## Economic Research Forum POLICY BRIEF

ERF Policy Brief No. 21 | October 2016

# The Impact of Emigration on MENA Labor Markets

Anda David and Mohamed Ali Marouani

#### About the authors

Anda David is an AFD Research officer and a Research Associate of DIAL.

Mohamed Ali Marouani is an Associate Professor of Economics, IEDES UMR Développement et Sociétés, Paris 1-Pantheon-Sorbonne University, an ERF Research Fellow, and a Research Associate of DIAL.

#### In a nutshell

- The Middle East and North Africa (MENA) region has seen large volumes of workers leaving their country of origin with, almost 6% of the region's population migrating in 2013 alone.
- While unemployment plays a role in encouraging people to migrate, general uncertainty about the future seems to play an important role for young people.
- The impact of skilled emigration depends on its duration and on the structure of the domestic labor market: it can represent a "brain drain" especially when migration is permanent, while it also relieves pressure on labor markets often characterized by high unemployment rates among graduates.
- Outflows can significantly impact the labor participation of those left behind, particularly women as households relocate the division of labor after a migrant's departure.
- The return of migrants poses challenges when it is a result of involuntary migration, such as mass deportation or where workers return to different regions and sections of the labor market. However, they may also return with new skills and are more likely to start a business than non-migrants.
- The aggregate skill level of the labor force in the origin country tends to increase in countries with aspiring migrants investing in their own education.
- The use of remittances by recipient households affects labor supply, since it determines household labor market participation, but also boosts labor demand when remittances are used as capital to start a business and create jobs.
- Policymakers must increase their focus on migration issues in order to maximize the benefits and minimize the negative impacts by:
  - Gaining a greater understanding of young people's aspiration to anticipate the size and composition of future outflows.
  - Providing tailored training for their future needs depending on their skills and destinations.
  - Designing incentives for entrepreneurship, such as tax benefits and improvements in business regulation to take advantage of the high skill levels of returning migrants.
  - Closely monitoring the flows of remittances to anticipate future changes to participation in domestic labor markets.



#### 1. Introduction

Migration has emerged as a major global policy issue in 2015 following the massive influx of Syrian and other refugees into Europe. However, migration has always been a major phenomenon in the Middle East and North Africa (MENA) region, which is among the first regions in terms of origin and destination for migrants. The MENA region also ranks first in terms of unemployment rate in the World (ILO, 2015). It thus seems particularly relevant to study the interactions between labor mobility and employment outcomes.

#### 2. Overview of labor mobility in the region

The MENA region is at a crossroads in terms of migration patterns, with significant flows of labor migrants and of forced migrants. According to the latest UNDESA figures (ESCWA, 2015), the international stock of migrants living in Arab countries more than doubled between 1990 and 2013, going from 14.8 million to 30.3 million migrants. While the proportion of migrants coming from Arab countries relative to migrants coming from non-Arab countries significantly decreased over the period 1995-2010, Arab countries' nationals make up to 40% of the stock of migrants in the Arab region. In terms of flows, it was estimated that 21.9 million people emigrated from Arab countries in 2013, representing 5.9% of the total population of the Arab region.

#### Emigration patterns

In terms of emigration rates, Lebanon ranks first by far, with a stock of emigrants reaching 11.4% of its population. Morocco ranks second with an emigration rate of 7.8%. Despite the expectations of a surge in emigration from Tunisia and Egypt during and post-Arab Spring and a complete shift in patterns, Fargues and Fandrich (2012) and De Haas and Sigona (2012) show that the "large-scale" migration to Europe was no more than a myth. However, in the wake of the ongoing civil wars in Libya (2011 and since 2014), Syria (since 2011) and Yemen (since 2015), significant waves of migration occurred, within the region, which render existing statistics obsolete.

#### Where MENA migrants go?

Although most countries in both Maghreb (North Africa west of Egypt) and Mashreq (the Arab world to the east of Egypt) are labor exporters, the destinations vary considerably between the two groups of countries. Migrants originating from the Mashreq region mainly choose Gulf countries as destinations, while those from Maghreb migrate more to Europe. Egypt is the largest labor exporter in the MENA region (Wahba, 2014), with 50% of its emigrants living in Saudi Arabia. Globally, Egyptian migration is relatively homogenous in terms of educational distribution, but strong differences appear by region of destination. While migration to Europe and North America is predominantly highly educated (95%), migration to Libya, Jordan and Iraq is far less educated, with a quarter of migrants being illiterate.

