduates in Economics and Business,⁵² with offices in London and Paris. The organization offers business training, and every year has a business plan competition for graduating students. The authors of winning projects are matched with experienced Moroccan businessmen as mentors.

A similar specialized professional network is the organization *Savoir et Developpement*, created by the Moroccan scientific diaspora in

the university and techno-hub of Toulouse, the headquarters of Airbus, the European Aerospace consortium (see Box 4.1). The organization opened its network of professionals to Moroccan companies searching for expertise in R&D. This exemplifies the potential of a specialized network of professionals to provide avenues to solve complex problems across borders by reducing the search and information costs and by leveraging the inner desire to contribute to the development of the home country.

Under certain conditions, these search networks allow talented individuals to locate and interact with the dynamic segments of home country institutions, and produce transformational impacts and reforms

However, while these social entrepreneurs exist, it is a challenge to find a suitable partner among home country institutions (win-win

⁵¹ The three associations are: ATUGE (Association Tunisiens des Grandes Ecoles), AMGE (Association des Marocains des Grandes Ecoles) and REAGE (Réseau des Algériens Diplômés des Grandes Ecoles et Universités Françaises).

⁵² Source: interview by the authors with the current chief representatives of Maroc Entrepreneurs in the Paris and London Offices.

Box 4.1: Savoir et Développement: a European “Silicon Valley” Diaspora?

An interesting example that shares similar traits to some of the early stage initiatives that took off around scientific hubs in North America is the spontaneous network of Moroccan scientists “Savoir & Développement”¹ grown in 1999 in Southern France’s scientific pole of Toulouse (the headquarter of Airbus, the European aerospace consortium). In the words of the author who documents this case, “the projects and the subjects discussed by the group are extremely practical and concrete.”² The organization serves as a search network to match Moroccan scientists abroad with Moroccan small and medium enterprises willing to undertake innovation at the firm level. The members of the organization work either on R&D projects, or to help firms finding partners for their R&D needs. In a business environment where local capacity to under-

take structured and large research and development is limited, this organization is able to fill the gap by providing R & D services to the market of small and medium firms, as well as what we would classify as “consulting.” In terms of institutional cooperation, the organization is collaborating with a local university to propose a nanotechnology research initiative. The organization has also branched out to public institutions such as the Organization for Moroccan Abroad (with which they organize annual meetings for Moroccan students), and local municipalities to work on treatment facilities of urban waste. Time will tell whether this search network will be able to translate such promising steps into even more concrete and effective actions at the institutional level, within the scientific and business communities.

Source: Kuznetsov, Yevgeny and Matteo Morgani.2008

¹ <http://www.savdev.org/>

² This draws from Boujour 2005

matches). This hinders the potential for these groups to make altruistic, positive contributions to the development of their place of origin. In their absence, the diaspora network in North Africa serves the more limited purposes of diaspora members alone, such as career advancement, business contacts, and socialization.

The case of the philanthropic organization Coptic Orphans (see Box 4.3) is an example of how transaction and information costs can be reduced through the intermediation of a common institution that ensures logistical support, entry points and the organizational structure to scale up—in this case through the Egyptian Coptic Church. The story begins with a highly entrepreneurial diaspora member, who gave rise to a small private philanthropic initiative with funding from her Coptic Church community in the United States. The enterprise evolved into a structured and professional NGO that reached with scale the poorest strata of the population in Egypt. The use of the Church as intermediary provided a shared set of beliefs that could transcend cultural difference and could appeal to the second generation of migrants in North America,

offering a clear mission that is recognized both by diasporas and home institutions.

A third, yet again very unique, case of institutional development led by diasporas is the project of the International University of Rabat.⁵³ This private university plans to provide advanced undergraduate- and masters-level courses in science, architecture, social sciences and languages through an intercollegiate faculty drawing from a network of international universities that employ Moroccan academics. Not surprisingly, the project originated with the initiative of a Moroccan professor working at the Polytechnic University of Nantes, France, who desired to return to Morocco and to contribute to the modernization of the country. A core point of strength of the project design is its reliance on a network of well-positioned members of the Moroccan diaspora in other academic circles in the world. Domestically, the endorsement of a powerful segment of a home country government (the King

⁵³ Sources: Interview with a member of the Moroccan professional diaspora and former government employee; Afrik.com, Attalib.org,

Box 4.2: Unlikely reform initiated and sustained by diaspora members: electricity in rural area of Morocco

When a French steel plant in the city of Argentière-la-Bessée was closed down in the wave of heavy industry retrenchments of the 1980s, laid-off workers received seed funding to start local enterprises. Defying the French authorities' plan to invest funding locally, 54 migrants—under the leadership of a Moroccan worker and active member in local trade union—decided to return to their region of origin, the Souss valley, and to invest in the development of electrification. The lack of electricity was symbolic of the divide between the modern Morocco and the politically neglected territories such as the Taroudannt province, where government intervention had been scarce since colonial times. Turning into social entrepreneurs, these former insiders with a new modernizing vision engaged with their communities of origin in an iterative process of technology adaptation and institutional development. A key to their success was the ability to become interfaces between local needs and external resources, and a basic understanding of the technology that they were attempting to transfer. Through the establishment of a formal NGO and of a search network—which in 1997 reached about 60 organizations and established offices in Rabat, the Taroudannt region, and five cities in France—Migration et Développement was able to tap into a wealth of private and public investors on both sides of the Mediterranean; from urban migrants in Morocco interested in investing in the development

of their community of origin, to the European Union and the French Cooperation. The NGO also created a platform where specialized associations could transfer knowledge and know-how: for instance, the case of the association of volunteers from Electricité de France and the “Hydraulics without borders.” Equally important was the participatory, staged, and dialogic method the group used to identify priorities, receive feedback, and establish local village institutions that would plan for the future interventions and sustain the existing infrastructure. These innovations at the local level did not come unnoticed by some government institutions, by then interested in servicing also these regions (such as the Foundation Mohammed V), which co-funded initiatives and began including the local communities in their infrastructure expansion plans. Following the hierarchy of diaspora effects illustrated in this paper, over its 20 years of existence this organization of migrants also generated a remarkable degree of institutional change at the national level. Perhaps the most telling evidence is that the public electricity company eventually adopted the association's technical standards and participatory processes in a massive rural electrification plan in 1996. More broadly, the experience reversed, through demonstration, a long-lasting bureaucratic paradigm that used to map this region within the boundaries of the “useless Morocco.”

Source: Kuznetsov and Morgandi 2009, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

himself, and a number of former ministers), who donated public land for the construction of the private institution in the Technopole of Rabat, shielded the project from possible interference by competing institutions. With an initial investment of 50M€, and planned revenue from substantial (10,000€) but still internationally competitive university fees, the school aspires to serve the local as well as the regional public. As the project is still at the preparatory stage, it is too early to assess whether it will function as planned, and whether this intended local center of excellence will have positive spillovers on local

human capital development, or it will become an additional springboard for brain drain.

Initiatives by national governments

The number and potential of skilled and unskilled migrants from North Africa has not remained unnoticed by policymakers. A large number of initiatives have been implemented by both sending and receiving countries to engage diasporas in collective remittance projects, encourage return or circular migration, and invest in their country of origin.

Box 4.3: Diaspora-led philanthropy transforms the way traditional charities operate in the Egyptian Coptic Church

Descending from Christian converts of the first century, Coptic Egyptians have a long tradition of cohesion as a minority in their home and host countries alike, making this group somehow singular with respect to other North African diasporas. When a Coptic-American visited an orphanage run by Coptic Nuns in Cairo and witnessed the situation of resident children from poverty-stricken families, she began fundraising within the Coptic Churches of the United States with unexpected success. Coptic communities abroad had a long tradition of charitable giving through bilateral exchanges with twin parishes in Egypt, but their effects—comparable to the typical collective remittances—only contributed to the sustenance of the existing charitable system. Understanding the potential to leverage diaspora resources to produce a more lasting impact on the children's lives, Nermien Riad's next step was the creation of a program to counter early school dropout and girls' high illiteracy rates, by pairing adult women—volunteers from the local community—with younger girls from low-income families in various church districts. The girls would receive both academic support and a role model through their educated “big-sister” role models. Local churches played an intermediation role by providing the communication infrastructure, volunteers, and the outreach capacity in communities.

A second program directly targeted children who suffered from the death of their father, granting their families an alternative to traditional orphanages to raise their children. In its 20 years of operation, these initiatives that started in few communities around Cairo now reach the entire country, and distribute \$2.3 M a year (2007). Complementary workshops targeting children and parents (for instance on rights, nutrition, study habits) support change processes at the community level.

Through these actions, the diaspora NGO was able to channel part of the Copts' remittances into a professionally-managed development program, and to become a change factor across a large network of traditional and hierarchical charitable institutions. Introducing individual mentoring and mentors' training enhanced local volunteerism. New accountability mechanisms allowed monitoring the behavior of beneficiary families towards the welfare of their children, and to record the remarkable improvement in literacy, academic performance and achievement of a 0

percent drop-out rate among girl beneficiaries. As the communities reached by the NGO became hundreds, procedures became standardized, and today donors receive transparent accounts on the use of their donations (a remarkable improvement in light of a tradition that would discourage the giver from inquiring about the result of his charity).

By exposing the direct link between diasporas and communities of origin, Coptic orphans awakened not only compassion but also a sense of capacity among diaspora members to share some of the “fortune” that made their destiny so different from that of their fathers. In exchange for the contributions, the NGO offered identity and opportunities for fulfilling engagement: through summer English teaching programs, networks of young Egyptian-Americans were able to re-establish the cultural link with Coptic Egypt. A further success factor was the NGO's ability to build on the logistical strengths of the Coptic Church, an institution which is both local and transnational, and whose beliefs and cultural norms are shared among sending and receiving communities and conducive to charity itself. The organization also strives to stick to the intrinsic motivation of Coptic charity: for instance professional staff is kept to a minimum, and limited to the coordinating offices in Cairo, Australia, Canada and the United States.

The relationship between the State and NGOs continues to be complex and ambivalent in Egypt. On one hand the role of NGOs in improving the welfare of citizens is recognized, on the other all civic activities are closely controlled and their legal status can be challenged by the state. This ambivalence may be all the more true for a NGO which represents diaspora Copts, who provide remittances and are well connected with eminent people abroad, but nonetheless work to serve a local minority who is discriminated against and at times persecuted. Especially for a diaspora organization that embodies, in its way of proceeding, a “change” agenda, the willingness and ability to collaborate with the state—at the state's pace—without losing its focus on results may depend on a future accidental encounter with an enlightened internal champion. This is yet to occur, but the change brought within a hierarchical and complex organization such as the Coptic Church is, per se, a remarkable product of diaspora social entrepreneurship.

Source: Brinkerhoff (2007) and interview with C.O. Executive Director Nermien Riad.

Initiatives driven by host country governments (bilateral aid agencies or foreign ministries) in receiving countries in Europe tried to engage non-specialized diaspora organizations in development projects (co-development). De Haas (2005) provides a very thorough review of such programs in the EU—many of which are intended for Maghreb migrants—and, his general findings and recommendations are very relevant to our discussion and worth summarizing here.

Since the 1970s, some of the most popular and best financed programs have focused on co-development or “brain circulation” initiatives with a more or less hidden agenda of return, for instance by requiring participants that benefit from seed funding for their investment projects to leave the country for a number of years. Evaluations of experiences in the Netherlands and in France⁵⁴ showed that such initiatives did not engage the brightest and most dynamic diaspora individuals—let alone groups—because such conditions would be appealing only to “failed” migration experiences. In terms of impact, it appears that investment projects by return migrants under such circumstances did not prove sustainable.

A number of governments have attempted to involve diasporas as potential partners in local development cooperation, especially by giving grants to specific projects or by matching collective remittances. A key challenge of such programs has been to increase the capacity of migrants’ spontaneous organizations to take advantage of these funds, without losing, in the process, the ingenuity of the effort and without fostering an “over-professionalization” of migrants. It appears that the most promising results in terms of quality of projects have been obtained where migrants’ organizations were able to partner with professional NGOs to build capacity.⁵⁵

All North African countries have established offices for migrants abroad in the main destination countries, but there has been no clear evaluation so far of the quality of their functions. These offices are also in charge of disseminating information on incentives and initiatives to facili-

tate return and investment by diaspora members. The international experience suggests that such bodies serve as initial gateways to home country institutions, but they rarely offer specialized services that a potential “overachiever” would be able to take advantage of, and direct contact with home country institutions is usually more relevant. However, they play an important convening function—as they can organize diaspora congresses, which draw together more or less specialized segments of migrants—and link them with country institutions.

Thus, though North African diasporas have already made significant contributions to institutional development and promising and significant examples of diaspora contributions to home country development exist, the promise of diaspora remains immature. The challenge for the government is scaling up and institutionalization (i.e., rendering some governance and structure) to many promising diaspora networks, which are often informal. For North African diasporas to make strong contributions, they require a higher level of support to diaspora members and its association in a less centralized and bureaucratic way.

Strengthening ties with North Africa’s diaspora

North Africa demonstrates segments of home institutions and foreign champions that manage to advance a shared agenda. However, North Africa’s public institutions that have the role of liaising with migrants have a limited capacity to work as interlocutors in very specialized fields such as technology. These kinds of matches require special skills, and understandably a public agency cannot host them all in house.

The analysis of more mature diaspora experiences than those of North Africa, already documented by the literature, is that this process of

⁵⁴ *REMPLOD* program in 1970s in the Netherlands, *Aide au Retour* program 1980s, and *Programme Développement Locale Migration*, 1995, in France.

⁵⁵ De Haas cites as positively evaluated examples the small grant program for non-professional development organization *Linkis* in the Netherlands.

Table 4.4: Institutionalization of diaspora networks as search networks

	Characterization of better performing segments	Examples
Informal networks	Individual champions, usually 'overachievers,' from government, diaspora, and private sector sides	<ul style="list-style-type: none"> • Ireland in the 70's, • India in the 70's and 80's • Networks of scientists, business school graduates from Maghreb • Most middle-income and many low income countries now,
Some institutionalization	The champions (personalities) create institutional platforms to institutionalize interactions	<ul style="list-style-type: none"> • Taiwan experience with early stage venture capital • Mexico' Red de Talentos • Diaspora initiatives promoted by private sector associations such as TiE • Associations of Maghreb business school graduates
Institutionalized networks	A process of matching of Diaspora members and institutions in home countries to generate and support joint projects	<ul style="list-style-type: none"> • GlobalScot • ChileGlobal

emergence and institutionalization goes through three stages.

In the first stage, informal networks between individual champions, typically overachievers, emerge. The ability to act innovatively and think 'out of the box' stems both from personal reputation and credibility (not necessarily linked to an official position) and the ability to leverage resources provided by an official position. This duality allows flexibility and opens the door to institutionalization of personal and informal networks. The second stage of evolution is their partial institutionalization, where diaspora search networks can help to formalize other networks while making them more effective as a means for incubating new programs as governance structures as well as new projects. Finally, the third stage is the fully institutionalized search network.

The full formalization of diaspora search networks is typically not desirable, particularly in a context of a developing economy. An institutional home is desirable, yet many informal features (characteristic of Stage 2 of the evolution) should remain. Full institutionalization can easily result in stifling of creativity and capture of a heretofore vibrant network by vested interests. In short, interests of powerful organizations may overtake dynamic searches of diaspora members.

How can government provide coherent a centralized framework to assure diversity of bottom-up initiatives to fit specific local circumstances? The evidence from successful experiences worldwide suggests a two-prong approach: both a centralized framework (which is up to government to establish) which makes diaspora members feel welcome and assures basic rules of their engagement, and an institutional space for bottom-up creativity and initiative of all agents involved.

North Africa countries have developed a number of initiatives to engage with diasporas such as building databases of diasporas, websites to promote diaspora dialogues, and subsidies for short scientific collaborations. Ministries of Foreign Relations develop outreach programs to link to its people abroad. This effort should be continued. This is a framework for the diaspora engagement to establish a dialogue to make diaspora feel welcome and needed at home—a first prong of the strategy we propose. However, the framework cannot substitute for decentralized and largely bottom-up creativity—diaspora members and organizations working with home country institutions to change things for the better.

Striking such a balance is far from trivial and the centralized ministries of diasporas (as, say, in

India), proved to be at best, of very limited value. The relevant analogy is promotion of innovation. One needs a tolerant innovation climate, yet it is private agents, not the governments which make innovation happen (with Ministries of Sciences and technology more often part of the problem, rather than solution).

One blending of bottom-up creativity with an explicit national framework of ‘rules of the game’ is a national contest between diaspora initiatives, which could provide matching funds to organizations in a country interested in articulating and running diaspora initiatives that would advance their own missions and objectives (for instance, an organization interested in using diaspora professionals to test new methods of delivery of preventive medicine to low-income population). These types of diaspora contests can help to pilot promising activities.

Attempts to foster diaspora talent in a decentralized way already exist in the Maghreb and there is a diaspora agenda, at least in the narrow sense: diaspora ministries, Ministries of Foreign Relations, and so forth. These are entry points of diaspora engagement which play also a coordination role: advocating reasonable institutional environment for diaspora engagement and maintaining dialogue with diasporas. These agencies are Diaspora “embassies” in the home countries. But just like embassies are just entry points to the governments, one needs “diaspora agenda in the broad sense”—a process of engagement with specialized government agencies (Ministries of Health, Education, Science and Technology) and agents to elicit credible commitments between the agents with resources and expertise at home and relevant diaspora members.

As a short-term dimension of their diaspora strategy, North African countries should emphasize decentralized ‘light touch’ agendas allowing a diversity of NGOs and research efforts to flourish. Once a diversity of diaspora engagement efforts is apparent, one can, over the medium-term, move to strengthen some of them by establishing a diaspora contest between local organizations in specific areas (such as in Russia and Mexico), including, but not limited to, science, technol-

ogy and technology-driven SMEs as a means of employment creation.

Furthermore, many efforts are being carried out by bilateral development agencies as well as international organizations to mobilize diaspora engagement in their home countries. However, rather than providing financial incentive to convince diasporas to invest in development projects in their home countries, where success has proved questionable, these organizations could focus on three lines of assistance:

- Evaluation and documentation of successful approaches, which will build critical knowledge of the advantage of the diaspora social entrepreneurs who are already engaged in the cause.
- Sponsoring of gatherings of diaspora organizations from different countries to favor knowledge exchange and provide informal opportunities for mutual assistance and learning.
- Assistance to home country governments in establishing enabling policy frameworks, including the removal of bureaucratic hurdles that prevent diaspora-led NGOs to act freely in the home country as entities.

North African countries already recognize the potential for diasporas to be economic partners and global bridge builders. And the evidence worldwide suggests that diasporas do not need to be large and voluminous to produce an impact. However, North African countries do need to ensure that the diasporas are better engaged if they are to be the valuable source of tangible help and resources (remittances, philanthropic contributions, investments, and technological and organizational knowledge) to home country development.

Return Migration

Migration can lead to important forms of beneficial transfers back to home countries, in the form of technological, managerial, and entrepreneurial know-how. Some migrants who return home may have acquired the financial resources, and the work experience, while abroad to provide an

impetus to the local economy and become engines of innovation, employment, and economic growth. The development impact of return migration, however, as with all stages of migration, varies strongly across countries. Understanding the factors that influence the ultimate contribution—be they characteristics of the migrant and their return, characteristics of the home country, or characteristics of the time abroad—are important information for guiding policy-makers both in North Africa and in destination countries.

It is generally acknowledged that while the number of North Africans returning home was sizable up to the mid-1970s, returns since then have been limited in size. This tendency of some migrant workers to settle for good in immigration countries (or, at least, to stay longer) is due to several factors, among which are poor economic prospects in the home countries, high income differentials between home and host countries, and the closure of European frontiers, making legal circular migration impossible. Lower-bound estimates of the number of return migrants in Morocco, Algeria and Tunisia computed from census data are provided by the website of the MIREM project.⁵⁶ In the case of Morocco, about 68,000 international migrants returned between 1975 and 1982—almost 10,000 per year—and 117,132 returnees were recorded in the 1994 census. In the case of Algeria, 29,863 individuals interviewed in 1998 were abroad ten years earlier, suggesting a return migration flow of about 2,600 individuals per year over the 1987–1998 period (RGPH 1998). Turning to Tunisia, the return migration flow is estimated at 5,931 individuals per year over the 1982–1984 period, and at 3,553 individuals per year over the 1999–2004 period.⁵⁷

Development impact of return migration

Data on return migration are scarce, and there is only a small amount of empirical literature that has examined the impact of return migration from the sending country perspective. Two issues in particular have received research attention: the labor market performance of return migrants, and the characteristics of businesses created by returnees.