Indeed, in the case of Jordan, migration is characterized by inflows of low-skilled foreign workers and outflows of high-skilled Jordanians going to GCC countries (David and Marouani, 2013b). Wahba (2012) points out the high skill intensity of outmigration, with 62% of emigrants holding a university degree, and finds evidence of an increase in local wages due to emigration. However, Jordanian emigration is mainly of a temporary nature, with the majority of Jordanians going to Gulf countries (60%). The high skill intensity of outmigration should also be put into perspective with the unemployment rates that average 13% and reach 30% for the high skilled youth. According to a study by the World Bank (2008), this particular situation has multiple origins such as massive lowskilled immigration, skilled unemployment due to an investment policy that favors low-skill low-wage job creation and geographical mismatch between high unemployment areas and job creation areas.

A completely different migration profile is that of Tunisia, where migrants often have long stays abroad and almost 83% of them live in Europe. Although not of the same magnitude as Jordanian migration, the

<sup>&</sup>lt;sup>1</sup>The destination countries of these migrants are both Arab and non-Arab countries.

Tunisian migrant stock accounted for 5.9% of the total population in 2013. The most important share of Tunisian migrants (48.1%) has a secondary education, while university graduates represent 14.1% of migrants.

### 3. Labor mobility impacts domestic labor markets via four key channels

Migration flows across MENA affect domestic labor markets in four distinct ways. The first channel is the impact of outmigration on domestic labor markets in terms of both numbers of workers and on the structure of the labor market. The second channel is the return of migrants either due to a one-off shock or more gradual return migration. The third channel is the positive impact on education and skill level as a result of workers' plans to migrate. The final channel is the way that remittances are used by receiving households and the impact that money has on domestic labor markets. These factors also have interactions with each other.

#### 4. Outflows of labor supply

Emigrants represent an exit of labor supply from the labor market. Predicting the future volume and structure of migration flows requires an understanding of the factors that shape migrants' intentions. Using the 2009 Survey of Young People in Egypt, El Badawi (2011) investigates the determinants of youth migration intentions. Unemployment does not seem to be a significant determinant of emigration in Egypt, while discouraged unemployment does. However, using the TLMPS2014 David and Marouani (2016) find that more than half of Tunisian migrants are unemployed.

General uncertainty about the future seems to play an important role for young people in Egypt. However, the effect of this variable on migration aspirations is not linear but follows a U-shaped pattern. It is very high for youth with great uncertainty; it drops with average uncertainty; and increases again for the youth with marked certainty about their future. For the latter this may be due to a higher probability of finding good jobs abroad. The impact of uncertainty on the migration decision is confirmed by David and Marouani in Tunisia as more than the two thirds of migrants were irregular workers prior to migration. Finally, having migrants in their social network has a very high impact on migration in both countries. In Tunisia, highly skilled migrants rely much less on families and friends.

Another interesting finding from El Badawi's paper is that most of the youth who intend to migrate are willing to accept a job which does not correspond to their skills or specialization. This means that even the skilled among them will probably seek jobs in the unskilled segment of destination countries, rather than the more competitive skilled segments. Finally, the more educated or from wealthier family background they are, the more they aspire to migrate to Western countries.

The composition and volume of the flows will entail structural effects in terms of employment/unemployment outcomes. A sudden outflow of individuals might cause a shortage of key workers, or might alleviate the pressure on the labor market depending on their labor status. An outflow of skilled migrants could have a positive or negative impact on the domestic labor market depending on the substitutability or complementarity of those staying behind. Thus, the skill composition of emigration is a significant element to be taken into account when analyzing the impact of labor mobility.

Wahba (2014) finds that Egyptian migrants are more educated than non-migrants, but the predominant temporary nature of Egyptian migration removes some of the eventual concerns for the existence of a brain-drain phenomenon. Along these lines, she also points out that since education is free in Egypt, the outflow of migrants might represent a loss of investment in education for the country. However, given the high unemployment rates among educated workers, migration simply relieves the pressure on the labor market.

The situation is different in Maghreb countries where migration is more often permanent, the main destination Europe, and migration increasingly high-skilled. As Natter (2015) points out, given the decline of legal opportunities to migrate to Europe, Tunisians increasingly rely on student migration channels. Thus, the risks of "brain drain" are higher although, as Clemens' (2011) literature review shows, the issue is complex as there are also positive externalities, particularly on investment in education.