With regard to labor market performance, empirical studies have focused on whether returnees are able to apply at home what they learned abroad through a comparison of the wages of return migrants to the wages of those who stayed in the home country.⁵⁸ Contrasting results emerge from this literature, with some finding that experience is neither penalized nor rewarded,⁵⁹ and some finding that there is a wage premium for having gone abroad,⁶⁰ with large differences in results across gender and host country (foreign experience was found to strongly matter for women but not for men).

Another stream of empirical studies has examined the impact of return migration on the development of small businesses in the home country.⁶¹ There are two ways through which experience abroad might enable migrants to contribute to small business development: first, accumulated savings abroad might contribute to alleviate domestic capital market imperfections; secondly, overseas work experience might generate new skills and new ideas. From this literature, there is information on North Africa. McCormick and Wahba (2001) explore the extent to which returnees to Egypt become entrepreneurs and the way this process is influenced by overseas savings, overseas work experience, and pre-migration formal education. Using data drawn from the ELMS 88, which included a return migration module, they estimated a simple model of the probability that a return migrant is an entrepreneur. Their findings suggest that total savings accumulated overseas and the length of overseas employment positively and significantly affect the probability of becoming an entrepreneur among literate returnees. By contrast,

⁵⁶ See www.mirem.eu/donnes/statistiques/statistiques for statistics based on census data.

⁵⁷ Gubert and Nordman 2008b, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

⁵⁸ See Kiker and Traynham 1977; Enchautegui 1993; Co, Gang and Myesong-Su 2000; de Coulon and Piracha 2005; Rooth and Saarela 2007

⁵⁹ See Enchautegui 1993.

⁶⁰ See Co et al. 2000.

⁶¹ See for example Ilahi 1999; McCormick and Wahba 2001; Ammassari 2003; Black, King and Tiemoko 2003; Wahba 2003; Mesnard 2004; Nicholson 2004.

longer periods overseas have no influence on the likelihood of becoming an entrepreneur among illiterate returnees.

Information from returned migrants' studies of North Africa

Lack of appropriate data prevents an empirical investigation of the impact of returned migrants in North Africa. However, three recent surveys on returned migrants simultaneously conducted in Algeria, Morocco, and Tunisia in 2006 as part of the MIREM project⁶² provide a window into the factors which motivated and shaped the migratory stages; how the human, social and financial capital of the interviewees changed over time; and how patterns of reintegration and entrepreneurship differed among returnees and countries.

About 330 returned migrants were interviewed in each country using a common questionnaire. In each country, the sampling procedure was based on a geographical stratification process. A few specific regions were selected using official statistics on return flows, so the survey data should not be viewed as reflecting national trends (Table 4.5). For the MIREM project, a returnee is defined as “any person returning to his/her country of origin, in the course of the last ten years, after having been an international migrant (whether short-term or long-term) in another country. Return may be permanent or temporary. It may be independently decided by the migrant or forced by unexpected circumstances.”⁶³ This definition partially draws on the one recommended by the United Nations. It refers specifically to migrants who returned to their country of origin in the course of the last ten years, as this time limit allows for assessment of the impact of the experience of migration on the interviewee's pattern of reintegration. It also allows the respondents to recount their migratory experiences more precisely.

The questionnaire is structured around three modules relating to the different migratory stages: the returnees' conditions before they left for abroad; the returnees' experience of migration lived abroad; and the returnees' post-return conditions in the country of origin.

By contrast, it is important to clarify that other questions cannot be addressed: First, since there are no non-migrant individuals in the sample, the questions of whether the entrepreneurial behavior of return migrants differ from that of non-migrants or whether experience abroad affects the characteristics of businesses established by the returnees cannot be explored.

Second, the data set focuses on returnees and, as such, is not a representative sample of migrants in general. Since migrants from Maghreb countries are not mandated to return (even though some of them are sometimes “encouraged” to do so), returnees are unlikely to constitute a random sample of the migrant population. It may be the case that those who have failed economically or socially in host countries or those who are retired are overrepresented in the return migrant population. Controlling for this would require having data on migrants who still reside in immigration countries. Since such data could not be collected for obvious logistic and financial reasons, the conclusions that are derived from the analyses that follow only apply to the surveyed returnees, and they cannot be generalized to the whole population of migrants.

Nevertheless, while the studies are limiting in this sense, they provide a valuable blueprint into what makes one returned migrant contribute more to the home economy than another: that is, what kind of experience abroad creates the infrastructure for the maximum contributions upon return. In this case, they are indeed valuable. Moreover, perhaps no migration policy is more heavily touted than circular migration. The European Union, in particular, has invited to Commission to propose ways and means to facilitate circular and temporary migration between third countries and the EU. Since the surveys provide information on the difficulties returned migrants have faced in reintegrating into the home country, including re-entry into the labor market, they are very useful for helping policymakers to

⁶² see www.mirem.eu/mirem?set_language=en, for further details on the whole project.

⁶³ Gubert, Flore and Christophe Nordman. 2008b

Table 4.5: Composition of national samples for return migrants

	Algeria		Morocco		Tunisia	
	N	%	N	%	N	%
Wilayas			Regions		Governorates	
Algiers	104	31.3	Tadla-Azilal	111	Tunis	122
Setif	82	24.7	Casablanca	99	Ariana	40
Bejaia	75	22.6	Chaouia-Ourdigha	57	Sfax	40
Tlemcen	71	21.4	Rabat-Salé-Zemmour-Zaër	50	Sousse	40
			Other Regions	13	Nabeul	28
					Medenine	25
					Mahdia	20
					La Manouba	15
Total	332	100.0	Total	330	Total	330
				100.0		100.0

Source: Gubert and Nordman, 2008b, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

improve the ease with which migrants to return and contribute to home country development.

Return migration, reintegration, and entrepreneurship

The return migrant survey data was analyzed for several purposes: first to better understand what factors have been most important in helping support occupational upward mobility for returned migrants, and second, to better understand returnees' entrepreneurial behavior.

Determinants of return migration occupation mobility

Occupation mobility is important in two ways in relation to reintegration. First, for the sending country, upward occupational mobility ensures that return migrants will be able to make greater economic contributions upon their return. Without greater success in the labor market upon return, the gains from migration decline significantly. But secondly, for the individual, occupational status is a good indicator for overall social status, as it encompasses many other dimensions including living standards, prestige, and the like. As such, upward movement within occupations is a reasonable proxy for changes in individual economic well-being.

The return migrant survey data provides an opportunity to examine the conditions under which migrants experienced job mobility. Not all mobility is good, however, and thus a methodology for establishing upward mobility versus downward mobility was needed. The full methodology behind occupational classifications, along with the econometric model to test for occupational mobility, is presented in Appendix 9. The occupations from the North African sample were classified into 5 mutually exclusive groups or clusters, which can be ranked from 1–5, with 1 being the highest occupational status and 5 being the lowest:

- Group 1: Employers, or employees with secured jobs
- Group 2: Employees with secured part-time/short-term jobs
- Group 3: Small self-employed
- Group 4: Employees with unsecured jobs or unemployed
- Group 5: Family workers

Using this ranking of occupations, the notion of occupation mobility (either upward or downward) could be examined. Occupation mobility is unevenly distributed in the Maghreb. Algerian migrants are less likely than both Tunisian and Moroccan migrants to experience

upward mobility (17 percent, versus 30 percent for Tunisians and 26 percent for Moroccans). They are also more likely to withdraw from the labor market post-migration (36 percent, versus 22 percent for Tunisians and 21 percent for Moroccans).

To understand the forces behind occupational mobility in the Maghreb, a probit model was used to disentangle possible determinants of occupational mobility between pre- and post-migration periods. The estimation results for upward mobility are presented in Table 4.6 (the results for downward mobility can be found in Appendix 9).

The estimation of occupational mobility reveals some important results.

First, and most significant, mobility is in large part conditioned by the migrants' initial positions in the distribution of occupations. Those returnees who were family workers prior to migration or small, self-employed workers were much more likely to experience upward mobility than those who had secured part-time or short-term jobs (Group 2). Thus, and not entirely surprisingly, the greatest potential payoff to migration occurs for those at the bottom of the occupational spectrum.

Secondly, a high amount of remittances is significantly and positively associated with upward mobility for North African return migrants. The result suggests that the higher the remittances, the lesser the budget constraint after return, an important determinant of entrepreneurship behavior.

Third, the conditions of return play an important role in the North African migrants' professional trajectories. In particular, those migrants who returned for administrative reasons are less likely to experience an upward mobility. The effect is particularly strong in the case of Tunisian returnees. "Forced" returns are indeed likely to be unprepared returns and to negatively affect the migrants' professional reintegration in their home country. A symmetric result is found in the model of downward mobility.

Surprisingly, the migrants' receiving country has little effect on the probability of having upward/downward mobility, once their demographics, education, professional status, overseas stay and return characteristics are accounted for.

Characteristics and Determinants of Entrepreneurship

Migration and return can be an important mechanism for entrepreneurship. With (often) financial capital, business knowledge, and social networks created abroad, return migrants possess many of the key ingredients to small business creation, which can be a vital source of both growth and employment creation in the home country. Indeed, given many of the problems with the availability of credit in North African countries, the return of migrants with savings might be a particularly important means for small business investment (Figure 3.4).

More generally, understanding what facilitates self-employment and small business formation among return migrants is important to governments and international organizations, which aim to target schemes to assist return migrants in business development.

As with occupational mobility, to understand the determinants of business creation among return migrants, a probit version of a discrete choice econometric model was utilized to estimate the probability of entrepreneurship since return. The methodology and full results can be found in Appendix 10. From the econometric analysis, and also from descriptive analysis of the surveys, certain salient features about North African entrepreneurship emerge (Table 4.7).⁶⁴

First, one third of returnees did invest in projects and businesses after return although

⁶⁴ Two definitions for "entrepreneur" are alternatively used. In the restricted definition, an entrepreneur is defined as any individual who is either: an employer, a regular self-employed, or an irregular self-employed with at least one employee. In the extended definition, an entrepreneur is defined as any individual who is either an employer, a regular self-employed, an irregular self-employed with at least one employee, or anyone who invested in a project hiring at least one employee..

this share strongly varies between countries. Algeria clearly stands apart, with both a lower share of returnees being either employers or self-employed and a lower share of returnees being investors. This lower propensity to invest partly results from the fact that a significant share of Algerians within the sample went to France as early as in the 1960s and occupied low-qualified

positions that did not allow them to acquire any entrepreneurial skill. In addition, Algerian returnees are older on average and most of them are now retired.

Second, entrepreneurs among returnees are on average different in some ways from non-entrepreneurs: they are more likely to be

Table 4.6: Probit model of upward occupational mobility after migration with selection

	Pooled sample	Algeria	Morocco	Tunisia
Individual characteristics				
Female	0.139	0.062	-0.153	-0.589
Age at time of migration	0.016	-0.003	0.004	0.015
Born in urban area	0.048	-0.069	0.101	0.240
Bi-national	0.144	-0.425	0.157	0.947*
Family status prior to migration				
Married before migration	-0.233	0.099	-0.725	-0.906**
Household size before migration	0.005	0.006	0.018	-0.001
Occupational status prior to migration				
Was in Group 1	-0.440*	-0.531	-1.233*	-0.352
Was in Group 2	0.529**	0.608*	0.328	0.741*
Was in Group 3	2.705***	—	3.038***	—
Characteristics of overseas stay				
Worked during last migration	-0.044	-0.211	-0.195	-0.477
Trained during migration	0.158	0.287	0.026	-0.068
Diploma recognized (1=yes)	0.229	0.186	0.210	0.255
Migration duration (years)	0.016	-0.045***	-0.055**	0.017
Past remittance behavior				
Sent less than €500 a year	-0.057	-0.377	-0.476	-0.693*
Sent between €501 and €1000	0.111	0.532	-0.249	-0.100
Sent more than €1000 a year	0.393**	0.726	0.744	0.346
Return conditions				
Time elapsed since return	0.048***	-0.024	-0.005	0.056
Back to birth place	-0.002	0.376	-0.229	-0.263
Returned for administrative reasons	-0.719***	-0.583	-0.774	-1.043***
Location after return is capital	0.133	-0.950*	1.558**	-0.711*
Location after return is secondary city	0.042	-0.339	1.458**	-0.514
Algerian returnees	-0.073			
Moroccan returnees	-0.032			
Tunisian returnees				

Source: From Gubert and Nordman, 2008a, an output of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

male, are younger, and have medium education levels.

In addition, the probability of becoming an entrepreneur after return is significantly higher

for returnees with experience as employers or self-employed, for those who received vocational training while abroad, and for those who independently and freely chose to return. Again, the conditions of return play a significant role in the

Table 4.7: Probit model of becoming an entrepreneur after migration (marginal effects)

	Algeria	Morocco	Tunisia
Demographic characteristics			
Female	-0.138***	-0.254***	-0.341***
Age	-0.002	-0.003	-0.032***
Region of origin: urban	0.050	0.035	0.182**
Bi-national	0.271**	0.116	0.160
Education (reference is none)			
Primary	0.203*	0.225**	0.445***
Preparatory	0.291**	-0.170	0.519***
Secondary	0.298***	0.186*	0.370***
University	0.468***	0.252**	0.297**
Higher diplomas	0.255**	-0.034	-0.049
Was an entrepreneur before leaving	0.266***	0.186*	0.176*
Characteristics of overseas stay			
Trained during migration	0.087	0.209**	0.179**
Duration of last migration (years)	-0.001	0.008	0.019***
Sent less than €500 a year	0.108	0.048	-0.025
Sent between €501 and €1000	0.071	0.006	0.153
Sent more than €1000 a year	0.065	0.266***	0.253***
Conditions of return			
Time elapsed since return	0.021***	0.016*	0.053***
Forced return	-0.077	-0.195***	-0.168*
Plans to re-migrate	-0.108**	-0.102*	-0.113*
Back to birth place	0.017	0.116*	0.056
Back to capital city (ref. is small city)	-0.132**	0.234***	-0.171**
Back to secondary city (ref. is small city)	-0.071	0.189*	-0.016
Destination country (ref. is France)			
Germany	0.131	0.032	0.317**
North America	0.081	0.194	-0.228
Other Europe	0.108	0.032	-0.064
Spain	-0.014	0.063	
Italy	0.164	0.229**	-0.080
MENA	0.011		
Unknown		0.323**	-0.251

Source: From Gubert and Nordman, 2008b, an output of the EC-Funded World Bank Program of International

future contributions return migrants can make at home.

Surprisingly enough, there is no clear correlation between migration duration and entrepreneurship even after controlling for the potential endogeneity of migration duration.

Entrepreneurs do not form a homogenous group, though, and sharp differences emerge when employers and self-employed are considered separately. Compared to their self-employed counterparts, employers appear much more educated on average, are more likely to reside in urban areas after return, have received more training during their migration stay, and the vast majority have deliberately chosen to return.

Third, projects or businesses owned by returnees appear to be concentrated in a few sectors. Overall, the wholesale and retail trade sector ranks first, followed by hotels and restaurants, agriculture, and the manufacturing and construction sectors. This hierarchy is roughly the same in all countries. Most enterprises owned by return migrants are rather small, with less than 10 employees, and were created using the returnees' own savings. Whatever the country, administrative constraints rank first among the difficulties faced by investors, followed by excessive competition and lack of capital. Turning to non-investors, access to financing is considered to be the biggest impediment in all three countries, especially in Morocco.

Policy alternatives for North Africa and Europe

The empirical evidence on return migration is thin, and much greater knowledge will be needed to be able to formulate policies which can ensure greater contributions of return migrants to development (as well as facilitate their re-integration into labor markets). But there is initial evidence to suggest that North African returnees have an ability to both experience upward job mobility and to create small or medium businesses and generate jobs, factors which clearly impact the ultimate benefits a country can expect to receive from its returned migrants. But returnees do not

form a homogenous group, and some factors may have particularly important influence over how well returnees do upon return.

Both job mobility and entrepreneurship are associated with the conditions of return, with forced return significantly lowering the probability for returnees to experience occupational mobility or to start businesses. While the return of migrants is a cornerstone of European states' rights to determine who shall enter and remain on their territory, the conditions of return may have a strong influence over the ability for return migrants to find economic success. Assisted voluntary return programs (IVR), which currently operate out of some 18 countries in Europe, have been designed to increase return for irregular migrants, but to date, the success of these programs is doubtful. The OECD (2008b, 194) concluded:

Despite the many initiatives and sums spent by host countries, assisted voluntary return programs are of limited impact, at least when assessed in the light of the numbers of people involved and in comparison with return flows as a whole. This no doubt reflects the fact that return is only an option if the political, economic and social situation in the home country is restored and stabilized. Yet even in this case, AVR programmes will not make much difference for migrants unless financial constraints are the primary barrier to their return.

The evidence suggests entrepreneurship is influenced both by training received abroad and financial resources brought home. This suggests potential interventions by host countries. Small business start-up programs with market studies, micro-credit, and training components could be tested to ascertain if they could ease constraints on entrepreneurship that arise from capital market imperfections or other market failures, such as lack of information. The French Development Agency is presently preparing to launch an experimental program aimed at helping migrants from the Maghreb to set up their business. For these programs to be effective, however, local

governments should also create better conditions for returnees to integrate and stay in their home countries. Moreover, training upon return may be equally important (and beneficial).

Finally, savings—or start-up capital—are essential for both entrepreneurship and for upward job mobility upon return. Like the analysis of the relationship between remittances and growth,

the evidence suggests that remittances (or accumulated savings abroad) are important for future contributions of migrants, in part because financial markets in the region are weak. Understanding that, programs and arrangements to enhance access to finance among return migrants (but more generally, improving access to finance in the economies broadly) need to be included as key among migrant reintegration objectives.

European Migration Policy, Labor Market Conditions, and Migration Outcomes

The development impact of migration is directly influenced by the experience of migrants abroad. The contributions of North African migrants to home-country development over the migration life cycle—through remittances, knowledge transfer, and investments while abroad, and through occupational mobility, knowledge transfer, investment, and institution building upon return, will be largely determined by host country labor market conditions for migrants. These conditions will not only determine the amount migrants can remit, they will also affect the contributions of migrants upon return, through both the quality of job experience and training received.

Increasingly, it is understood that the experience of migrants abroad critically depends on the overall policy and institutional environment for migrants. Much of the European focus on migration has centered on security, national identity, and vulnerability associated with dependence on immigrants for entire productive sectors. Immigration is often blamed for high unemployment, for draining government welfare programs, and for increasing inequality in host countries. As a result, there is no strong political constituency for mass immigration. At the same time, the need for less-skilled immigrants in Europe, based on labor demand, is clear.

The dichotomy between stated European migration policy objectives to control mass immigration and the ambivalence toward outcomes (at least regarding less-skilled illegal immigration), has created inherent distortions which have had

an impact on both the incentives for migrants to return, and also the ability for North Africa's migrants—as diaspora and upon return—to contribute to home country development.

Immigrant labor in Spain, one of the countries examined more closely under this research program, has contributed positively to growth through both increases in the working age population and increased employment. Although migration has been associated with lower productivity (with immigrants primarily working in low-productivity sectors), migration has also allowed for strong increases in native female labor force participation. Thus, by taking on low productivity jobs, migrants have opened up the possibility for women to take up work, which in turn may enhance productivity in the long term.

In both Spain and the Netherlands, policies to limit less skilled migration have had little impact on the flows, but they certainly have had repercussions on the status of migrants. In the case of Spain, rigid controls on formal labor migration have resulted in a burgeoning of irregular workers entering the country. In the Netherlands, on the other hand, as opportunities for labor migration waned, family and asylum migration grew rapidly. In both countries, migration flows have ultimately been largely determined by labor demand conditions. While policy has not achieved its ultimate objectives regarding low-skilled migration flows, it has resulted in growing informality, lower productivity, and reduced access to social insurance programs.

Interactions Between Migration Policy, Migration Flows and Development Outcomes

Migration flows and the situation of migrants are affected by a range of policies, both in sending and receiving countries. Perhaps most obviously, migrants are affected by migration policies in host countries which dictate who can come and who cannot, by integration policies, and by border control and protection policies that affect the scope for undocumented migration. But migrants are also impacted by a host of policies outside of actual migration policy, including those relating to host countries' labor markets, social welfare, financial sector, international trade, and investment and development cooperation policies, to name a few. Combined, these policies—mixed with underlying labor market conditions—have bearing on the types of migration flows, the ability for migrants to participate and benefit from growth in host countries, and the contribution migrants are able to make to sending country development, both when abroad and at return.

Migration policies in host countries reflect, at least in part, concerns over migrant effects on the host country. Migration flows can impact host countries through a variety of channels, including economic output, poverty, labor conditions of native workers, social protection systems, security, and cultural and national identity, among others. Many of the effects on host countries are positive, but there are sufficient examples of deleterious effects, as well. The nature of this report precludes a thorough review of the complex and changing factors that enter into host country migration policy formation. A wide theoretical and empirical literature on both how migration policy is formulated as well as the impacts of migration on host countries can be consulted for a better understanding of the challenges host countries face in formulating migration policy.⁶⁵

The architecture of migration

The “migration architecture” includes a broad range of policies and arrangements that have impact on the migration experience. Table 5.1 details some of the key elements that comprise

the overall migration architecture. Each element can be affected by the unilateral policies of receiving-country governments, the unilateral policies of sending-country governments, or by the negotiated bilateral/multilateral policies of senders and receivers.

Controls are the immigration and emigration policies that directly determine who is allowed to move. Receiving country immigration policies are the dominant feature of the architecture, but other policies matter as well. Policies that affect the formation of diaspora networks or their links to the home economy (*connections*); policies that provide assistance for return or help reintegrate returnees into the home economy (*circulation*); policies to invest in human capital in sending and receiving countries (*creation*); policies to compensate sending countries for losses or provide a share of gains from international migration (*compensation*); and policies to attract or retain international talent (*competition*), all have a role to play in the migration experience.

Rich-country migration policy features

A review of labor receiving OECD countries for this migration program⁶⁶ reveals four basic features characterizing migration policy: first, it is *restrictive*—only a relatively small fraction of poor-country residents have the option of becoming a rich-country resident. It is *selective*—routes for legal access are heavily tilted towards the highly skilled. It is *rigid*—governments generally emphasize permanent movement over circulation. And it is *ambivalent*—many governments combine restrictive policies (especially towards the unskilled) with a measure of forbearance towards illegal migrants.

The *restrictiveness* of receiving country migration policy may not be apparent when one considers that OECD economies on average have a 12 percent foreign-born population,

⁶⁵ See, for example, Zimmermann 2005; Tranaes and Zimmermann 2004.

⁶⁶ McHale, 2009, an output of the of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Table 5. 1: The International Migration Architecture Examples

	Unilateral Receiving-Country Policies	Unilateral Sending-Country Policies	Bilateral/Multilateral Policies
Controls	Immigration policies (e.g., selective issuance of permanent and temporary visas)	Emigration policies (e.g., refusal to issue passports)	Free movement agreements (e.g., access policies for EU accession countries or NAFTA-related TN visas)
Connections	Cooperation with diaspora organizations in allocating development aid	Government coordination of diasporas; matching subsidies for diaspora investments	Inter-government cooperation in coordinating diaspora organizations; multilateral lender support of diaspora organizations
Circulation	Assisted return programs; ensuring reasonable probability of re-entry; tax withholding conditional on return	Targeted return inducements; programs to leverage the human, financial and social capital of returnees	Free movement agreements; inter-government cooperation in returning illegal migrants
Creation	Forward-looking education policies to avoid (reoccurring) “crisis” foreign recruitment; policies towards foreign student recruitment	Education investment responses in anticipation of emigration (either more public investment to compensate for foreseeable losses, or less investment due to lowered social return)	International student exchange programs
Compensation	Payroll tax sharing for temporary migrants; migration-related development assistance	A Bhagwati tax on overseas income; conditional tertiary education funding that becomes repayable on emigration	Bilateral cooperation in migrant taxation schemes; migration-related multilateral development assistance
Competition	Tax and benefit policies to provide better “value propositions” for attracting international talent; immigrant integration policies	Public sector working conditions to retain health and education professionals; broader institutional reform to stem talent exodus	Inter-government agreements to refrain from active recruitment of critical personnel such as health care professionals

hardly suggestive of closed borders. But legal access channels to rich-country labor markets do not come close to meeting the demand. The overwhelming majority of the world’s citizens do not have the option of arbitraging the large income gaps that exist between poor and rich countries—opportunities that many would take if they could.⁶⁷ In terms of *selectivity*, English-speaking, post-graduate degree holders with a handful of years of relevant professional experience are significantly more likely to have access to one or more rich-country labor markets. This access is most explicit in the case of countries with formal points systems, but is also present in (skilled) employment-based systems. In contrast, there is a dearth of access routes for the lesser skilled. Rich-country systems exhibit *rigidity* because they are primarily designed to facilitate permanent settlement. While temporary access routes are growing in importance, they are often

seen as part of the broader process of attracting and selecting highly skilled permanent movers.

And finally, to some degree, rich-country migration policies are marked by a certain degree of *ambivalence* toward low-skilled, irregular migrants. On the one hand, migration policy is aimed toward attracting higher skilled individuals, but on the other hand, countries take few efforts to make illegal residence less attractive—for example using harsh employer sanctions. The ability for low-skilled labor to continue to live and work in rich countries illegally, with migrants living alternatively on the margins of society—reflects a general ambivalence toward the tension between the clear demand for low-skilled laborers in their economies and their

⁶⁷ Illegal flows provide one indicator of this unmet demand.

policy stance designed to exclude them. It is that ambivalence in receiving country migration policy that has perhaps the greatest distortive effects on achieving better migration outcomes (both in receiving and sending countries).

Case studies of the migration architecture in the Netherlands and Spain reveal a few insights into the dichotomy between *de jure* migration policy objectives and *de facto* migration outcomes, which have bearing on North African migration and development.

The Migration Architecture and Labor Market Conditions in Spain

During most of the 1990s, Spain was a major sender of migrants, who headed for Latin America and Northern Europe. However, since the turn of the century, the inflow of migrants has been so intense that Spain has evolved into one of Europe's key immigrant countries. After 2000, the inflows have reached an average of 600,000 new arrivals per year and the number of immigrants increased from 0.9 million (2.2 percent of the population) in the year 2000 to 4.7 millions (10.5 percent of the total population) in the year 2007. Such growth rates—a five-fold increase over seven years—has no parallel in any other of the OECD countries for the last decades. In fact, 10 percent of all the immigrants to OECD countries for the period 2000–2005 chose Spain as their destination country. The—by far—most important category of immigrants is Latin Americans followed by other EU members and Northern Africa.

This large and relatively sudden influx of migrants has, in turn, meant that the population growth rate in Spain has been higher than at any point in time for the last hundred years. In fact, the Spanish population increased more in the period 2000–2007 (by 4.6 million) than in the previous two full decades (by 3.4 million people).

As in most European countries, immigration policy in Spain has mainly been concerned with controlling, rather than managing, the inflow of immigrants.⁶⁸ The series of different legislative measures have proved relatively ineffective when

dealing with the actual phenomenon of immigration, especially after the year 2000. This has resulted in the cyclical creation of large pockets of irregular immigrants, which, from time to time, have had to be incorporated into the system by means of extraordinary regularization processes, as there was no other policy mechanism to deal with them on an individual basis.

Every time in the past 30 years that new immigrant legislation had been passed, there has been a corresponding process of regularization of immigrants. From the approval of the National Law of Foreigners in 1985 up until now, there have been six different episodes of extraordinary regularizations, taking place in 1986, 1991, 1996, 2000, 2001, and 2005 as shown in Table 5.2. All these processes established certain prerequisites and set limited application periods for all irregular immigrants. From the year 2000 onwards, this process of extraordinary regularization has become more relevant in terms of the number of applicants and concessions. For example, from the year 2000 to the year 2002, when the fourth and fifth of these extraordinary regularizations took place, the number of residents increased by almost 500,000. In the last of this extraordinary regularization in 2005, four years later than the previous one, the number of successful applicants was nearly of 550,000 immigrants. Since 2000, hence, over one million migrants have been regularized in Spain.

The Spanish experience points to repeated failures of successive governments since 1985 to adjust to the realities of large-scale immigration; large pockets of irregular immigrants continued to exist. Different legal frameworks proved to be too rigid and ineffective to deal with the large number of immigrants coming to Spain. This has resulted in large inflows of regular and irregular migrants.

There are three main reasons why so many immigrants have decided to come to Spain without appropriate residence permits in the past:

⁶⁸ Appendix 10 has a review of the key phases of migration policy formation in Spain over time.

Table 5.2: Legislative development and regularization processes in Spain

Year	Legislative reform	Focus	No. regularized immigrants	GDP growth*	Unemployment rate
1986	LOE 1985	<ul style="list-style-type: none"> Tight control of inflows Speedy deportation 	38,181	2.4%	20.6%
1991	—	<ul style="list-style-type: none"> Extraordinary regularization 	109,135	3.7%	16.3%
1996	Reglamento 1996	<ul style="list-style-type: none"> Scale of offenses Introduction of work and residence permits 	21,283	2.5%	21.7%
2000	LODYLE 2004/4	<ul style="list-style-type: none"> Introduction of family reunification Access to health care and education extended to irregular immigrants 	169,157	4.8%	13.5%
2001	LOE 2000/8	Same as before	310,327	4.5%	10.3%
2005	Reglamento 2004	<ul style="list-style-type: none"> New legal idea of <i>arraigo laboral</i> (2 years residence and 1 year work) New legal idea of <i>arraigo social</i> (3 years of residence) More flexible and realistic recruiting policy at the home countries 	577,923	3.3%	8.4%

Source: Conde-Ruiz et al 2008, an output of the of the EC-Funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Note: See Appendix 11 for review of key Spanish immigration policy phases.

*average of the previous 5 years.

i) only option—no legal labor migration options existed to respond to labor demand in Spain; *ii*) access to the labor markets—immigrants can find work in the informal sector in Spain; *iii*) expectations effects due to previous regularizations—migrants come with the expectation that they will be able to regulate their situation in the next extraordinary regularization process.

With regard to integration of migrants into the Spanish economy and society, the legal framework has been progressively adapted to protect the rights of both legal immigrants and irregular immigrants, including through laws penalizing discrimination against immigrants, as well as ensuring irregular migrants the right to medical assistance, access to education, and legal counsel when dealing with the authorities.

The nexus between policy, markets, and migration outcomes

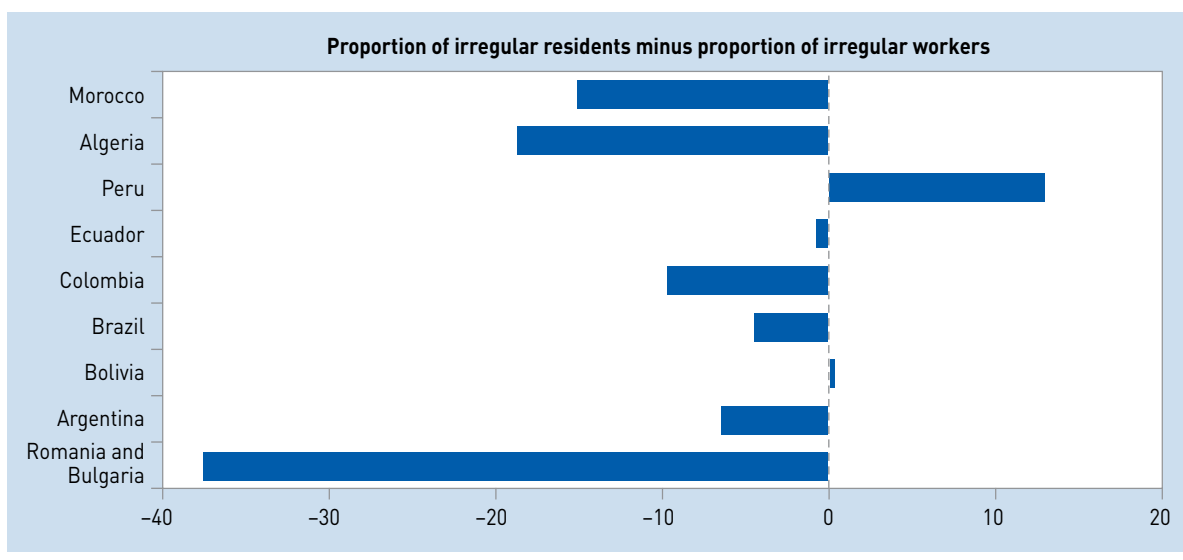
It is not possible to empirically link North African migration outcomes to Spain's migration policy. However, some consequences of Spain's migration architecture are evident. Rigid controls on

legal migration for low-skilled workers, combined with the ambivalence toward their existence in the economy (demonstrated through repeated regularizations) and continuing demand for less-skilled workers, have contributed to the steady growth in irregular migrants in the Spanish economy. Without access to formal labor markets, this has led to increased informalization of the migrant labor market.

Estimates of informality, based on employment surveys and social security records, suggest that migrant workers are more prone to be working in the informal sector than natives. Latin Americans who reside illegally can clearly not hold legal jobs. Rumanians and Bulgarians have legal access to living in Spain but cannot work in the country due to the moratorium imposed on recent EU members' access to labor markets. The inherent tension creates pressures for informal work.

But in addition, and surprisingly, many North Africans (predominantly Moroccans, but also Algerians), who generally reside *legally* in Spain and so unlike the former group would have

Figure 5.1: Difference between the proportion of “irregular residents” and the proportion of “irregular workers” in Spain by nationality, 2007



Source: Conde-Ruiz, et al. 2008.

the right to work, have a relatively high share of informal sector work. Only about 5.5 percent of Moroccans were in an irregular situation in Spain in 2007 (compared with 74 percent of Bolivians, 63 percent of Brazilians, and 51 percent of Argentinians). The explanation for this puzzling result is that North African (mostly Moroccan) migrants, because of their skills profile, tend to work in a limited number of sectors where, by consequence, informality is high. Competition for jobs therefore forces North African’s legal migrants to accept poorer working conditions, including informal jobs. Thus, the inability for Spanish migration policy to stem the large inflows of irregular migrants impacts the wellbeing of North African immigrants, because when working in the informal sector they cannot have access to social insurance (pensions, unemployment benefit) and active labor market programs.

The impact of migration on economic growth

Migration policy has in contributed to larger number of irregular migrants than intended in Spain, but policy has not been able to stem the underlying demand for low-skilled migrants. And, with the availability of low-cost, less skilled labor,

the removal of some of the supply constraints has had a positive impact on Spanish economic growth in recent years.

Immigration can impact growth through three major channels: productivity growth, increases in the employment rate, and increases in the working age population. Previous studies of growth in Spain have concluded that immigration has had a positive impact on growth in Spain through the effect on the working age population (they are younger) and on the employment rate. The impact on productivity growth (i.e., GDP per worker) has been negative, however. This is not surprising, as immigrants are disproportionately employed in low-productivity sectors. However, and additionally, immigrant workers have “freed up” native workers in Spain to move to more productive sectors, improving native productivity (see Box 5.1 for a summary of the main findings on immigration and growth in Spain).

The improvements in the demographic factor (the proportion of the population that is of working age) can be seen in Figure 5.2. In 2007, more than 86 percent of immigrants were between 16 and 64 years old, compared to 66 percent of natives. In the absence of immigration inflows, the

Box 5.1: Migration and Economic Growth in Spain

The simplest way to assess the direct impact of immigration on regional and national economic growth is to examine the development of the three factors that completely determine its development. By means of an accounting identity, the per capita GDP can be broken down as the outcome of: i) productivity -*Pr*- (i.e.

production per employment unit); ii) employment rate -*ER*- (i.e. ratio between the employed and the working age population from 16 to 64 years old); iii) the demographic factor -*DF*- (the ratio between the working age population and the total population).

$$\frac{GDP}{Pop} = \frac{PIB}{L} \cdot \frac{L}{Pop^{16-64}} \cdot \frac{Pop^{16-64}}{Pop}$$

GDP per capita
Productivity (Pr)
Emplotment Rate (TE)
Demographic Factor (DF)

The impact of immigration on the per capita income growth rate: different studies

	% GDP per Capita	Immigration			Productivity
		Total	Demographic F.	Emplotment R.	
OEP (2006): 2001–2005	1.60	0.40	0.40	0.20	-0.20
Bank of Spain (2006): 2000–2005	1.70	0.40	0.31	0.27	-0.18
Conde-Ruiz <i>et al.</i> (2008): 2000–20006	1.78	0.05	0.35	0.21	-0.51

The impact of immigration on GDP growth rate: different studies

	% GDP	Total	GDP pc	Population
OEP (2006): 2001–2005	3.10	1.60	0.40	1.20
Bank of Spain (2006): 2000–2005	3.30	1.60	0.40	1.20
Conde-Ruiz <i>et al.</i> (2008): 2000–20006	3.34	1.3	0.05	1.25

The differing results between these studies can be attributed to differences in the period under examination (our analysis includes a longer period) and the

methodology employed to calculate the impact on productivity.

Source: Conde-Ruiz et al (2008)

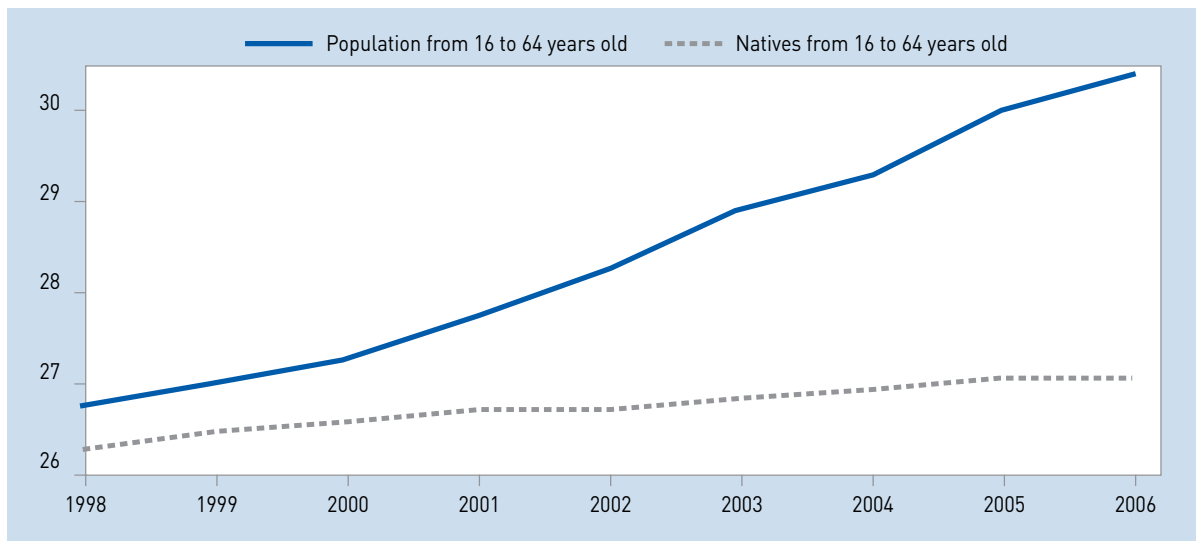
number of individuals aged between 16 and 24 would have decreased by as much as 1.5 million in the last seven years.

But immigrants have also increased growth in Spain through the employment rate. First, they have increased the total Spanish employment rate because they have higher employment rate than natives (68.6 percent versus 66.2 percent). This is mainly because almost all immigrants come to Spain to work—the activity rate of immigrants is almost 10 percentage points higher than natives. But additionally, the intensive immigrant inflow to the Spanish labor

market occurred in parallel with: *i*) a decline in unemployment among Spaniards; *ii*) an spectacular increase in the female activity rate; *iii*) a stable level of fixed-term contract rate at around 30 percent. In fact, unemployment rates fell between 2000 and 2006 in virtually all Spanish regions, while at the same time female activity rates increased universally—especially in high immigration regions.

There are several reasons to believe that immigrants have contributed to the increased employment among natives. First, immigrants have increased the availability of domestic helpers and

Figure 5.2: Evolution of the Working Age Population in Spain (Natives vs. Immigrants, in millions)



Source: Conde-Ruiz, et al. 2008.

reduced the cost of this service, thus facilitating the increase of female labor participation. OEP (2006) has estimated that for every point increase in the immigration rate, the female activity rises by 0.6 points, and that over one-third of the 12 percentage points by which the female activity rate has increased in the last decade is attributable to immigration. Thus, by taking on low productivity jobs, migrants have opened up the possibility for women to take up work, which in turn may be productivity enhancing.

Second, immigrants have reduced structural unemployment (that is, non-accelerating inflation rate of unemployment (NAIRU)) by reducing the mismatch between labor supply and demand. In the context of a reduction in the unemployment rate like that observed since the mid 1990s, the OEP report (2006) suggests that the effect of immigration on the NAIRU is large and negative, amounting for nearly 2 percentage points' reduction in the last ten years.

Third, immigrants have probably helped sectors with demand restrictions. Compared to natives, immigrants are more concentrated in construction, a sector that was growing faster than the total economy over the year 2000–2006.