Moreover, the impact of pull factors on labor supply is different between one MENA country and another. In the case of Tunisia, using a dynamic general equilibrium model, David and Marouani (2015) show that an outflow of migrants due to an increase in foreign wages has a limited impact in terms of reducing the working age population (although there is a strong positive effect on unemployment through remittance, which will be elaborated in a following section). When applying the same model to Jordan, the impact is stronger since migrant outflows represent a higher share of the total labor force in Jordan (David and Marouani, 2013b).

The outflows of labor supply can significantly impact the labor participation of those left behind and, particularly, women's labor market outcomes. This topic is even more relevant in the context of MENA countries where male migration remains the norm, labor market gender segmentation is more marked and women's participation rates very low (World Bank, 2014). The first direct consequence of the migration of a household member is the need to reallocate labor within the household in order to replace the migrant's labor and/or income. Therefore, given the magnitude of the migration phenomenon in the region, we expect to observe an impact on female activity rates. For instance, in rural Morocco, Sorensen (2004) argues that harvesting - a typically male task in the 1950s - has progressively been feminized following male emigration and has become regarded as women's work.

Binzel and Assaad (2011) look at the impact of emigration on the labor market participation of women left behind in Egypt and David and Lenoël (2016) study

#### Box

One interesting area is the cross-border mobility of services workers that can arise from a Mode 4<sup>2</sup> agreement. David and Marouani (2013a) find evidence of a skill bias regarding unemployment reduction in Tunisia and Jordan. Indeed, when increasing Mode 4 exports, which tend to be skill intensive, the outflow of skilled workers tends to reduce more the unemployment rate of the skilled population and has limited impact on the unemployment rates of the other skills. Interestingly, the results also show a decrease in migration outflows, suggesting a tradeoff between Mode 4 type mobility and migration.

the case of Morocco. Both papers find that the strict gendered division in these countries takes over the absence of labor supply and thus the outmigration of men has no significant impact on female activity rates.

These findings will raise issues for policymakers in terms of the impacts of the outflows on the composition of skills among emigrants that may lead to a "brain drain" in some countries but relieve labor demand pressure in others depending on domestic conditions. The outflow of migrants raises issues about the remittances they send and the impact on their eventual return (as discussed in the following sections).

#### 5. Inflows of labor supply from returning migrants

International labor mobility also impacts the domestic labor markets through the inflows of labor supply via return migration. There are two types of effects: a quantitative and a qualitative effect. The quantitative one would appear if a massive return occurred as a consequence of a crisis in the destination country for

<sup>&</sup>lt;sup>2</sup> According to the WTO, "Mode 4 refers to the presence of persons of one WTO member in the territory of another for the purpose of providing a service. It does not concern persons seeking access to the employment market in the host member, nor does it affect measures regarding citizenship, residence or employment on a permanent basis."

instance. This was the case for Tunisia, where more than 40,000 migrant workers had to return when the war broke out in Libya in February 2011 (AfDB, 2012). The other type of effect concerns the labor dynamics that might appear on the domestic labor market, such as internal migration, labor market outcomes and skill composition.

If return migrants settle in a different place from the one they lived in prior to the departure, their return migration entails internal migration and shifts in the density of labor force. Wahba (2014) find no evidence of such a phenomenon in Egypt.

Furthermore, returnees' employment status tends to be different from that of non-migrants and Wahba (2014) points out that Egyptian returnees are almost always confined to market-based work, while non-migrants are more likely to work as unpaid workers and to be engaged in subsistence work. Returnees also often experience upward occupational mobility after return (Figure 1). The share of returnees among employers and in self-employment is significantly higher than that of non-migrants. Given the importance of small and medium enterprises in the development of MENA countries, it is important to acknowledge the role of returnees, who often start businesses upon arrival.

Return migrants can also bring back skills from abroad and Wahba (2014) shows that returnees benefit from their overseas work experience and often undergo an upwards mobility. In a further work, she highlights that after separating the selection biases into emigration and into return, the average wage premium for returnees is of 16% compared to non-migrants (Wahba, 2015).

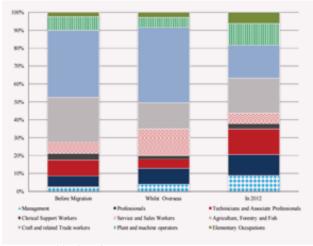
Aside from the wage dimension, David and Nordman (2014) look into the more qualitative labor market outcomes of returnees to Egypt and Tunisia. They observe that compared to Egyptian returnees, Tunisian return migrants are more prone to have studied during their migration and to have benefited from 'on-the-job-training' while abroad. When looking at the transitional mobility between job levels during

and after migration, it appears that Tunisian returnees experience an upgrade in job levels upon return more often than Egyptians.

They also show that Egyptian returnees have lower probabilities of being overeducated, while Tunisian ones are more likely to be overeducated. This points out to a potential waste of human capital that was acquired through migration due to a lack of recognition of the expertise acquired abroad.

Nevertheless, the benefits of return migration, either for returnees themselves, or for the origin country as a whole, appear only when return is of a voluntary nature. When individuals are willing to go back to their home country, they can prepare their return by mobilizing their savings and activating their social networks. David (2015) shows that in the case of migrants returning to Maghreb countries, involuntary return (often through deportation) negatively impacts labor market outcomes. Deported migrants have significantly higher probabilities of being unemployed upon return and are very poorly integrated in both economic and sociocultural terms. She also finds that lower scores of integration are characteristic of returnees that were not deported, but had to unwillingly come back to their home countries. These results raise an issue for

Figure 1. Occupation of Return Migrants: Before, During and After Migration, Ages 15-59



Source: Wahba (2014)

policymakers of the current lack of awareness when it comes to return migration. Beyond the strategies to engage the diaspora in the development of their origin countries, the support to returning migrants is often lacking from the policy dialogue perspective.

#### 6. The quality of labor supply

The findings on both outmigration and return migration highlight important impacts on the skills levels in domestic labor markets as a consequence of international migration. As was seen in the previous section, return migrants can also bring back skills from abroad and often start businesses upon arrival.

However the impacts go beyond returning migrants. The aggregated skill level of the labor force in the origin country can also increase as a result of migrants' desire to leave the country (as discussed earlier when comparing Maghreb and Middle East countries).

Various studies find that the perspective of migration has a positive effect on the education level of a country. The hypothesis is that given the positive selection into emigration, individuals will invest more in education in order to increase their chances of migrating. Since not all of them will end up going abroad, the stock of skilled workers will increase incrementally.

The results from David and Marouani (2013b) show that an outflow of high skilled migrants is a strong incentive for tertiary education, but has a limited impact on transitions to secondary education in Jordan. In Tunisia, the positive effects on higher education are much lower.

An increase in mobility due to an increase of Mode 4 exports has been shown to entail a skill bias and thus significantly higher incentives to pursue secondary and tertiary education in Jordan and Tunisia, although the impact is more important in Tunisia, where service exports represent a bigger share of total exports and are more skill intensive (David and Marouani, 2013a).

The tendency of returning migrants highlights op-

portunities for countries of origin to benefit from more highly-skilled and entrepreneurial returning migrants. However, the return of large numbers of involuntary migrants also raises serious policy issues.

#### 7. Remittances and their impact on households

The fourth channel through which international labor mobility can impact domestic labor markets is remittances. Sirkeci, Cohen and Ratha (2012) note that remittances were relatively resilient to the global crisis. Many factors explain this resilience. Regional diversification of destinations reduces risk. Moreover, even if migration flows decrease, stocks matter more for remittances. Return migration was also not as high as expected and those who returned took their savings with them. In some cases migrants reduced their consumption and continued sending remittances. Finally, strong exchange rate depreciation in some countries has probably created an incentive to buy more products and assets in the home country.

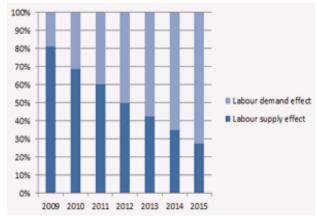
The use of remittances by the receiving households affects labor supply, since it determines household labor market participation, but also labor demand if the remittances are used as capital to start a business for instance.

Wahba (2014) and David and Marouani (2016) find that remittances represent the most important source of non-labor income for households in Egypt and Tunisia respectively. Both papers find that the heads of households receiving remittances are more likely to be out of the labor force. Al Assaf (2016) finds similar effects for Jordan and also shows that the impact is stronger for men living in a remittance-receiving household than for women.