Immigration has a negative impact on labor productivity (GDP per worker) in Spain. Conde-Ruiz et al. (2008) show that in regions where growth rate of employment is high (i.e. regions that receive a lot of immigrants), the productivity growth rate is low and vice versa. The elasticity of employment to productivity growth is -0.68 .

The accounting explanation is easy; regions that have received more immigrants (i.e. the average growth rate of employment is high) are the same that have experienced a lower productivity growth. However, the economic interpretation is more complex. There are two potential explanations: i) regions that attract relatively more immigrants experience falling labor costs; the economy becomes more labor intensive, and therefore productivity goes down; or ii) regions which have adopted technological changes increase productivity but do not generate labor demand for immigrants (because immigrants usually do not have sufficient skills or enough human capital to work there).

The characteristics of labor immigrants differ from those of natives in at least three dimensions that indicate that they are working in lower

productivity sectors and occupations: type of contract, wage levels, and job qualification.

First, their type of contract indicates they are in lower productivity occupations. The incidence of fixed-term contracts is higher among immigrants than among natives. According to the LFS, 55 percent of immigrants have a temporary contract compared to 28 percent for natives. Fernandez and Ortega (2007) show that the incidence of temporary contracts is much higher for newly arrived male immigrants than for comparable natives, while it is very similar for newly arrived female immigrants and their native counterparts. The number of immigrant workers with temporary contracts has increased by more than 1.1 million in the period 2000–2007, but at the same time the temporary contract rate of the economy has remained constant. In all, this suggests that immigrants have been substituted for natives in terms of temporary contracts.

Secondly, different researchers have also shown that immigrants receive, on average, a wage that is 25 percent lower than natives. When adjusting for training and experience, the differences are not as large, but are still positive. Simón, Ramos y Sanromá (2007) find that legal immigrants from developing countries exhibit lower mean wages and a more compressed wage structure than native-born workers in Spain, and that disparities can be explained by their different observed characteristics (mostly due to occupational and work-place segregation). More specifically, the Bank of Spain (2005) estimated the unexplained differences to be just 7 percent; Simón, et al. (2007) obtained similar results. Canal-Dominguez and Rodriguez-Gutiérrez (2007) find that the unexplained component of the wage difference between native and immigrant workers decreases along the wage distribution, even becoming negative at the end. They also detect that the wage gaps between immigrants and natives are largest for the low skill workers.

Finally, most immigrants are over-educated for the job they are doing. According to OECD data, 42.9 percent of immigrants have higher levels of education than required for their jobs, while 24.2 percent of the natives are overquali-

fied. Fernandez and Ortega (2007) similarly show that immigrants are much more likely to be overeducated at arrival than comparable natives. They also find considerable differences in the magnitudes of the gap across nationalities: *i)* the native immigrants differences are largest for East European immigrants, who are also the immigrants with the highest educational levels; *ii)* the over-educational gap is smaller, although still sizable, for Latin American and African immigrants. It is important to point out that by education level, the distribution of immigrants does not differ too much with respect to natives. Concretely, immigrants from outside the European Union (but including Rumania and Bulgaria) are proportionally more likely to have primary and secondary education and less likely to have tertiary levels of education, but the differences are quite small.

Thus, while Spanish productivity has declined with immigration, the decline can be explained by labor immigrants' characteristics in the Spanish labor market (low productivity, precarious jobs, and over-qualification). However, this negative impact may be a short-run phenomenon. There are, in fact, two channels through which the immigrant's productivity could increase in the future. First, the literature on the "*assimilation of immigrants*" which analyzes the speed of "*catch up*" of immigrants' characteristics to those of natives (Adsera and Chiswick 2007; Peracchi and Depalo 2006), has pointed out that the longer that immigrants reside in the country, the smaller the differences between natives and immigrants become, and that differences disappear altogether after 15 years. Fernandez and Ortega (2007) find that, compared to natives, immigrants have initially higher participation rates, but also higher unemployment rates, and higher incidence of over-qualification and of temporary contracts. However, five years after their arrival, participation rates start to converge to native rates, and unemployment rates decrease to levels even lower than those of natives. Second, the intense immigrant inflow experienced in such a short time period and fully absorbed by the labor market has reduced the growth rate of the capital/labor ratio and consequently the productivity growth

rate. In the future, as long as the investment in productive capital increases, the productivity (that is, the wages) of all workers (included the immigrants) will increase as well.

The Migration Architecture of the Netherlands

The Netherlands immigration experience is similar to that of some other Western European countries, marked by large scale labor immigration in the 1960s, temporary workers who became permanent, family reunification beyond 1970s, and subsequent increasing efforts to reduce irregular migration.

During the 1960s, the Netherlands concluded labor migration agreements with several labor-abundant countries around the Mediterranean: Spain, Portugal, Turkey, Greece, Morocco, Yugoslavia, and Tunisia. This resulted in increasing inflows of both regular and irregular migrants, and with the acceptance throughout society that growth required foreign labor.

The 1973 oil crisis had a very strong negative effect on the Dutch economy, especially in sectors like manufacturing and construction, both with a strong presence of foreign workers. Many guest workers left at that time. However, those from poorer countries, including Morocco, had less incentive to do so, as the economic and political situation in their home countries was unstable. Although the recruitment policies assumed that these workers would leave the Netherlands once their services were not needed anymore, this did not happen to the extent predicted. Additionally, like any other unemployed person, guest workers were entitled to income-replacing social security benefits, despite being unemployed, providing an additional incentive to stay.

During this time, migration policy centered on three themes: limiting labor migration, focusing on migrating jobs through trade and development policies, and an idea that policies were needed to move the Dutch economy away from any dependence on low qualified foreign workers. The Den Uyl government, for example, set itself an ambitious objective of changing the economic

system in a way that labor intensive industries are placed in the South instead of in the North. To accomplish that aim, the government would strive to liberalize trade policies of developed countries and selectively stimulate industrialization in developing countries. Thus, the Dutch policy in the 1970s was aimed at reducing the push factors for migration in poor countries by improving the work—and income—options of the potential migrants in their home countries, and thereby discouraging immigration in the Netherlands.

In the attempt to minimize the number of foreign workers, and due to the view that labor migration would be of a temporary character, more effort was placed on the actual realization of returning migrants back to their home countries. The government proposed to give a bonus for each worker that would voluntarily and permanently return. After a strong criticism against such a premium, the government dropped the proposal. Nevertheless, attempts to encourage return migration took hold in a number of projects.

From temporary to permanent residents

By the end of the 1970s, however, it became clear that many immigrants would stay in the country despite government policy in the in that decade to facilitate return. As a consequence, the policy at the time could best be classified as categorical welfare policy, with the aim to provide the necessary services such as housing and cultural programs to facilitate temporary stay and later return. As the preservation of immigrants' own ethnic identity was given special emphasis, the government supported ethnic cultural education and mother-tongue teaching, to facilitate reintegration upon the migrants' (expected) return to their home countries. Also, given the lack of coordinated central government intervention, many private institutions were set up, and partially subsidized by the government, to provide welfare services to the various immigrant groups. Also, employers, in many cases, provided housing for guest workers and their families.

However, with recognition of the position of immigrants in the country, debates began about the need to acknowledge permanent residence for some immigrant groups and the need to introduce integration policies for them (rather than reintegration policies). As many ethnic minority groups were facing a number of problems such as a weak legal status, high unemployment rates, low education, and discrimination, they became the target population of an extensive catalogues of policies aimed at ethnic emancipation. By the early 1980s, the government had redefined its perspective on immigration, acknowledging that the Netherlands had indeed become an immigration country and there was need for an effective policy providing a regulatory framework for the large populations of foreigners residing non-temporarily in the country and facing persistent socio-economic disadvantages.

The main policy objective was to reduce socio-economic disadvantages of the members of minority groups and to “emancipate” minority groups through the creation of new ethnic communities (*pillars*) in the Dutch society. This involved large-scale government funding of minority organizations, ethnic language and culture education institutes, and ethnic radio and television broadcasting channels, all with the goal of fostering emancipation. During the 1980s numerous projects on the national as well as on the local level were started to provide better educational opportunities, improved chances on the labor market and access to social housing (previously impossible). The overarching aim was to provide ethnic minorities, as separate groups, with an equivalent status and equal developmental opportunities as the Dutch. The policy rested on the improvement in their legal status and their socio-economic positions as well as on the preservation of their own cultural and religious practices. It was expected that this positive identification would contribute to a better integration of the ethnic groups (and, by implication, of the individuals) into Dutch society. In return, the immigrants were expected to acquire the basic skill (language) that would allow them to function well in Dutch society.

A number of notable projects were setup in the 1980s and 1990s toward improving migrant civic and economic integration, including projects to enhance literacy and educational activities for ethnic minorities and Dutch language training, and civic orientation classes.

Since the mid 1980s, the government also undertook initiatives to improve the weak labor market position of ethnic minorities. And finally, during the same decade, the government decided to delegate the task of disbursing residential concentrations of disadvantaged minorities to local authorities, in the light of the ineffectiveness of central housing policies. This has led to the implementation of housing dispersal policies to fight housing deprivation of among ethnic minorities in numerous municipalities. Despite the general ineffectiveness of central housing policy, a fundamental change was introduced by the central government through a legislative revision in 1981 providing legally residing foreigners full access to social housing. As social housing accounts for the larger share of all housing in big Dutch cities, this measure improved the housing situation of minorities considerably (Penninx 2006).

Doors are opened, and difficult to close

Part of the new integration policy included enhanced opportunities for family unification. Immigration for family reunification and formation reasons was considered functional to the integration of the earlier labor migrant. It was thought that families were considered to integrate more easily in the local ethnic community than single men and that these ethnic communities would become an integral part of the Dutch society.

At the same time, the Netherlands also introduced much stricter control on labor migration, and later on immigration for family and asylum reasons. Visa requirements were introduced for countries with high immigration potential, such as Morocco, Turkey, and Suriname. In the 1990s, family unity was no longer considered as an asset to migrant integration, but more as a curse. The Law on Integration Abroad (*Wet Inburgering in het Buitenland*) from 2005 clearly sees family migration as a potential threat to integration.

The declared goal of the “civic integration test abroad,” which is required for migrants entering the country on the grounds of family reunification or family formation, is to improve the integration conditions for new migrants. Though the reduction of the number of immigrants allegedly is not the primary goal of the policy, the government still expects a drop in family migration. That, in fact, happened when the number of applicants for family formation dropped significantly in 2006.

As for labor migration, the basic policy of the Dutch government (since the turn in 1973), is to not allow permanent settlement unless there are compelling reasons to do the opposite (Doomernik 2005). Different from France and Germany where a formal recruitment stop was introduced, labor migration continued to be possible even after the Netherlands proclaimed itself closed to labor migration. First, immigration was regulated by the Foreign Employees Act from 1979 to 1995 (Wet Buitelandse Werknemers) and from 1995 onwards through the Foreign Workers Employment Act (Wet Arbeid Vreemdelingen) (Bruquetas-Callejo et al. 2007). The admission was a temporary matter and only the workers that were already in Europe were admitted. Employers were only allowed to employ workers from outside the European Economic Area (EEA) if they could prove that suitable employees could not be found within this area (Roodenburg et al. 2003). Although the end of labor immigration was proclaimed, the above-mentioned policies continued to channel the entrance of those workers that were considered beneficial to the Dutch labor market.

The main policy instrument that currently regulates employment of “third country nationals” is the Foreign Workers Employment Act (WAV). The Act is entirely demand driven, meaning that employers are responsible for obtaining the work permit. Preferential treatment is given to “priority labor supply,” which means that a third country national can only be hired when the employer can demonstrate that every possible attempt has been undertaken to employ a person of Dutch nationality or the nationality of one of the countries within the EEA. Every ap-

plication for a work permit relates to a specific job and requires an individualized labor market test.

With regard to irregular migrants, meanwhile, the growing concerns in the Netherlands about undocumented migration materialized in “the linkage act” in 1998 which completely excludes irregular migrants from public services including housing, secondary or higher education, and health care, by preventing them from obtaining a social security number (which is a prerequisite for regular employment, social security benefits, and subsidized housing).

How migration has adapted to changing policies

Like Spain, the Netherlands presents an example of a country struggling to adapt to migration flows. Migration policies have been largely reactive, with economic and political realities driving migration flows, and migration and integration policies readjusting to these realities with a somewhat trial-and-error approach. It also points to the problems associated with developing the right mix policies for circular migration, balancing the desire for circularity with the desire for integration.

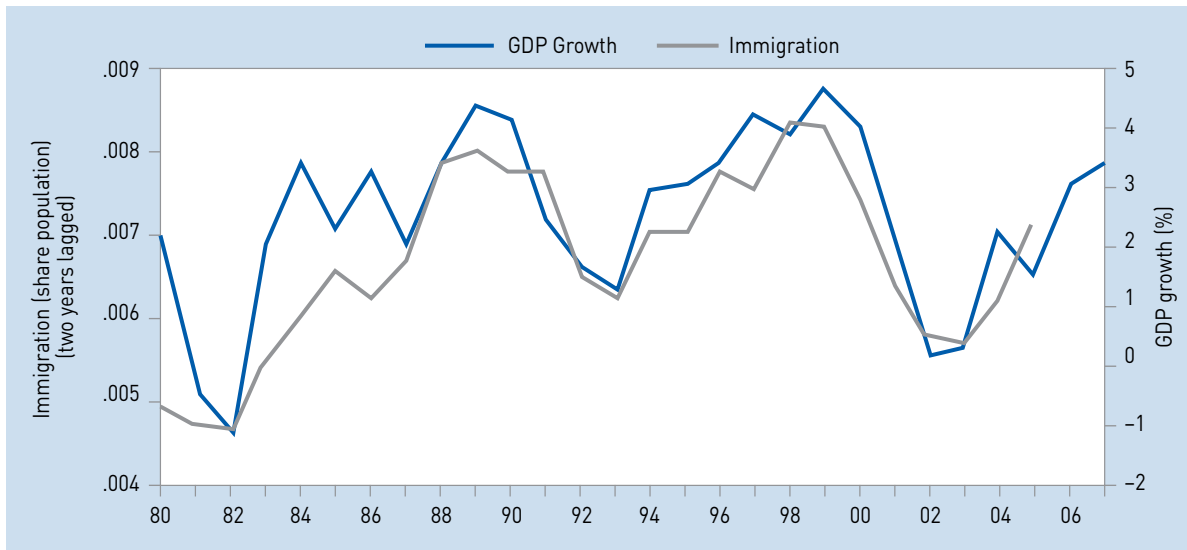
On the migration flows front, the most obvious feature of migration policy has been its inability to reduce migration from its growth-determined trajectory. Looking at immigration and GDP growth in Netherlands, changes in the number of immigrants⁶⁹ closely follows the business cycle (see Figures 5.3 and 5.4). When the economy is growing, the number of immigrants increase, and the decreases when economic growth is depressed. That indicates that labor demand remains an important factor driving the number of immigrants in the country. The institutional environment may change the way in which migrants enter, but it has far less ability to stem the number of immigrants entering the country. This casts a peculiar light on the intended government policy to make migration more selective. It may be that the government

⁶⁹ lagged two years.

here overestimates its influence to limit immigration under the condition of an excess labor demand.

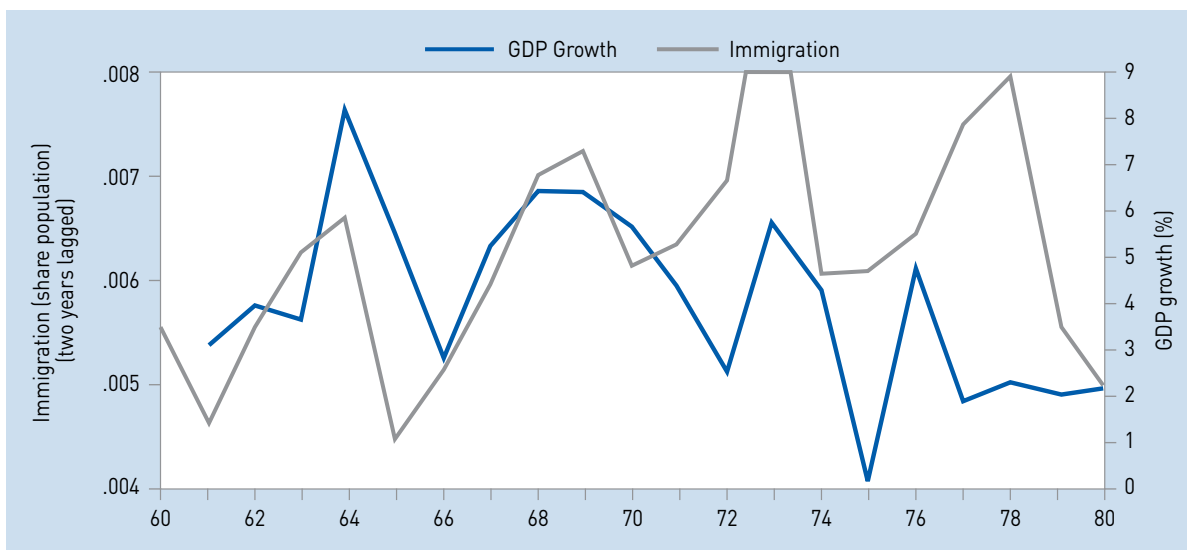
On the integration front, the objectives of migration policy in the Netherlands have been in many ways successful. The socio-economic

Figure 5.3: Immigration in the Netherlands (per 1.000 inhabitants)* and GDP growth 1980–2007



Source: de Neubourg, Chris. 2008. "Changes in Immigration in the Netherlands: Trends, Policies and Incentive." An output of the EC-funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

Figure 5.4: Immigration in the Netherlands (per 1.000 inhabitants)* and GDP growth 1960–1980



Source: de Neubourg, Chris. 2008. "Changes in Immigration in the Netherlands: Trends, Policies and Incentive." An output of the EC-funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

position of the non-OECD migrant population is generally a lot worse than that of the indigenous population on whatever indicator is chosen to describe the differences (as is illustrated for low-income incidence in Figure 5.5). Since the recognition, however, that migrants are becoming permanent residents in the country in the mid-1970's, and with increasing policies to reduce socio-economic disadvantages, the situation has gradually been improved. Given the permanently growing stream of additional immigrants to absorb, this in itself signals that the integration policies that have been followed since the mid-1980's had some effect. The situation has also improved considerably with regard to housing,

Educational disparities have also been greatly reduced. Only 8 percent of the Dutch population finished primary education as their only degree, compared with 31 and 34 percent of Turkish and Moroccan migrants, respectively (in 2005). This is down from more than 50 percent only 10 years earlier. Significant progress is seen among the second generation, of whom almost 20 percent held a higher education degree in 2006; still seven per-

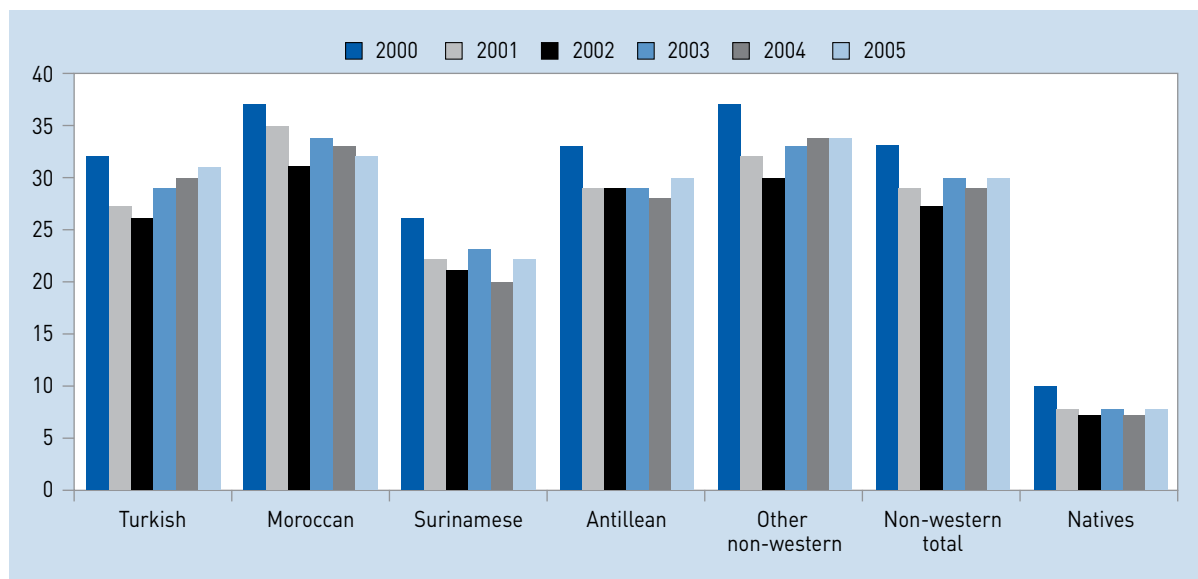
cent less than among the indigenous population, but well above the earlier rates. While educational disparities between second-generation migrants and Dutch natives remain, the convergence has been impressive (Figure 5.6).

The policies aimed toward socio-economic equity, however, have had less success on the employment front. Employment rates of migrants were generally 13 percent below the overall employment rates during the entire period between 1996 and 2006. Unemployment rates are very high and in the order of magnitude of 15–16 percent which is well above the overall employment of 5–7 percent for the same period.

What Spain and the Netherlands Tell Us about Migration Policy

Spain and the Netherlands are comparable studies in the efforts to manage migration flows through migration policy. In neither country have flows varied far from the trajectory of labor demand. Migration policies have been largely reactive: economic and political realities have driven

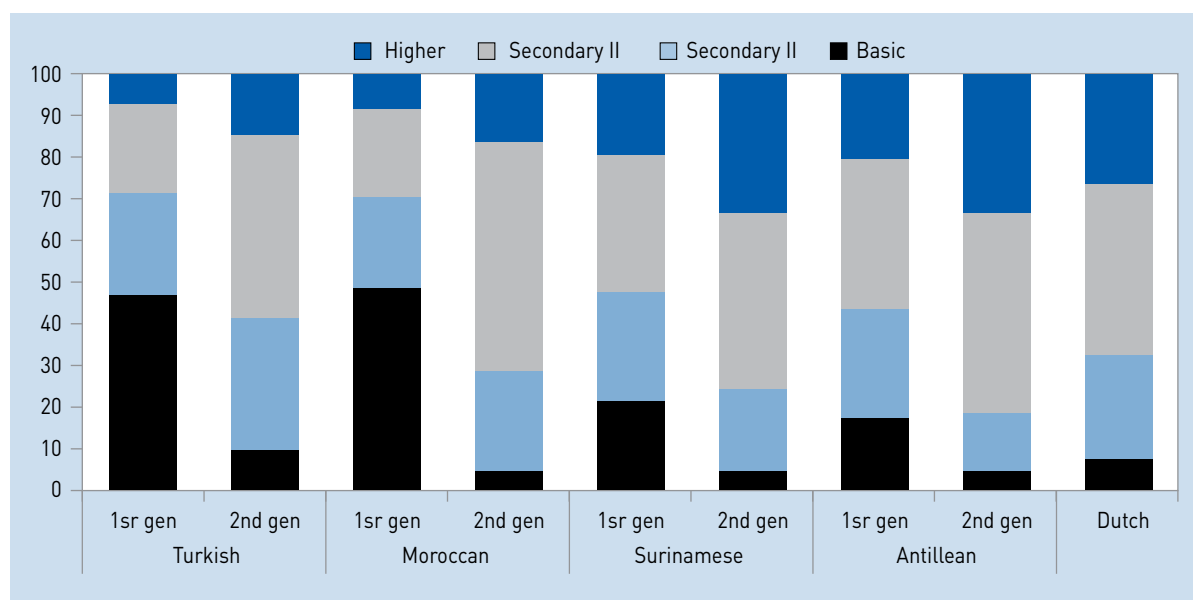
Figure 5.5: Share households with low income (households disposing up to and including 100% of the low-income threshold), per ethnic group, the Netherlands, 2000–2005 (in percentages)



Source: CBS Statline, 2007; SCP, 2007

Note: Years displayed in chronologic order from left to right.

Figure 5.6: Educational Catch-Up Among Migrant Communities in the Netherlands



Source: de Neubourg, et al. 2008, an output of the EC-funded World Bank Program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

migration flows, and migration and integration policies have readjusted to these realities with a trial-and-error approach. Both countries have also been marked by a certain ambivalence to the issue of low-skilled migration (from North Africa and elsewhere): while both economies have need unskilled workers, the political realities of mass immigration of low-skilled workers has resulted in repeated efforts to contain their flow.

In the end, policies had little impact on the flows, but they certainly have had repercussions

on the status of migrants. In the case of Spain, rigid controls on formal labor migration have resulted in a burgeoning of irregular workers entering the country. In the Netherlands, on the other hand, as opportunities for labor migration waned, family and asylum migration grew rapidly. In both countries, the rigid migration architecture has resulted in increases in irregular migrants, working in lower productivity, informal jobs, with poorer working conditions. This has in all probability reduced gains in the welfare of migrants.

Demographic Forces and the Implications for North Africa

While Chapter 3 outlined the impact of migration on North African economies over the last decade, the migration landscape is being rapidly changed by global demographics, the result of which makes increased migration axiomatic. How North Africa (and MENA more broadly) prepares for these large demographic forces will strongly impact the ultimate costs and benefits of migration for the region.

Demographic Changes and the Opportunities for Arbitrage

The world population is going through significant shifts that will affect labor demand and, ultimately, the growth and welfare prospects of all regions. Some regions and countries, most notably Europe, but also North America, China, and other East and Central Asian countries, will experience significant reductions in their available labor force in the coming decades. A general decrease in fertility along with reduced mortality rates is causing a progressive and inescapable ageing, or *graying* of European nations. Without increases in migration, these countries will lose hundreds of millions workers between now and 2050.

On the other hand, the countries of North Africa and the broader MENA⁷⁰ region share a relatively young population. Working-age population growth is high, putting strong pressures on labor markets, with rapid growth of new entrants to the work force. However, as fertility rates continue to fall, this phenomenon will pass. After 2030, these young entrants will be retiring, and MENA emigration countries will begin to confront the same difficulties that Europe faces today, with rapidly aging populations.

The direct impact of demographic change occurs through the so-called dependency ratio. The total dependency ratio (*TDR*) is the ratio of the economically dependent part of the population to the productive part. The economically dependent part is recognized to be children that are too young to work, and individuals that are too old; that is, generally, individuals under the age of 15 and over the age of 65. The total dependency ratio is important because as it increases, there is increased strain on the productive part of the population to support both the upbringing of the young and the pensions of old. There are direct impacts on financial elements like social security.

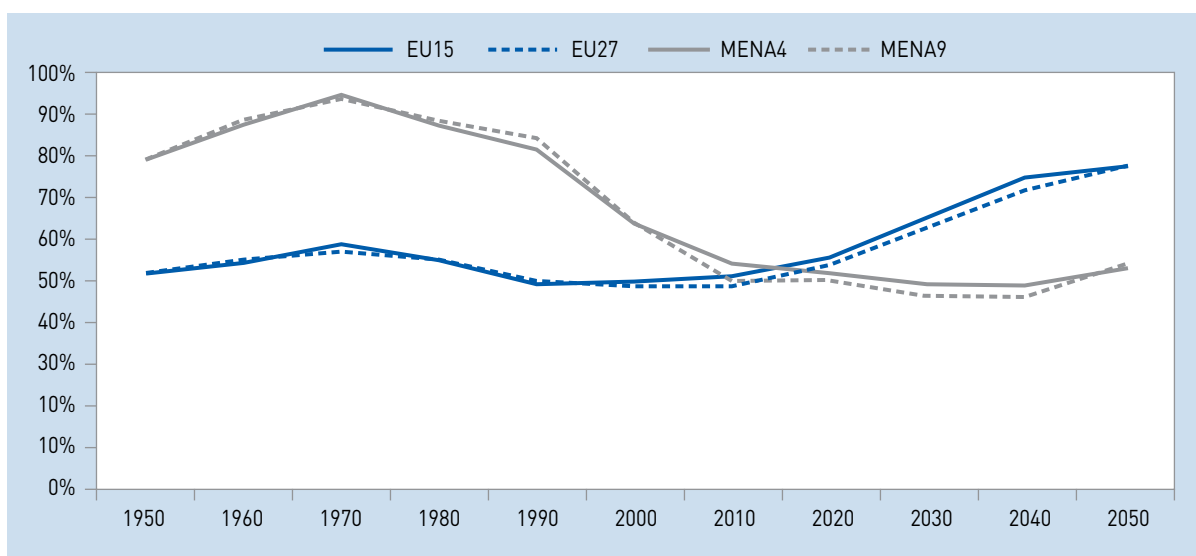
Figure 6.1 shows that the total dependency ratio has been higher in the MENA region than in the EU since 1950 and is still expected to remain higher until 2020. After 2020, the rise in life expectancy will push the EU ratio upward while the drop in fertility rates will push the MENA ratio downwards. The European results are similar whether one focuses on the EU15 EU15⁷¹ or the EU27.⁷² In the same vein, the demographic evolutions observed in North Africa and the broader MENA region are almost identical.

⁷⁰ For the purpose of the demographic analysis which follows, the MENA region is comprised of the focus North African countries (Morocco, Algeria, Tunisia and Egypt) as well as Djibouti, Iran, Lebanon, Libya and Malta.

⁷¹ EU15 comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

⁷² EU27 comprises Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

Figure 6.1: Total dependency ratio (TDR) by region (1950–2050)

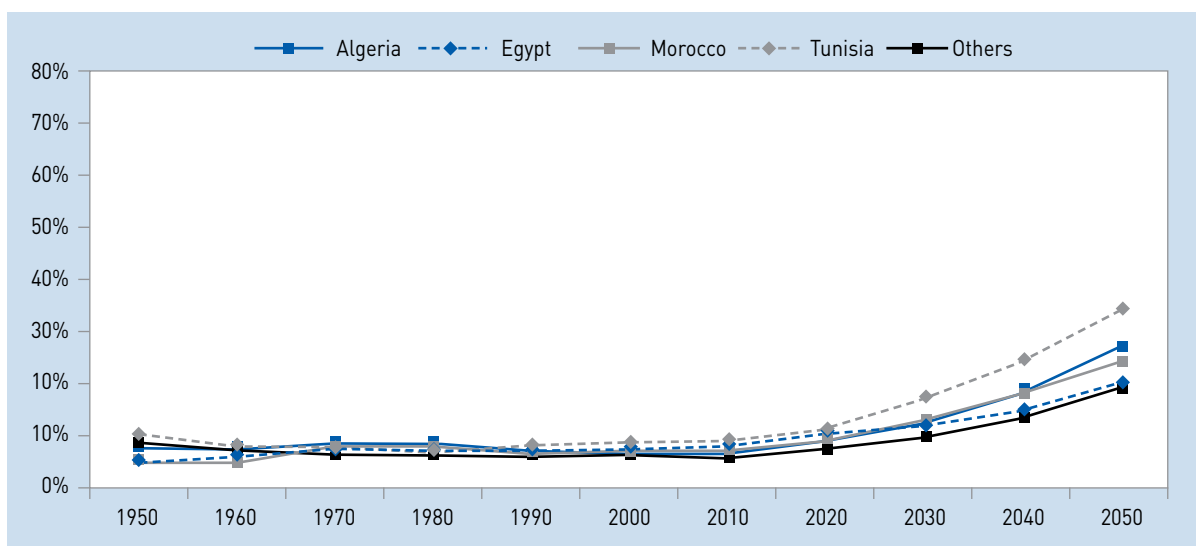


Source: Docquier and Marchiori 2008, an output of the EC-funded World Bank program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

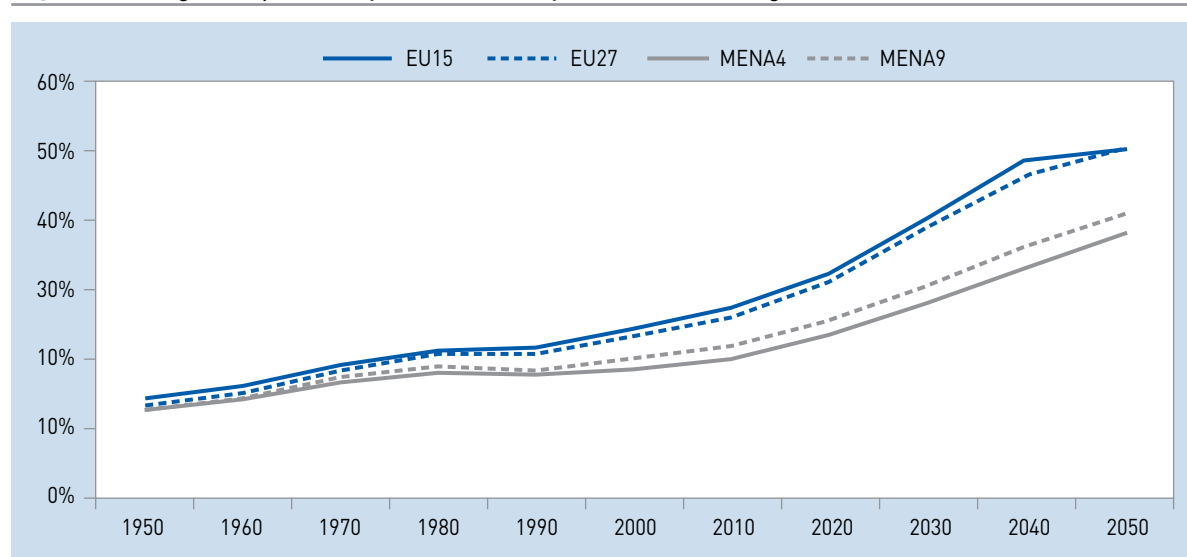
All of the countries in Europe will experience a similar demographic transition, although some countries, including Italy, Spain, Austria, Germany and Portugal (in the EU15), will

be more severely impacted. In the Maghreb and Egypt, meanwhile (MENA4, below), the graying of the population will occur after 2030 (Figure 6.2).

Figure 6.2: Aged dependency ratio (ADR) in North African and other MENA countries (1950–2050)



Source: Docquier and Marchiori 2008, an output of the EC-funded World Bank program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Figure 6.3: Aged dependency ratio (ADR) by consolidated region

Source: Docquier and Marchiori 2008, an output of the EC-funded World Bank program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

It is useful to also consider the evolution of total and aged dependency ratios for consolidated regions, i.e., aggregating EU and North Africa (MENA4)⁷³ or the broader MENA region (MENA9).⁷⁴ In a sense, this consolidation provides the full picture of dependency ratios if there were full labor mobility. Clearly, this consolidation smoothes the trends and attenuates the rise in dependency; however it is also clear North African countries could not hope to fill the labor market gaps in Europe. With a total population of around 137 million, North African countries have only about 27 percent of the EU27 population (500 million). Thus, there would remain a large increase in the dependency ratio even with full labor mobility with North African countries, and even with full mobility between the broader MENA region and Europe.

The figures confirm that increasing migration flows from North Africa or the broader MENA region to EU27 countries would clearly attenuate the deterioration of the European demographic structure. The magnitude of the imbalances is such that migration into Europe and other deficit regions is almost certain to intensify into the future. In the absence of immigration, the European region's shrinking and aging population will impose new challenges on Europe's

social protection systems, in particular, health care and pensions.⁷⁵ Governments then face hard choices between higher taxes (including a possible reweighting of taxes from earnings to consumption), increasing debt (which could jeopardize the welfare of future generations) and a reduced government role in providing health care and social security. It is also clear that the demographic opportunity for MENA to help ease the labor shortages in Europe is limited: MENA countries themselves will begin to experience serious demographic problems after 2030. Indeed, the MENA aged-dependency ratio in 2050 will be approximately equal to the current aged-dependency ratio observed in the EU.

While demographics fit, the skills do not

However, a recent World Bank study points to significant disparities between projected European demand and MENA skills.⁷⁶ Projections

⁷³ MENA4 includes Morocco, Algeria, Tunisia and Egypt.

⁷⁴ MENA9 includes Morocco, Algeria, Tunisia, Egypt, Djibouti, Iran, Lebanon, Libya, and Malta.

⁷⁵ Holzmann 2005.

⁷⁶ World Bank, 2009. *Shaping the Future: A Long-Term Perspective of People and Job Mobility for the Middle East and North Africa*.

over the short-, medium-, and long-term suggest that labor shortages in Europe will occur across the skills spectrum, with significant demand for medium-level skills (such as nurses or intermediate business services) or even relatively low skills (retail sales persons, waiters, etc.). A study by CEDEFOP “Future Skills Needs in Europe—Medium-Term Forecast”⁷⁷ for the period 2006—15, projects a drastic increase in qualification requirements across most jobs in Europe (including the EU-25, Norway, and Switzerland) with more than 12.5 million additional jobs required at the highest qualification level across all occupational groups (see Box 6.1 for definitions) and an additional increase of about 9.5 million jobs required at the medium level of qualifications.

By contrast, jobs at low qualification levels are expected to fall by 8.5 million across all occupational groups (see Figure 6.4).

The projections take into account demand expansion as well as replacement demand (from attrition). In all categories, replacement demand exceeds demand from expansion, a clear reflection of population aging and attrition of the labor force. In terms of occupation, because of expanding demand for higher skills, demand will be high for technical and professional occupation groups. But because of attrition, there will also be significant demand for service workers and shop, market, and sales workers as well as elementary occupations; however, the demand for formal qualifications is expected to increase across the

board and cover workforce replacement and expansion (Figure 6.5).

Based upon current education levels, however, MENA countries (including North Africa) will provide a poor match to the projected skill needs. Since most of the additional population will have primary education levels, only a fraction of MENA’s additional work force would be of interest to European countries.

Moreover, if education levels in the North Africa labor force remain low, while the demand for skills increases significantly across the Mediterranean, there is the considerable risk that the region will lose scarce talent, expertise, and its educational investments to Europe—the so called “brain drain.”

Although projections suggest that medium-level skills will also experience significant increases in demand, the EU has agreed to union-wide Blue Card for highly skilled non-EU nationals, and a number of European countries have recently introduced programs aimed at attracting a more qualified labor force. A more selective European immigration policy may over time increase skilled emigration from the MENA region, especially from North Africa. And although, as noted in Chapter 3, there are potential positive externalities on the effects of skilled migration (through remittances, brain gain, and

⁷⁷ See http://www.trainingvillage.gr/etv/Information_resources/Bookshop/publication_details.asp?pub_id=488.

Box 6.1: CEDEFOP Definition of Occupational Groups

Highly skilled, nonmanual occupations: Managers, professionals, technicians, and associate professionals

Skilled nonmanual occupations: Clerical support workers, service, and sales workers

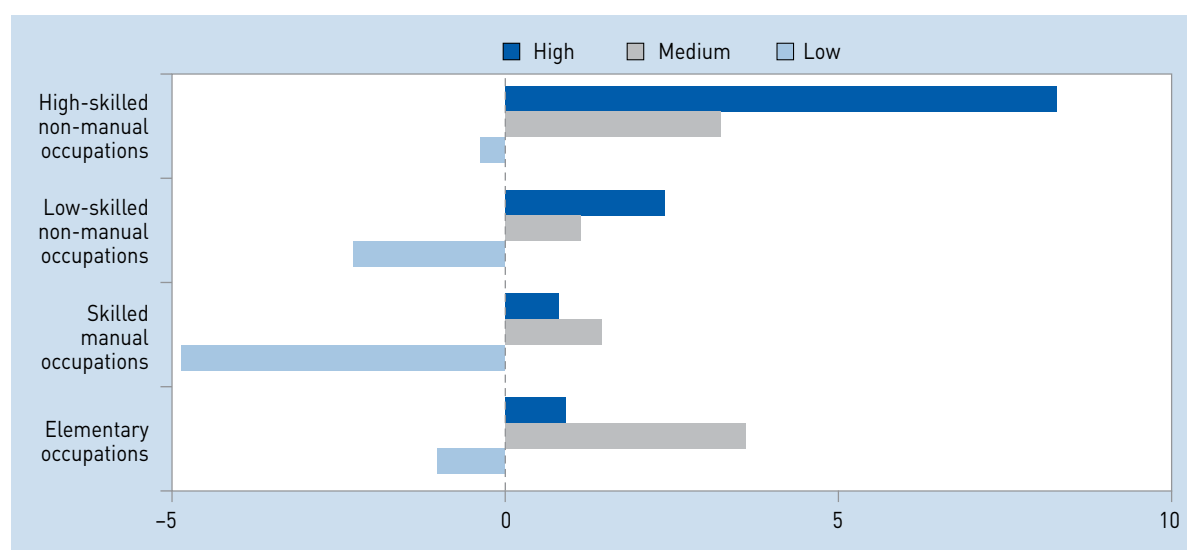
Skilled manual occupations: Skilled agricultural, forestry, and fishery workers, craft and related trade

workers, plant and machine operators, and assemblers

Elementary occupations: Cleaners and helpers, agricultural workers, laborers in mining, construction, manufacturing and transports, food preparation assistants, street and related sales and services workers, refuse workers, and others

Source: World Bank 2009. Shaping the Future: A Long-Term Perspective of People and Job-Mobility for the Middle East and North Africa.