In the case of Morocco, David and Lenoël (2016) highlight that while outmigration has no labor substitution effect on women's labor market participation, remittances received by the household do influence female activity rates. Using both a quantitative and a qualitative approach, they highlight that given the high prevalence of women employed as unpaid family workers, remittances allow them to withdraw from the labor market and benefit from a higher quality of living. Indeed, their results suggest that the poor working conditions and low wages for Moroccan women in formal employment dissuade them from joining the labor market, a finding confirmed by the qualitative interviews. In line with the literature, they argue that while paid work remains an important route to women's emancipation, international migration is unlikely to play a positive role in supporting their access to cash-earning opportunities in the absence of more favorable labor market conditions at origin, and remittances may instead be used to withdraw from it.

David and Marouani (2013a) analyze the impact of the global economic crisis and the Arab uprising on Jordan and Tunisia and find that decline in remittances is higher in Tunisia due to two main factors. Firstly, the crisis entailed a significant decrease in migrants' incomes, especially in Europe, thus limiting their ability to remit. Secondly, lower growth also meant a smaller depreciation of the exchange rate given that the two countries had a structural deficit in their trade balances. This amplified the negative impact on migrants' remittances. This phenomenon is more pronounced in Tunisia and significantly increases the labor market participation. Despite the higher decrease of remit-

Figure 2. Decomposition of the Increase in Unemployment between Labor Supply and Demand Effects



Source: David and Marouani (2015)

tances in Tunisia, we observe a similar effect on Jordanian activity rates because remittances represent a much higher share of households' revenues in Jordan. Low and medium skilled workers were the most affected by the crisis in both countries for different reasons. In Tunisia the low skilled unemployment rate is the lowest, which means that an equivalent decrease of labor demand (for the three skill levels) has a higher impact on unskilled unemployment. In Jordan, the low skilled are characterized by the highest increase of their labor supply (given their initial low activity rate), resulting in a higher rise of their unemployment rate.

Using a similar model and focusing on the crisis in Europe, followed by the one in Tunisia, David and Marouani (2015) highlight that the increase in unemployment in the Tunisian labor market can be decomposed into labor supply and demand effects. In the first period (2009-2012), when the crisis was more severe in Europe, unemployment increased due to the increase in labor supply entailed by the fall in remittances. Meanwhile, in the second period (2013-2015), the increase in unemployment was due to the decrease in labor demand (see Figure 2).

The evolution of remittance flows is a factor that policymakers will need to take account of when analyzing future structural changes in their domestic labor markets.

#### 8. Conclusions and policy implications

International labor mobility has a significant impact on labor markets in the MENA region through emigration, immigration and return migration, the quality of labor supply, and the role of remittances. Policymakers should take account of these findings when formulating policy responses, particularly in planning for trends in outmigration, the impact of involuntary return migration, stimulating entrepreneurship, and handling the impact of remittance flows.

Migration needs to receive more attention to maximize its benefits for countries and individuals. The share of migrants in the labor force, the skill composi-

tion of emigration and the region of destinations are among the main factors that explain the differences of outcomes observed in the labor markets of countries of the region. Understanding youth aspirations in terms of migration would help in anticipating the future flows in terms of volume and composition.

At the national level, candidates for emigration need to receive a tailored training on their future needs, depending on their skills and destinations. More engagement with the high skilled diasporas is also crucial, particularly in Maghreb countries where migration is more often permanent and the probability of return of the high skilled low.

Policymakers should take advantage of the potential for business and job creation by returning migrants when designing incentives for entrepreneurship and when encouraging return migration. These incentives can take the form of tax benefits, but can also be of informational order in terms of investment opportunities and business climate. However, as David (2015) shows, return migration has a negative impact on the labor market when it is involuntary. More attention should be given to massive movements of involuntary returnees, such as the ones witnessed by Egypt or Tunisia due to the Libyan civil war. This category of returnees would benefit from future studies.

Policymakers must take account of the composition of skills among emigrants in deciding whether they should respond to concerns over a "brain drain." They must also ensure they can take advantage of the finding that returning migrants tend to have higher skills and a greater propensity to establish a new business than non-migrants.

At the regional level, negotiations could be set to take into account the economic situation of both sending and host countries. Moreover, labor mobility through trade in services should be promoted within the region and in the negotiations with Western countries as this has positive effect on skilled jobs and could be a partial substitute to migration.

Remittances play an important role as one of the main sources of household income, and also through their impact on labor supply and their macroeconomic effects. Closely monitoring the flows of remittances can also help policymakers anticipate future outcomes on domestic labor markets since the link between remittances and labor market participation is very strong in countries such as Tunisia and Jordan.

#### References

- AfDB and IOM (2012). "Migrations des Tunisiens en Libye: Dynamiques, défis et perspectives." Organisation internationale pour les migrations and Banque Africaine de Développement.
- Alassaf, G. (2016). "Do International Remittances Affect the Performance of Labor Market in Jordan? An Empirical Investigation." ERF Working Paper Series N°1014, Economic Research Forum.
- Binzel, C. and R. Assaad (2011). "Egyptian Men Working Abroad: Labour Supply Responses by the Women Left Behind." Labour Economics, 2011, 18, S98-S114.
- Clemens, M. A. (2011) "Economics and Emigration: Trillion-Dollar Bills on the Sidewalk?", The Journal of Economic Perspectives, 25(3), 83-106.
- David, A. and A. Lenoël (2016). "International Emigration and the Labour Market Outcomes of Women Staying Behind The Case of Morocco." Papiers de Recherche AFD, n°2016-23, Mois.
- David, A. M. (2015). "Back to Square One: Socioeconomic Integration of Deported Migrants." International Migration Review.
- David, A. and M. A. Marouani (2016). "Migration and Remittance Trends and Patterns in Tunisia." ERF Working Paper, forthcoming.
- David, A. and M. A. Marouani (2015). "Migration and Employment Interactions in a Crisis Context: the Case of Tunisia." Economics of Transition, vol. 23(3), pages 597–624.
- David, A. and M.-A. Marouani (2013a). "The Impact of Labor Mobility on Unemployment: A Comparison between Jordan And Tunisia." ERF Working Paper Series, N° 823, Economic Research Forum.
- David, A. and M.-A. Marouani (2013b). "The Labor Mobility-Employment Nexus: A General Equilib-

- rium Analysis for Jordan." ERF Working Paper Series, N° 824, Economic Research Forum.
- David, A. and C. J. Nordman (2014). "Skill Mismatch and Return Migration in Egypt and Tunisia." (2014) DIAL Working Papers, N°DT/2014-05.
- De Haas, H. and Sigona, N. (2012). "Migration and Revolution". Forced Migration Review, 39:4–5.
- El Badawi, A. (2011). "Migration Aspirations Among Young People In Egypt: Who Desires To Migrate?" ERF Working Paper Series, N° 619, Economic Research Forum.
- ESCWA (2015). "2015 Situation Report on International Migration. Migration, Displacement and Development in a Changing Arab Region." ESCWA, Lebanon.
- Fargues, P. and Fandrich, C. (2012). "Migration after the Arab Spring." MPC Research Report 2012/09. European University Institute, Florence - Robert Schuman Centre for Advanced Studies Migration Policy Centre (MPC).
- International Labour Organization (2015). World Employment and Social Outlook: Trends 2015. Geneva: International Labour Office.
- Natter, K. (2015) 'Revolution and Political Transition in Tunisia: A Migration Game Changer?' Migration Information Source Country Profiles. Washington, DC: Migration Policy Institute.
- Roudi, F. (2011). "Youth Population and Employment in the Middle East and North Africa: Opportunity or Challenge?" Technical Report UN/POP/EGM-AYD/2011/06, United Nations Population Reference Bureau.
- Sirkeci, I., Cohen, and Ratha, D. (2012). "Introduction: Remittance Flows and Practices
- during the Crisis" in Sirkeci, I., Cohen, Jeffrey H., and Ratha, D. (Eds.), Migration and remittances during the global financial crisis and beyond. World Bank Publications, 2012.
- Sorensen, N. N. (2004). "Migrant Remittances as a Development Tool: The Case of Morocco." Migration Policy Research Working Paper Series, 2.
- Wahba, J. (2015). "Selection, Selection, Selection: The Impact of Return Migration." Journal of Population Economics, 28(3), 535-563.
- Wahba, J. (2014). "Through the Key Hole: International Migration in Egypt." ERF Working Paper

- Series, N° 830, Economic Research Forum.
- Wahba, J., (2012). "Immigration, Emigration and the Labor Market in Jordan." ERF Working Paper Series, N° 671, Economic Research Forum.
- World Bank, (2008). "Resolving Jordan's Labor Market Paradox of Concurrent Economic Growth and High Unemployment." Technical Report 39201-JO, World Bank Washington.
- World Bank (2014). "World development indicators 2013." Technical report, World Bank.

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#### **ERF Contact Information**

Address: 21 Al-Sad Al-Aaly St., Dokki, Giza, Egypt Telephone: 00 202 333 18 600 - 603 | Fax: 00 202 333 18 604 Email: erf@erf.org.eg | Website: http://www.erf.org.eg