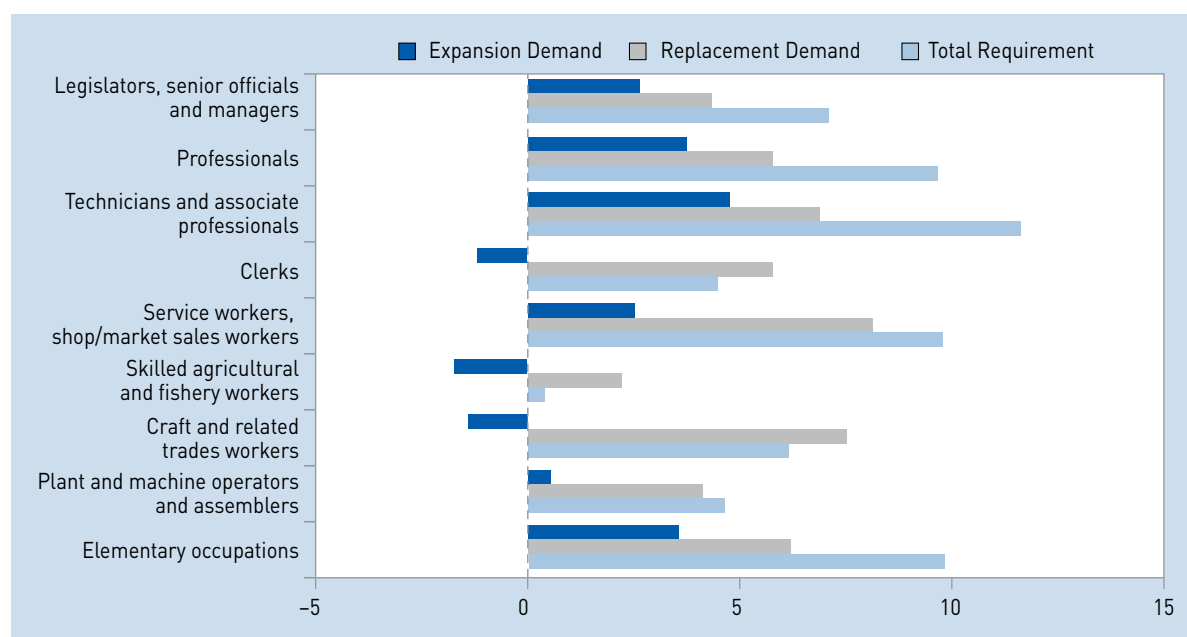
Figure 6.4: Expected Employment Changes in Europe 2006–2015 by Occupational Groups
Net Employment Change (in millions) and Highest Level of Qualification, EU-25, Norway, and Switzerland



Source: World Bank 2009, *Shaping the Future: A Long-Term Perspective of People and Job Mobility for the Middle East and North Africa*.

Note: Projections for EU24, Norway and Switzerland.

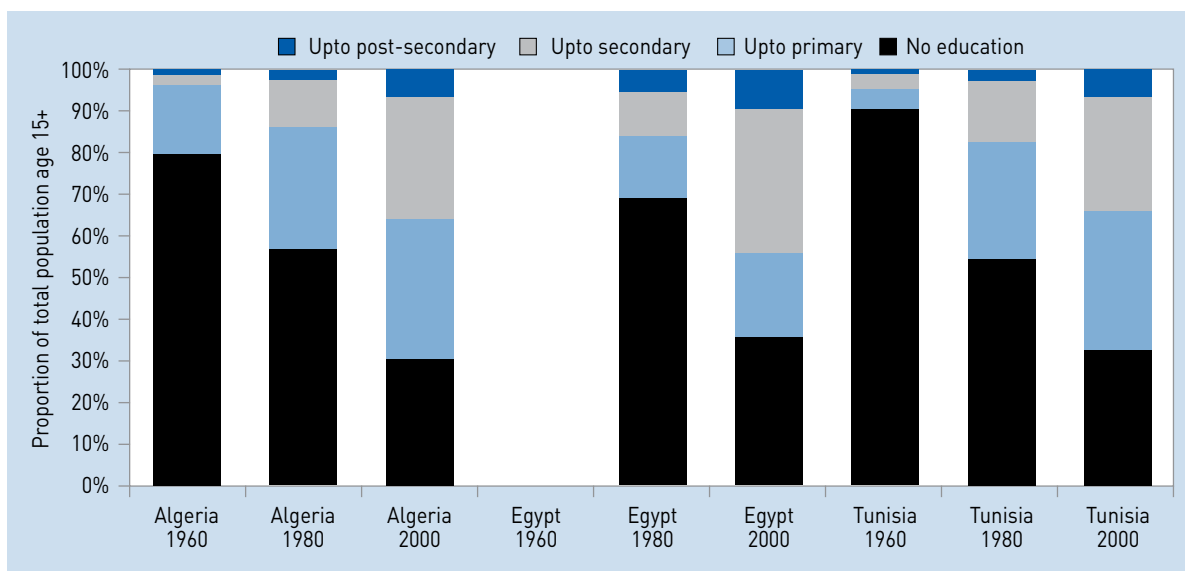
Figure 6.5: Increase in Occupational Demand in Europe
Broad Groups (change in millions), 2006–2015



Source: World Bank, 2009; *Shaping the Future: A Long-Term Perspective of People and Job Mobility in the Middle East and North Africa*.

Note: Projections for EU24, Norway and Switzerland.

Figure 6.6: Educational attainment of adult population in North Africa, 1960–2000



Source: Barro-Lee 2000.

contributions through return migration), sizeable increases in skilled migration could overwhelm the potential for positive feedback.

Scenarios of How Rising Migration may Impact North Africa

The impacts of increasing migration from North Africa to Europe over the coming decades could be potentially large, both for sending countries and for host countries. Because the contributions of workers (both fiscally and in terms of output) are heterogeneous, the results will depend on skill level of migrants and the way in which they are employed in Europe (particularly whether the skills of higher-educated workers are utilized or wasted in low-skilled jobs), with potentially significant impacts in terms of both output and fiscal balances. Immigrants induce many effects on the welfare of the population in the host country, through the capital market, the markets for skilled and unskilled labor, and through public finance. These direct effects can be reinforced by host country responses.

To better understand what this demographic transition might mean for MENA and North Africa as well as Europe—in terms of output, productivity,

and fiscal balances in both regions—a computable general equilibrium (CGE) model with overlapping generations of individuals who are heterogeneous in skills, date and place of birth provides some insight. General equilibrium analysis can only provide scenarios, and results are determined by the assumptions underlying the model. However, the scenarios are useful for modeling the types of impacts the region (and Europe) can expect from large-scale increases in migration (whether they be low-skilled or high-skilled, and whether they are accompanied by other feedbacks and policies).

The model employed here allows for heterogeneous use of skills abroad, changes in educational attainment emerging from the prospect of migration (brain gain), the remittance of a fraction of consumption by migrants, potential diaspora and returned migrant contributions, and fiscal changes determined by taxes on labor earnings and consumption of pension benefits, welfare transfers, and general consumption including schooling, both in Europe and in MENA.⁷⁸

⁷⁸ With North Africa accounting for about 80 percent of MENA-to-EU migration, multiplying the MENA deviations from the baseline by 1.25 can approximate the impact on each North African country.

The full details of the model and methodology behind the scenarios are included in Appendix 12.

The driving forces behind potential outcomes come from (1) who migrates (high-skilled or low-skilled), (2) how those skills are utilized abroad, (3) whether there are any positive feedback channels from migration (such as remittances), and (4) whether policies are employed to change the underlying assumptions on education. As a result, five basic scenarios were considered:

- The **“Skilled” scenario**, assuming the additional migrants arriving from MENA to the EU between 2010 and 2050 are skilled and are employed as skilled workers in the EU (i.e., perfect assimilation).
- The **“Unskilled” scenario** assumes that all additional migrants are unskilled and employed as unskilled workers in the EU.
- The **“Brain Waste” scenario** assumes that all additional migrants are skilled and employed as unskilled workers in the EU.
- The **“Brain Gain” scenario**, where skilled workers are employed as skilled workers in the EU, and where there are also ex-ante effects on the human capital formation at home (as well as various diaspora externalities).
- and finally, the **“Expansionary” scenario**, where the additional migrants arriving from MENA are skilled and employed as skilled workers, and where simultaneously the MENA region achieves substantial increases in the level of education at home over the period (while in the baseline, the proportion of skilled among youngest cohort is constant at 15 percent from 2000 onwards, and thus the proportion of skilled in the workforce and in the population reaches 15 percent in the long run, in the expansionary scenario, the share of skilled among the youngest cohort continues to rise after 2000 to reach 20 percent in 2030, with the consequence that 20 percent of the population will be educated in the long run).

These scenarios are useful only in the sense that they can provide insight into the potential

impacts in ways that need to be considered through a dynamic and endogenous process. Obviously, the additional migration that will be drawn from MENA (and North Africa) will to some degree involve bits and pieces of all scenarios. The ultimate impact will depend on which of these outcomes dominate in the MENA case.

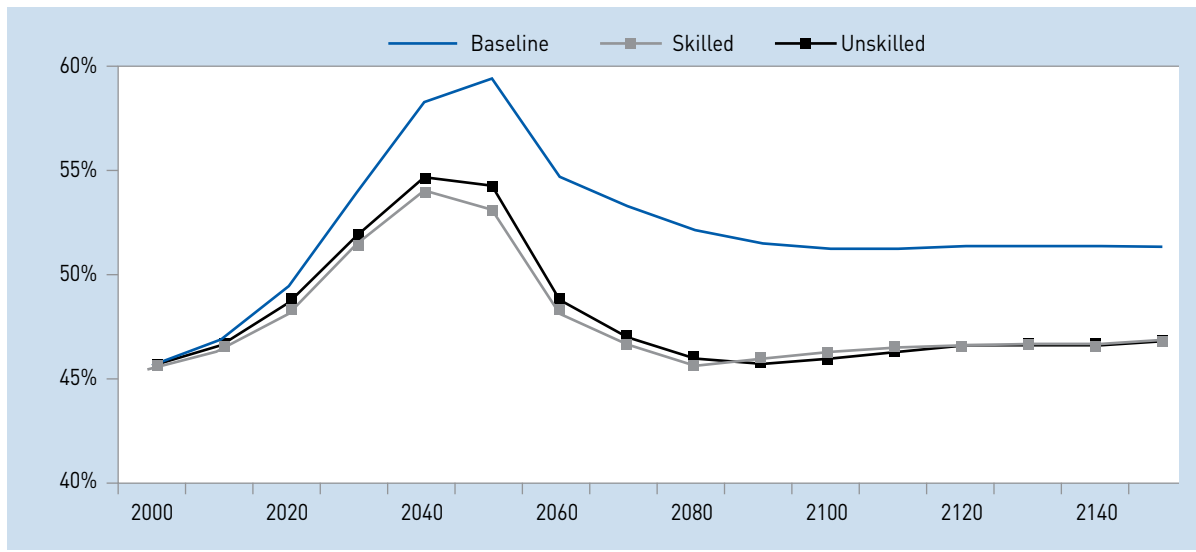
The results

Effects on taxes

The models collectively suggest how increased MENA-to-EU migration would generate significant changes in EU tax rates and GNI per capita, significantly smoothing the fiscal and economic burdens of aging.

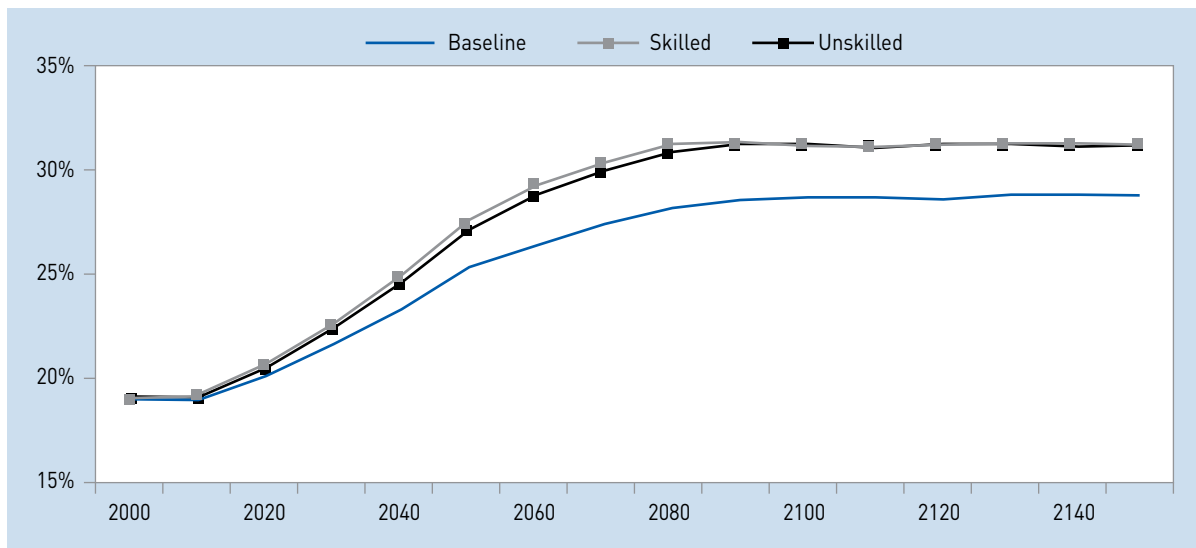
The analysis of skilled versus unskilled migration (both utilized effectively in the host country) reveals that selecting immigrants has only a moderate impact on host country tax rates. Figures 6.7 and 6.8 present the resulting tax rates compared to the baseline, where it is clear that immigration shocks reduce the tax rate in the EU and raise it in MENA. At destination, the “Skilled” scenario is unsurprisingly the most effective one to relieve the pressure on the pension systems since skilled individuals contribute more to, and benefit less from, welfare programs. MENA on the other hand would have to cope with a higher tax rate if it loses part of its labor force, and the “Skilled” scenario will have the worst fiscal implications. However, Figures 6.7 and 6.8 also show that the difference between these two scenarios is relatively small, explained by induced effects on wage rates, skill premiums and interest rates. When the additional immigrants are skilled, the skill premium decreases, and this reduces the average contribution of a skilled worker in financing pension systems. Conversely, when the additional migrants are unskilled, a skilled worker will pay more taxes since the skill premium is enhanced. Moreover, when additional migrants come to Europe (or leave MENA), it leads to an increase (decrease) in GDP and thus in the debt. Since GDP rises more rapidly under the “Skilled” scenario than under the “Unskilled” scenario, the public deficit to be financed will be larger when additional migrants are skilled.

Figure 6.7: Tax rate in EU15 – “Skilled” vs “Unskilled” (in percent)



Source: Docquier and Marchiori 2009, an output of the EC-Funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

Figure 6.8: Tax rate in MENA – “Skilled” vs “Unskilled” (in percent)



Source: Docquier and Marchiori 2009, an output of the EC-Funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

Effects on GNI per capita

While tax rates in Europe are only marginally affected by the selection of migrants, selection has a strong and positive impact on Europe’s GDP per capita. The reallocation of labor from

EU to MENA leads to higher returns to capital in Europe. Since Europe is technologically more advanced, labor outflows from MENA induce a more than proportional reallocation of physical capital to Europe. Thus, increased migration to the EU acts to enhance GDP per capita (see

Figure 6.9). This effect is particularly strong if the migrants are skilled and employed as such at destination (“Skilled” scenario). This is obviously due to the fact that skilled workers are more productive. In addition, the agglomeration of skilled labor in EU increases the marginal productivity of capital in this region.

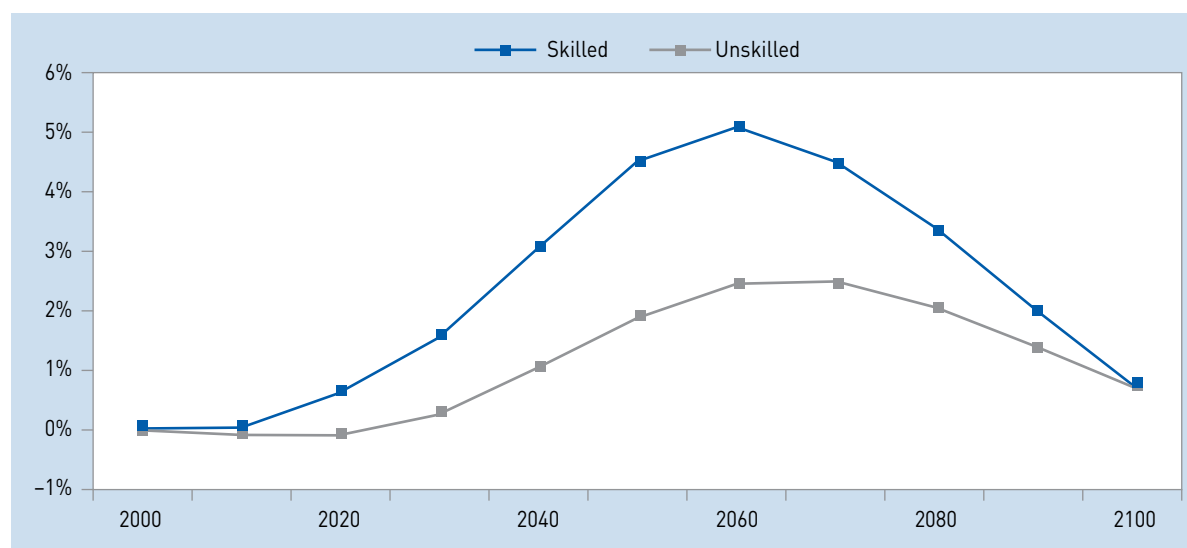
In MENA on the other hand, migration reduces GDP per capita, particularly when migrants are skilled, in the absence of any feedback effects (Figure 6.10, top). However, when remittances are included in the analysis, the negative impact is mitigated, with almost equivalent impacts whether migrants are high-skilled or low-skilled—the explanation hinging on general equilibrium effects. The selection of immigrants affects the skill premium at destination. Under a “Skilled” scenario the skill premium drops and skilled individuals earn less while unskilled earn more than in the baseline. Thus, the amount of remittances sent back by a skilled migrant is lower than in the baseline and the one of an unskilled migrant is higher than in the baseline. The reverse is true under an ‘unskilled’ migration shock. Consequently, the increase in remittance

amounts is equivalent across scenarios. As a result, however, increasing unskilled emigration in MENA leads to improvements in GDP per capita, which increasing skilled emigration continues to induce detrimental consequences.

Variants of the skilled migration scenario alter the results. A “Brain Waste” variant (in which skilled migrants are employed as unskilled at destination) combines the worst effects of the selective and non-selective shocks, since MENA loses its most productive workers, who are employed as unskilled in Europe and thus contribute poorly to the EU’s economy. In a second variant accounting for positive externalities of the brain drain, the negative impact of skilled migration on sending countries is mitigated (in terms of effects on income per capita and inequality [not shown here]). Still, MENA would suffer from an enlarged brain drain.

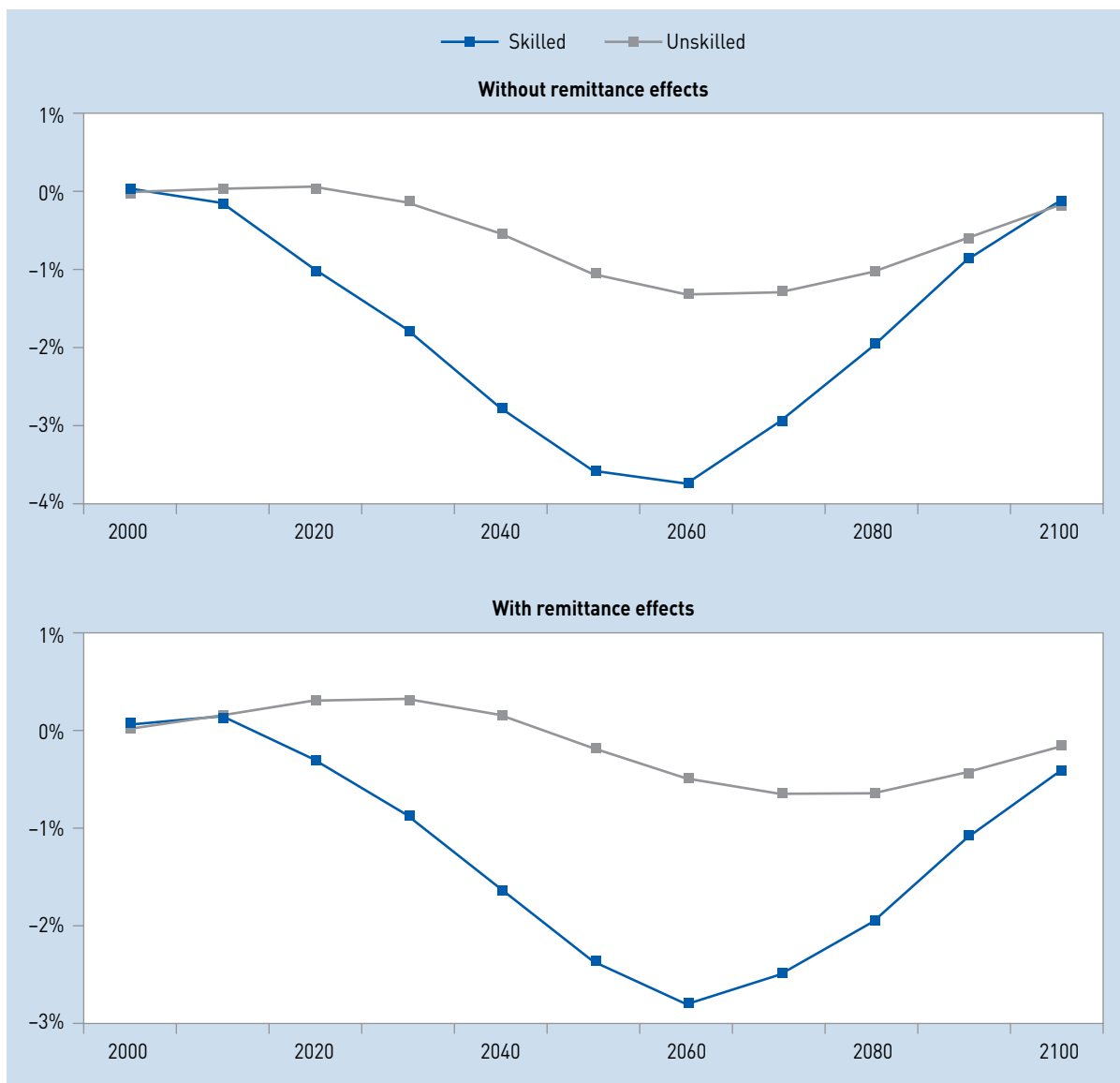
Finally, there is another possibility in which MENA countries prepare for greater skilled migration to Europe by accelerating their human capital formation. In this case, a skilled emigration shock could go along with a rise in education

Figure 6.9: GDP per capita in EU (percent deviation from the baseline) – “Skilled” vs “Unskilled”



Source: Docquier and Marchiori 2008, an output of the EC-funded World Bank program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Figure 6.10: GDP per capita in MENA (percent deviation from the baseline) – “Skilled” vs “Unskilled”: with and without diaspora effect



Source: Docquier and Marchiori 2008, an output of the EC-funded World Bank program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

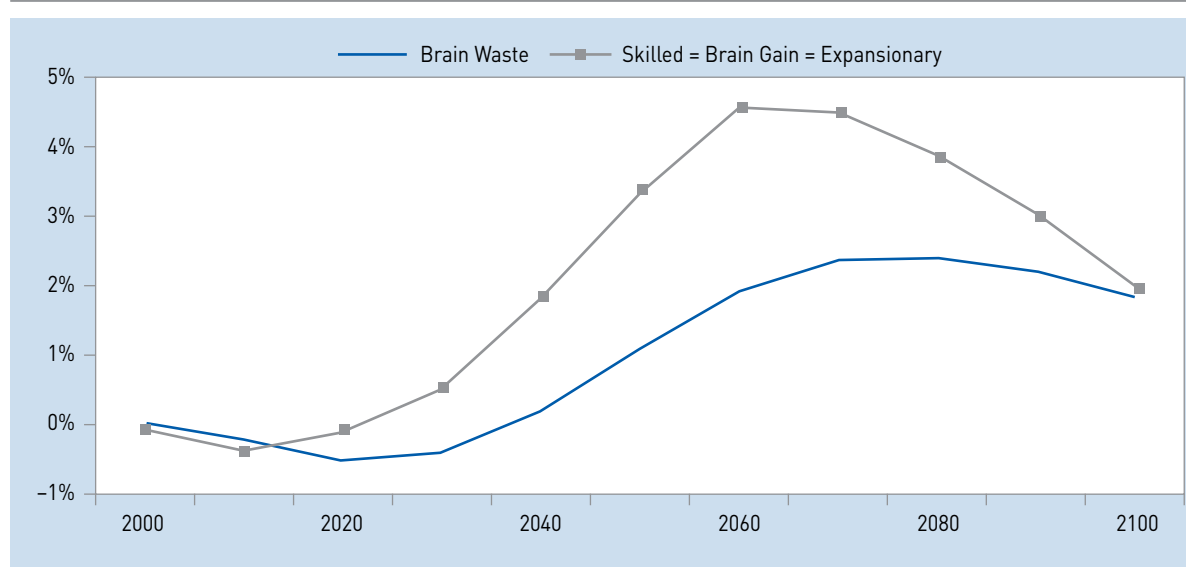
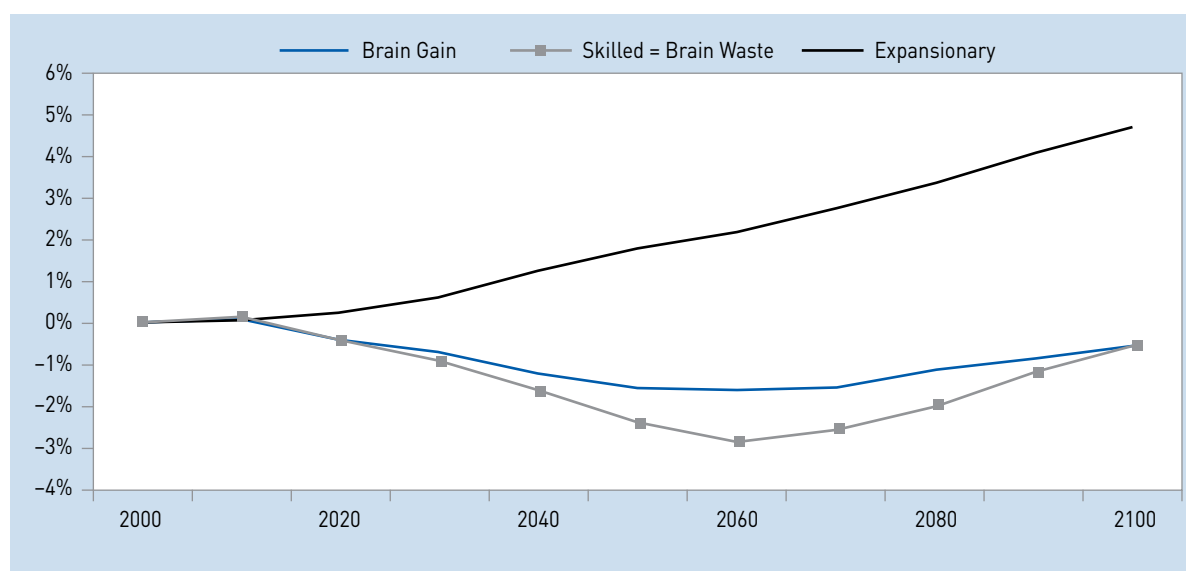
levels of the MENA population and income per capita (Figure 6.11 and 6.12).

Policy implications for North Africa

The demographics and migration ties that exist between North Africa and Europe suggest that it is likely that many of the migrants Europe will need will continue to come from the South of

the Mediterranean, but at an accelerating speed. However, if North African countries are to provide a rapidly increasing skilled work force, the current situation poses a significant threat to these countries.

The threat is that the skills pools in sending countries becomes entirely depleted, with implications for growth, tax income, and so forth.

Figure 6.11: GNI per cap. in Europe – Brain drain variants (in % dev. from baseline)**Figure 6.12:** GNI per cap. in MENA – Brain drain variants (in % dev. from baseline)

Source: Docquier and Marchiori 2008, an output of the EC-funded World Bank program of International Migration from Middle East and North Africa and Poverty Reduction Strategies.

Although skilled emigration, as discussed, can carry many benefits, a scenario where all or a majority of persons with education leave their country must have severe and negative implications on the economy.

However, as discussed in a recent report (World Bank 2008), MENA's education systems

in general have not delivered a highly educated and employable labor force so far. The problem relates to both quality and to quantity. Although the region has made impressive efforts at expanding access—the average age of schooling has increased rapidly, and alphabetization efforts are paying off—the MENA region generally lags behind other regions, especially for young females

(by 2005, two in five Moroccan young women, and one in five Egyptian young women were still illiterate). As discussed earlier, the prospects of government employment and the lack of a dynamic private sector have introduced a disproportionate preference for humanities and softer skills at the expense of technology and management, and the quality problems in education are witnessed in high unemployment rates for graduates, “brain waste” abroad, falling returns to education, and poor performance of students in international comparisons.

Currently, education systems do not necessarily provide incentives for improving performance. Monitoring mechanisms are lacking, whether at the level of institution or instructor. The public sector concentrates on service delivery rather than quality control, there is little autonomy, private-public partnerships remain rare, and the general public and more specifically the consumers of education services, do not have the possibility to influence the education agenda. Skills that would normally increase employability—communication skills, project management, analysis—are not emphasized.

At the same time, the rapid growth in the youth population is also putting much higher pressure on education systems than in the past. Higher demand for education and weak outcomes are all the more a cause for concern given that MENA’s public education systems in general are quite costly, and provide comparatively more funding for higher levels of education. All of this suggests that more resources, by themselves, can hardly be the antidote. Efficiency gains through a thorough reform of education systems will be necessary.

As discussed in World Bank (2008) and World Bank (2009), North African countries can and must prepare for the future by improving their education system significantly. This would provide the region with a much needed force for economic development, and—in the face of increasing demand for skilled migrants—ensure that human capital at home is not entirely depleted. This requires addressing serious quality issues at all levels of education, with respect to curriculum, focus, as well as teaching methods, to make sure that qualifications reflect knowledge and competence in skills that are

in demand. Such efforts are also vital to ensure that the input into higher levels of education through basic and secondary levels is adequate.

Moving ahead on this ambitious agenda by addressing the weaknesses outlined above, will be essential for improving outcomes in the region, but also for providing prospective migrants with the necessary skills to ensure higher productivity and higher rates of employment abroad. However, there will also be a need for specific partnerships in order to provide a better match between skills demanded abroad and skills provided by the education systems.

European countries stand to win much from improved education systems in the North African countries and in MENA overall. The reform agenda is ambitious, however, and it seems only reasonable that all countries that wish to draw on the MENA work force intensify collaboration in this area.

The impetus for addressing skills shortages is strong, but it is also urgent. As skills gaps risk growing in coming years, action must be taken now. It takes several years to train a skilled worker, from basic education through specialized skills. Specialization may be possible through short-term training. However, such training will still require a basis of more basic skills and a broader capacity for absorbing new knowledge, which in turn must generally be acquired through the childhood and youth education system. Since these general foundations cannot be built over a few years, the efforts at improving and expanding education must start now.

Finally, education efforts will not pay off unless there is an enabling environment that allows for a productive use for knowledge in the economy (discussed further in the final chapter). And skills shortages may not, in fact, be the main problem for potential and actual entrepreneurs, whether based in the North Africa region or diaspora abroad. Political instability, corruption, high informality, and other factors seem to be just as important bottlenecks to higher productivity and growth. Indeed, these will be the very same factors that encourage some of the best and brightest to leave their country in the first place.

Further Agenda for Improving the Development Impact of North African Migration

The previous chapters have highlighted some of the challenges the North African region faces in both improving the potential for positive impacts from migration and preparing for the large demographic changes that will be occurring over the coming decades.

With increased migration to Europe foreseeable, particularly for the region's higher-educated workers, the largest challenge facing North Africa will occur on the education front, and involves both the expansion of education and significant improvement in education quality. This would provide the region with a much needed force for economic development, and—in the face of increasing demand for skilled migrants—ensure that human capital at home is not entirely depleted.

But there remain other large issues to address, both by the North African region and within Europe, if they are to mutually contribute to the region's sustainable development. Social protection regimes obviously have important implications for migrants themselves, and their capacity to cope with various risks—health, old age, unemployment, and others. Access and portability have important repercussions, not only on migrant welfare, but also on incentives for return. MENA country nationals in Europe are generally well covered by social protection through the Euro-MED agreements. However, some unresolved issues remain for migrants with residence permits. One is the social protection of migrants who are newly arrived—normally a

high risk period for the migrant. Another is the possible adverse effects of social security systems which require direct continued contributions from benefactors—even if they do not live in the country.

Devising good migration policies and ensuring well-founded policy options requires both internal and external guidance. Given the importance of international migration to their economies, the data that North African countries collect and make available on international migration needs to be significantly improved. How they go about it, and the benefits they can expect, depend on each country's existing level of knowledge on migration. But all countries can make small adjustments to current data collection instruments to significantly enhance their knowledge of both the determinants and consequences of migration. Moreover, data are of limited value if they are not made widely accessible to citizens of the country: for research, including finding limitations or deficiencies in the data that can lead to improvements in data collection; for research that can lead to improved policies; and for the private sector to plan its own investment, sales, and advertising strategies. It is therefore crucial for all four countries to move towards mechanisms to make data available to the public.

Finally, many of the elements of the incentive framework which would increase the positive returns from migration to the host country are precisely the elements which increase growth

and development overall. Thus, as North African economies aim to enhance the development potential from migration, they will need to strengthen these foundations for economic growth and development.

The Protection of North Africa’s Workers Abroad, and its Impacts on Migration Flows

Improving the impacts from migration also means improving the conditions of migrants abroad, and improving the conditions for migrants to return. Migration is part of a household risk diversification strategy, driven by lack of credit and insurance opportunities in sending countries.⁷⁹ Thus, it happens partly in response to inadequate social protection at home. Migrants are often more vulnerable to income risks as they lack extensive networks and are perhaps unacquainted with the society where they have arrived. De jure access does not guarantee de facto access to social services: for example, many benefits (for example, unemployment) require a certain time of contribution before they can be paid out. Although this is the case for non-migrants as well as migrants, recently arrived migrants are more vulnerable.

More broadly, however, social protection systems have much wider implications for migration flows, fiscal costs, and economic structure (namely the size of the formal economy). The

risk of attracting migrants to generous welfare systems is widely discussed. However, studies suggest that the attractiveness of generous welfare systems is a much smaller factor than economic opportunities or network effects for migration (Gubert and Nordman 2007). In contrast, incomplete social protection systems may introduce perverse incentives. For example, if pension benefits are not exportable across countries, migrants are discouraged to return to the sending countries as they approach or enter retirement (see Box 7.1 for explanation of exportability and portability). Reallocation of skilled workers across immigration countries is not possible in the face of an asymmetric demand shock.

Similarly, workers with no access to social insurance and contribution based benefits such as health and pensions, are discouraged from participating in the formal economy since this would involve payments without benefits.

The fiscal impact is often ambiguous but it is clear that return migration may bring fiscal benefits, as the costs associated with social assistance of the elderly are reduced. It would seem particularly unfair to impose contributions on migrants who then cannot claim benefits; yet, this is sometimes the case.

⁷⁹ See Bloom and Stark 1985; Stark 1991.

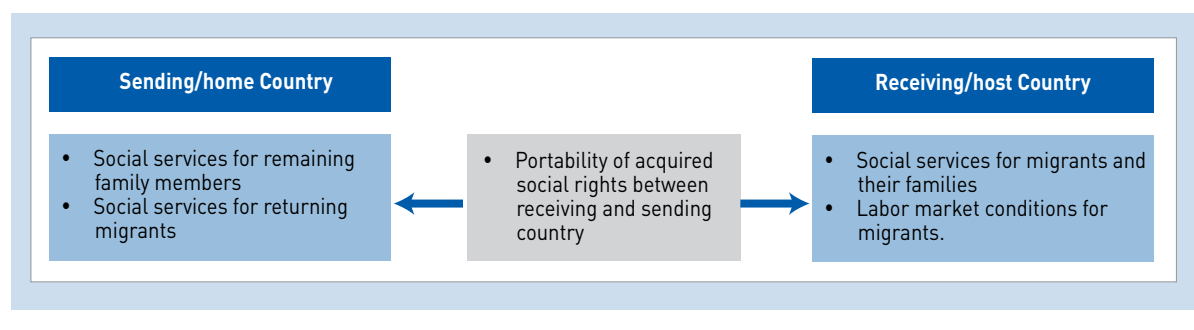
Box 7.1: Exportability and Portability explained

Exportability of pension benefits means that national social law allows for pensions being paid extraterritorially. That is, benefits are paid independent of the country of residence of the pensioner, as long as the individual qualifies for a pension according to national law. It is therefore a *unilateral* measure, independent of the legislation of the country of residence.

Portability, on the other hand, refers to the (partial or complete) totalization of the period of contributions between the host and the home country. Portability is the migrant worker’s ability to “preserve, maintain and

transfer acquired social security rights independent of nationality and country of residence” (Cruz, 2004). It ensures that not only acquired entitlements—that is, when the individual fulfils the qualifying conditions for a pension—can be exported, but also entitlements in the process of being acquired. That is, short periods of contribution in one country, which are not sufficient to qualify for a pension there, can be carried along to the other country, and vice versa. Portability is therefore a *bilateral* measure that requires the coordination of social security institutions in two countries.

Source: World Bank 2009. Shaping the Future: A Long-Term Perspective of People and Job-Mobility for the Middle East and North Africa.

Figure 7.1: Social services for migrant

Source: Koettl, et al. 2009, an output of the EC-funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

The social protection system for international migrants is illustrated in Figure 7.1 above and include (i) access to social services for migrants and their families in receiving countries; (ii) access to social services for remaining family members in sending countries; (iii) access to social services in sending countries for returning migrants; (iv) portability of acquired social rights between receiving and sending country which includes both the totalization of years of contributions irrespective of where they were made, and the right to receive the benefits in country of choice; (v) labor market conditions for migrants, including hiring procedures, visa regulations, and workers' rights.

Social protection for MENA migrants in Europe is largely covered by the so-called Euro-MED agreements. In addition to the Euro-Med agreements, Maghreb countries enjoy more advantages through bilateral labor migration and social security agreements with several European countries. The Euro-MED agreements govern the social protection framework for migrant workers from Algeria, Tunisia and Morocco, for countries for which the North African countries do not have more favorably bilateral social security agreements.) As a result of these agreements, MENA migrants overall compare favorably within the global pool of migrants. Holzmann et al. (2005) describe four main regimes of social protection for labor migrants:

Regime I: Access to social security benefits and advanced portability regulated

by bilateral agreements between the migrant-sending and receiving country, which in principle ensures transferability of acquired rights and no discrimination with regards to social security benefits;

Regime II: Access to social security benefits in the absence of bilateral agreements, which means that national laws of the migrant-receiving country alone determine the migrant's access to benefits;

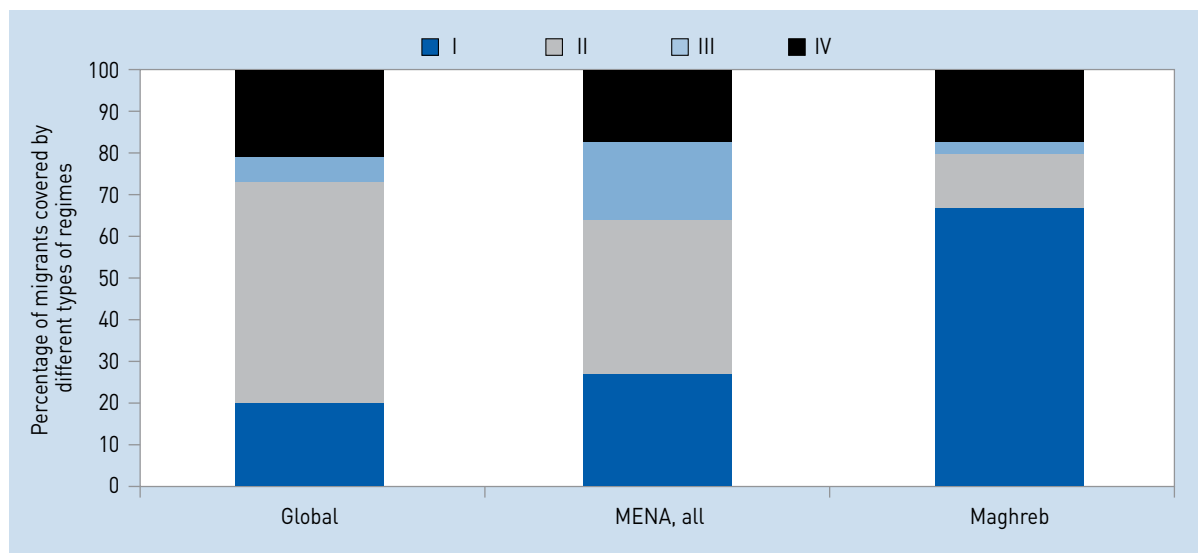
Regime III: No access to portable social security benefits, not even on a voluntary basis; and

Regime IV: Undocumented but also legal migrants who participate in the informal sector of the host country.

As seen in Figure 7.2, migrants from Maghreb, especially, enjoy quite high levels of social protection compared to the rest of the world and indeed compared to MENA migrants whose main destination is not Europe.

However, although much has been done and progress has been good, there are still loopholes in the social protection systems. One such loophole is related to pensions exportability, which requires a ten-year minimum participation in the social security system, and in some cases (for example, Germany), pensions are reduced

Figure 7.2: Social protection regimes for migrants



Source: Koettl 2006.

when transferred abroad. Clearly, such provisions discourage return migration.

Another inconsistency occurs in the interaction between national provisions for social protection and immigration and alien laws. Most European countries grant full social protection coverage to long-term migrants or permanent residents although the interaction between social and alien law complicates the de facto access. For example, temporary migrants have limited access to health care and unemployment insurance, and no access to social assistance or public housing. Yet, continental European countries require up to ten years of residence before granting permanency, and in the southern European countries permanent status has only very recently become possible.

Moreover, the interaction between social and alien law sometimes increases migrant vulnerability. For example, several governments have introduced provisions in their alien law that endanger the migrant's residence status (whether permanent or temporary) when claiming welfare benefits. Hence, although legally residing migrants contribute—by law—to welfare programs, they are discouraged from claiming benefits.

Clearly, a balance needs to be struck between, on the one hand, fiscal sustainability, the risk of migrant attraction to generous welfare systems, and ensuring a level playing field, and on the other hand the rights of legal and irregular migrants. If European countries wish to attract more migrant workers in the future, their specific vulnerability—when recently arrived, and in old age—must be taken into consideration, as well as the risk of distorting incentives for return migration, circular migration and the labor market flexibility that migrants potentially can provide.

Social protection plans to manage flows and protect workers

Part of that strategy will need to come through the design of European social protection regimes, including both provisions for access and portability, which impact both migrants' welfare, migrant flows, and social security institutions. In particular, circular or return migration may be discouraged if benefits earned through working years' contributions are not portable across borders.

The social protection for MENA-born migrant workers, with an emphasis on workers, is adequate if there is a bilateral social security

agreement in place between the migrant's host and home country. Such agreements effectively govern the access to and portability of social security benefits for migrants from the signatory states in their host country. In the case of MENA-born migrants, the Euro-Mediterranean Agreements only exist between the EU on the one hand, and Algeria, Morocco, and Tunisia on the other. Since these Maghreb countries supply the vast majority of MENA-born migrants to Europe, the social protection of MENA-born migrants in the EU is for the most part satisfactory.

Access to social protection for legal migrants in the EU is thus adequate, with the exception of the problematic interaction of social law with alien law. The latter deters migrants from claiming benefits that they are entitled to for fear of losing their temporary work and residence permission. There is, moreover, an inverse relation between the vulnerability of migrants and their access to social protection. Shortly after arrival, when migrants are most vulnerable, access to social protection is low, but increases over time until migrants are granted full access when receiving a permanent work and residence permission. To some extent, this is not unlike the accumulated rights to some benefits for native populations (such as waiting periods before unemployment insurance can be accessed). In the case of migrants, however, the trade-off here is one of risk of abuse of generous welfare systems (which applies to all populations) and the specific risks of migrant abuse (which apply to migrant circumstances).

With regard to portability, bilateral social security agreements are crucial. Although European countries usually allow for the exportability of pension benefits, only bilateral agreements can assure the totalization of periods of contribution. In the absence of bilateral agreements, returning migrants who do not fulfill the qualifying conditions for an old-age pension (usually at least 10 years of contribution) lose all their contributions and the benefits associated with them. While nationals also have required vesting periods, they do not usually move out of country as often, so their benefits collect throughout multiple jobs. Migrants are more likely to move between coun-

tries in Europe for work, and thus less likely to reach vesting.

Also, without totalization, replacement rates are lower—this is the case for example for German migrants. With regard to healthcare benefits, migrants who return to their home country for retirement might not be able to find adequate private healthcare insurance at home given their age.

The social security institutions of migrant-sending and receiving countries are affected whenever benefits with a pre-saving element are not fully portable. Hence, the lack of portability of old age and healthcare benefits creates distortions in the system, which affects the concerned social security institutions in various ways. The pension institutions of the host country are negatively affected since migrants want to avoid paying contributions and participate in the informal sector, but are positively affected by receiving contributions without paying benefits and paying lower benefits. The pension institutions in the home country also gain from not paying benefits or paying lower benefits to migrants who decide to stay in the host country, but at the same time lose from having to provide for returning migrants who might receive a means-based pension or social assistance without having paid contributions or taxes to the home country. In the case of health care, MENA's healthcare usually has a pre-saving element: young and healthy workers pay more into the system than the old and sick. If migrants work abroad while young and healthy but return when old, the health systems of MENA countries may suffer the financial consequences. Healthcare institutions in both migrant-sending and receiving countries would benefit from increased portability since it would remove obstacles in the trade of healthcare services.

While these difficulties may cancel out between developed countries between which flows are more symmetrical, the situation is clearly more acute in the case of flows from a poorer region (MENA) to a richer, labor importing one (Europe), where migrants spend their productive life abroad and return for retirement.

Policy implications for improving the social protection of MENA-born migrants in Europe and the Gulf are possible on three levels: unilaterally, multilaterally, and bilaterally.

Unilaterally, countries should align the conditions for exportability of old-age benefits for migrants with those that apply to nationals. Most countries allow that pension benefits are paid to every country in the world, but some countries apply reductions. Totalization of periods of contribution cannot be achieved unilaterally but only in cooperation with the migrant's home country. Yet, in the absence of totalization, if a migrant does not meet the qualifying conditions for an old-age pension, she should at least be able to receive a lump sum payment of her and her employer's contributions when returning to the home country. This is currently rarely the case.

In the case of healthcare benefits, the healthcare institutions of migrant-receiving countries should reimburse migrants for healthcare services they consume in the home country. This would not only benefit migrants who return to their home country—either temporarily or permanently—but also the healthcare insurance institutions in both migrant sending and receiving countries because they could realize comparative cost advantages through increased trade in healthcare services.

In this regard it would also make sense to allow migrants who have contributed long enough to the healthcare system of the host country to stay voluntarily insured, even after return, as it might be prohibitively expensive for them to find private insurance after return because of their age. This can only make sense, though, if these migrants are allowed to consume healthcare services in their home country at the expense of the healthcare system of the host country. If not, this would lead to the situation of French retirees who returned to Morocco: they have to continue to contribute to the French healthcare system without being reimbursed for healthcare services they receive in Morocco.

Finally, the experience of Tunisia, which extends the coverage of the social security system

to its émigrés abroad, deserves more attention in order to evaluate if such a policy can serve as a model to unilaterally improve the social protection of migrants.

A multilateral approach to address issues of access to and portability of social security benefits for international migrants is the first-best solution. Such an approach creates common standards and removes discrimination among migrants that is created through the current bilateral policies. The ILO Convention 157 on the maintenance of social security rights is the best example of what such an approach could look like. Also, the various regional efforts to cooperate in the field of social security—through the AMU, the GCC, and the EU—can serve as platforms to harmonize social security systems, deal with access to social protection for migrants, and enhance portability of benefits. The Euro-Mediterranean Agreements for the Maghreb countries show how such an approach might work and lead to common standards. Within the MENA Region, initiatives are not moving ahead, however.

Hence, for the time being, bilateral agreements as a second-best solution are more realistic. Some form of multilateral cooperation within the MENA Region is indispensable as long as access to social protection for migrants is not granted and as long as the disparities among the systems prevail. Yet, for the sake of fast and efficient results, bilateral initiatives—in particular between the EU and MENA countries—are preferable. Although Maghreb countries are mostly well covered, other MENA migrant groups do not enjoy the same access to social protection.

Improving social protection systems would not only benefit migrants and their family members by guaranteeing non-discriminatory access to, and enhanced portability of, social security benefits. It would also affect the concerned social security institutions by removing distortions within the systems and may facilitate the circular migration movements currently favored as the most desirable forms of people mobility.

North Africa's Migration Information and Capacity Gap

Devising good migration policies and ensuring well-founded policy options requires both internal and external guidance. Thus, while MENA policymakers should continue to review and assess the outcomes of international best and worst practices in migration management and consider how good practice can be adapted to specific national and regional circumstances, the most critical obstacle to adaptation of international policies as practice is a lack of migration data from which to monitor the trends in the size, determinants, and impacts of emigration and immigration.

Monitoring and evaluation of migration and other social and economic data is critical in order to understand the impact of different policies and adapt and improve the current policy mix. Apart from the long run implications of migration on growth and welfare, it is also essential that policymakers find a way to gauge the impact of the economic crisis on remittances and migration more broadly, the effect of those changes on household welfare, especially the poor, on inequality, and on households' livelihood, diversification and risk management strategies.

Paradoxically, while emigration and immigration phenomena is central to MENA countries, and receives increasing attention in the policy forum, the basis on which to inform policymaking and monitor policies remains weak. There are large information gaps, especially in the understanding of migration determinants and outcomes in the four focus countries. The statistical capacity and interest in monitoring migration and analyzing its impacts is still limited, although Morocco especially, but also Egypt appear to be more advanced than Algeria and Tunisia in terms of initiatives. For example, Algeria did not until 2008 have a way of counting emigrants or immigrants. None of the countries has a consistent database tracking migration stocks (or flows) over time, and so snap shots through different surveys are not comparable. The work on understanding the impact and drivers of migration are moreover only at its beginning.

The North African countries should be motivated to also monitor immigration. Different estimates suggest that each year, large numbers (some 30–40,000) of mostly sub-Saharan Africans enter Algeria and Morocco, some of whom stay and some of whom go on to Europe (de Haas 2006). Thus, understanding the size and impact of immigration is also becoming increasingly important. While this is an important premise, this discussion focuses on emigration, which is less straightforward to capture.

The limited knowledge base on the size of migration, its determinants and main impacts is due to two problems, on the input and output side. On the input side, there is a dearth of data. Expansion of the statistical instruments used to collect data on migration, as well as improvements in existing instruments are sorely needed. On the output side, clear strategies or approaches on how to turn data into knowledge appear not to exist.. Much higher and better exploration of existing data will be needed.

Data: Statistical capacity and instruments

The data that countries collect on international migration should reflect its importance to the country, and to the welfare of its citizens, whether at home or abroad. Since all four countries have indicated a significant increase in interest in international migration the question is how they should go about it, and what benefits can they expect. There are three possible levels of knowledge about international migration that are possible:

- A. Gauging the size of the emigration phenomenon.** This involves basic estimates of the stock of immigrants, and, if possible, outflows, taking into account transit and undocumented migration; basic estimates of households with (recent) emigrants, and outflows if available. These data are available from censuses in all countries.
- B. Characterizing migrants compared to non-migrants.** This requires data on certain key characteristics of the immigrants and emigrants and their households, such as

age, sex, education, marital status, employment status, etc., and how these compare with the characteristics of non-migrants; this information would help identify, among other things, the extent of skilled migration vs. unskilled migration. Exhaustive questions are costly for census and these data are more likely to come from household surveys. At issue is whether sample sizes are large enough to capture sufficient migrant households (this is unfortunately not the case in Tunisia).

C. Understanding what drives migration, and the consequences of migration.

This requires data on the characteristics of migrants and their households at the time of migration compared to non-migrant households; data on extent and use of remittances, working conditions, living conditions and integration in host country. This generally requires specialized surveys. Only Morocco and Egypt have specialized surveys that collect data on international migration, but most of these do not have adequate sample designs to ensure adequate numbers of *recent* migrants, and none has an adequate questionnaire design. The latter requires, for the investigation of the *determinants* of (e.g., emigration) decisions, data on the situation of the migrant prior to or at the time of emigration, *not* data at the time of interview. Moreover, these data should refer to not only the migrant but also to the household composition (which may have to be reconstituted from data on other household members being born, dying, or migrating into or out of the household since the time the migrant left.

Added to these considerations is the type of emigrants one can hope to capture:

D. Capturing migrating households rather than individuals. For identifying the emigration of entire households, a longitudinal or panel survey is needed: a single round survey (or population census) cannot obtain data on whole households departing since there is no one there to provide reliable data on the household that left before the time of the second round. Since international migration

from each of these four focus countries (and most other developing countries in the world) is a rare event, a *large sample size* is needed to capture a sufficient number of households present in one round who are not there at the time of the second round, which is commonly in practice one year later. Among the focus countries, Tunisia and Egypt have labor force surveys with fairly large samples that have a rotating panel, so that for their panels it is known if the household has migrated away or not. The new National Demographic Survey in Morocco also has several rounds, apparently for only one year.

Migration data are collected to inform policymakers of the extent, causes, and effects of migration, and guide policy interventions to maximize benefits and minimize costs. To understand this, it is necessary to consider the general relevance to policies in what we learn from studies of the determinants of international migration and of the consequences of international migration. Results from determinant studies tell us what it is that affects, or causes, international migration, and thereby can identify factors that policymakers may be able to influence in order to alter migration levels, types, or directions. But whether policymakers *should* do that cannot be inferred from studies of the determinants of migration. Instead it requires knowing what the *consequences* are of migration. If the consequences of a particular type of international migration are deemed positive (or negative), then the policy implication would be to encourage (or discourage) that type of migration. But a study of consequences tells us nothing about *how* to alter migration. That only comes from studies of determinants. It is clear, then, that policymakers need to have results on *both the determinants and consequences* of each type of international migration of interest if they are to develop or improve policies on international migration (Bilsborrow et al. 1984, 1997). Specialized surveys of international migration offer the best (but not inexpensive) means for collecting the data necessary to carry out the analytical studies needed to understand both the determinants and consequences of international migration.

Table 7.1 provides an overview of the existence of some emigration data in different census and surveys in the four focus countries. It is important to note that the table informs us primarily on whether *the questionnaire captures* any information on emigration. It does not detail issues in the broader statistical system, such as whether *sample sizes* are generally large enough to permit such data to be representative, if data are timely, or if it is available for exploitation. It is clear, however, that data are still scarce, especially for comparisons over time, and that especially Algeria, especially, has a long way to go to provide a good understanding of migration stocks, let alone determinants or impacts. It is also clear, however, that statistical systems are increasingly cognizant of the importance of filling the information gaps and that new initiatives are being launched.

A logical approach for the countries to pursue is to add modules on emigration to existing surveys (see Box 7.2), but also investigate the possibilities of specialized migration surveys that can adequately capture the broader policy questions surrounding migration determinants and impacts. Given where countries are now in terms of previous data collection with specialized surveys, both Morocco and Egypt, having carried out their own specialized surveys already on one or more types of migrants (immigrants, emigrants), and having strong statistical offices, could be thinking of how to improve and expand those surveys to collect better data, or design a new better specialized survey. Tunisia and Algeria, on the other hand, are ready to undertake surveys of the types Morocco and Egypt have already carried out, while learning from the mistakes and difficulties encountered in the latter. Later

Table 7.1: Data on emigration in statistical instruments

	Algeria	Egypt	Morocco	Tunisia
Census	2008 population census	2006 census		2004 census
Household surveys				
Consumption/ expenditure surveys			<ul style="list-style-type: none"> • 2000/2001: remittances from abroad • 2006/2007: yes, both emigration, immigration and return migration (but not available) 	2005 some information, but very small sample
Specialized surveys on migration		2008: International migration survey		
Labor force surveys		2007 onwards		2005 and onwards, some limited information
Demographic and health surveys				
Living standard measurement surveys			1991, 1998/1999	
Other				
Post censal surveys				
Border surveys			<ul style="list-style-type: none"> • Survey of socio-economic integration into receiving countries • 2000 survey on return migrants 	
Other		ELMPS, 2006,	<ul style="list-style-type: none"> • Upcoming: National Demographic Survey 2009–2010, panel (two years) • MIREM return migration 	

Box 7.2: Modules on emigration to add to existing surveys

A non exhaustive list of possible questions to add to labor force or other household surveys:

Identifying migrants and their characteristics (Sex, age, age at departure, education level, marital status, family left behind; year of departure, country of destination)

- Work/activity of emigrant prior to departure
- Reasons of emigration (work, studies, family, network)
- Policy relevant questions (terms of employment in destination country e.g. contract, form of re-

cruitment if relevant, cost of job brokerage, cost of travel)

- Work/activity in destination country
- Adaptation/assimilation in destination country (language, education achieved abroad, citizenship, future plans)
- Migration intentions among other family members
- Remittances (frequency, amount, use)
- Similarly, modules can be added on immigration, and on return migration.

Source: Bilsborrow 2009, an output of the EC-funded World Bank program of International Migration from the Middle East and North Africa and Poverty Reduction Strategies.

on they can move on to develop more complex specialized surveys of international migration.

Turning data into information and knowledge

Data are of course nothing but numbers, and are of limited value if they are not explored in an exhaustive manner. A country’s ability to carry out this exhaustive research is partly related to statistical capacity. According to the World Bank’s statistical capacity rankings, Egypt especially, but also Morocco, score above developing countries on average, while Tunisia is slightly above, and Algeria slightly below the average.

However, this is referring to in-house capacity only, and is not taking into account data transparency and access. Yet, data sharing outside of

government and statistical institutes has many practical implications. For example, it means that data can be explored by a much wider group of practitioners, especially researchers

However, this involves appropriate sharing of tasks—as discussed in this report, migration research is an area fraught with many methodological pitfalls and researchers may be better tuned in to both issues and methods necessary for the exploitation rather than collection of statistical information. Much more useful and policy relevant information and knowledge can be derived from the data, if it is shared widely.

Sharing data also has practical implications for the quality of the statistical system, as it is also a means of encouraging user-driven innovation. Researchers can find limitations or deficiencies

Table 7.2: 2008 statistical capacity indicator (out of 100)

Indicator	Algeria	Egypt	Morocco	Tunisia	All countries*
Overall	62	88	74	67	65
Statistical Practice	50	70	90	70	56
Data Collection	50	100	60	60	62
Indicator availability	87	93	72	72	77

Source: World Bank.

** All countries include low- and middle-income IDA/IBRD countries with a population of over 1 million.

in data that can lead to improvements in data collection, which in turn will also benefit “in house” exploitation of these data within the statistical agencies. Wider distribution encourages much more intense testing of the existing statistical approaches.

It is therefore crucial for all four countries to move towards mechanisms to make micro-data files available while, of course, ensuring confidentiality. These data need to be made available to the public in a timely fashion, together with clear documentation of the sample size, the sampling frame used, the sampling methods used, and sampling weights. This may require additional resources. As statistical capacity building is part of donor assistance to MENA countries, the emphasis on access could be factored into such programs and appropriately budgeted for.

Improving North Africa’s Environment for Migration Contributions to Development

Finally, and ultimately, the degree to which North Africa can benefit from emigration will depend as much on its own education, investment climate, and institutional reforms as on the policies in Europe. And it is perhaps not surprising that many of the elements of the incentive framework which would increase the positive returns from migration to the host country are precisely the elements which increase growth and development overall.

This research program has emphasized the need for both quantity and quality enhancements in education, both to avoid the depletion of important skills with the likelihood of increasing

migration, and also to better prepare workers for the type of work demanded by competitive firms in a global economy. Not surprisingly, the development of more private-sector relevant skills not only increases the employment potential (and remittance-sending potential) for migrants abroad, it also increases the employment potential for the population at home.

Having an investment climate which provides sufficient job opportunities for these higher educated workers at home not only reduces skilled labor flight, it also increases the contribution of human capital to growth and development. An investment climate that attracts business development from returned migrants also attracts the domestic investment for economic growth and development, and a financial sector that provides capital for return migrant investors also provides capital for domestic investors. Institutional capacity that can support the successful engagement of diasporas for development is the same institutional capacity that can support successful private sector growth and job creation. In short, the priorities for enhancing the returns from migration are, not surprisingly, the priorities for enhancing growth and development more broadly.

It is not the purpose of this research program to review the social and structural reform agenda remaining for North African countries: the agenda is distinct for each country, and each is at a different place in their own transition. However, it is upon this broader economic and institutional foundation that the migration and development nexus is built. Inevitably, for North African economies to enhance the development potential from migration, they will need to strengthen these foundations as well.

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