LABOUR SUPPLY, EDUCATION AND MIGRATION IN SOUTH MEDITERRANEAN COUNTRIES: POLICY CHALLENGES AND OPTIONS

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ABSTRACT

The analysis of labour supply in South Mediterranean Countries indicates that only a package of long term policies can foster employment creation. The quality of education systems needs to be improved to deliver good employees for companies and, potentially, new entrepreneurs. Social security protection needs to be extended to the private sector to make it more attractive to workers and to reduce informality, whereby it strongly contributes to the endogenous creation of opportunities. Institutional reform at the government level and in the market can significantly support this process. In the medium term, the combination of a growing population and low educational attainment with poor labour opportunities in the region, will only serve as a push factor and foster outflows of migrants.

Using a sustainable migration policy framework that benefits both origins and destinations remains of crucial importance. Lastly, our research also indicates that data availability in the region is a major obstacle to identifying labour market problems and formulating appropriate policy measures but also to monitoring their implementation.
INTRODUCTION

Historically, Southern Mediterranean Countries (SMCs)\(^1\) have been faced with persistent, high unemployment. Average rates (Figure 1, LHS) have always been higher than the global average and the EU average\(^2\) and the unemployment phenomenon primarily affects youths (Figure 1, RHS).

**Figure 1. Unemployment (LHS) and Youths (aged 15-24) unemployment (RHS) rates, % of Labour Force, South Mediterranean Countries.**

Source: World Bank, based on ILO

Youth unemployment rates are twice as high as the total unemployment rate: in 2017, close to 35% in Egypt and Tunisia and almost 40% in Jordan (see Figure 1, RHS). Tunisia and Egypt experienced a significant surge in unemployment after the 2009 crisis and the post-Arab spring. In Morocco and

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1 Algeria, Egypt, Jordan, Lebanon, Morocco and Tunisia.  
2 The EU average hides very large cross-country differences, larger than amongst the SMC: unemployment rates in Spain and Italy are above 10% and Greece above 18%, whilst in Germany it is around 3%.
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Lebanon, youth unemployment is still much higher than across the total population, but well below other SMCs.\(^3\)

In the region, demographic trends are an important factor behind chronic and persistent unemployment. Population projections until 2050 point to a substantial increase in population, particularly amongst youths of the working age population (see Groenewold and De Beer, 2013). This is most notably the case in Egypt, where, by 2050, the size of the country will double, compared to 2010. Also in Algeria and Morocco the population will continue to grow at a high rate. By contrast, demographic development appears to have reached a plateau in Lebanon and, in Tunisia, the population is projected to continue increasing but at declining rates. Jordan is an exception, as population dynamics have been dramatically affected by the large inflow of refugees from Syria.

**Figure 2. Population evolution (Egypt on RHS scale), thousands**

In principle, population growth associated with an expanding working age population, i.e. the workforce, increases relative to the number of dependents (people below 14 and above 64). This should be beneficial to long-term economic growth. Most growth models call it the “demographic

\(^3\) If one takes into account that the rates of young individuals Not in Education, Employment or Training (NEET) are also very high, peaking at 28% in Egypt in 2016 and 25% in Tunisia in 2013 according to World Bank Development Indicators, unemployment rates provide an underestimation of the size of the problem of youths being out of work

\(^4\) See Lassassi and Appler (2018) for the possible effects of discouraged young workers on the measurement of youth unemployment
dividend”. However, high youth unemployment can transform this dividend into a “penalty” (Ayadi and El Mahdi, 2013), if a large number of young adults are unable to participate productively, which could even become a source of political instability.

Persistently high unemployment is a manifestation of a dysfunctional labour market, both on the demand and the supply side. This policy brief focuses on the labour supply side, by providing evidence of key supply side features and of existing market frictions which can help to explain high unemployment rates. The last section proposes policy options to address the problem.

**EVIDENCE: LABOUR MARKET FEATURES AND FAILURES**

The economic literature suggests a number of reasons for the weak performance of the labour market due to the supply of labour. It should be noted that features of labour supply can often lead to market frictions and failures, but they are not a direct explanation for high unemployment. Yet, they call for public policy intervention and deserve being addressed. Such factors are:

- Skill mismatch and education systems
- Low employment rates and informality
- Size of public sector and social protection
- Quality of public and market institutions

**Skill mismatch and education systems**

Skill mismatch is a very broad concept. It can relate to many forms of labour market frictions and can impact workers in employment, or in firms employing or seeking to employ workers. Skill mismatch can materialise in different forms.

6 Vertical mismatch refers to a situation where the level
of skills or education is higher or smaller than the level of skills or education required to perform a certain job; skill shortage, skill gap and skill obsolescence refer to situations where demand for a particular type of skill exceeds or falls beyond the supply of people with those skills for different reasons, e.g. lack of, insufficiently specific or new skills. Horizontal mismatch refers to a situation where the type of education (e.g. field of education) or skills are not appropriate relative to what is demanded by a certain job.

Access to the education system has increased right across the world in recent decades. Most SMCs have achieved impressive progress in expanding access to education, as attested by increasing enrolment rates at the primary and secondary level, as well as tertiary education achievements amongst the youngest cohorts. Interestingly, tertiary education attainment appears to have increased, especially amongst women. However, these positive developments in the “quantity” of education were not accompanied by substantial improvements in terms of employment rates. On the contrary, in this respect, some countries like Tunisia emerge as malfunctioning cases. The unemployment rate is higher amongst those with tertiary educational attainment - above 30% - higher than in the rest of the population.

This can be symptomatic of two different problems: First, a typical mismatch problem, whereby the dominant fields of education chosen by individuals do not match the demand for labour, e.g. social sciences versus STEM. Second, the quality of education is low and the competences and skills developed in the curricula do not meet demand. Both situations can lead to over-education whereby, for instance, a highly educated person has to accept a job offer which doesn’t require a university diploma or he or she is unemployed. This result is consistent with the findings of Alshyab et al. (2018) who show evidence of over-education and under-skilling in the case of Jordan. Likewise, the World Bank (2014) finds that in Tunisia, secondary schools do not seem to provide students with the basic competences necessary to perform competitively in a globalised economy.

Skill mismatch, as described above, is clearly linked to education policies and points to the need for an improvement in the quality of education, in addition to achieving significant progress in terms of quantity. However, this does not explain the full story. Educated individuals are human capital, which should generate new growth, not just fill-in positions exogenously created. This is the main failure in

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7 See Ayadi and Trabelsi (2018) for an overview of the education system across SMCs
8 As shown in Akgüz et al. (2019) by 2020, with the exception of Morocco, all SMCs are expected to have more than 20% of young adults (20-39) with a university diploma.
9 See Akgüz et al. (2019) for a summary overview of the case of Tunisia.
10 See also Biltagy (2018) for the case of skill mismatch in Egypt.
the functioning of the economy, the result of the interaction of other factors with both cultural and institutional roots.

Employment rates and the informal sector

SMCs are usually characterised by low levels of employment. Employment rates in 2017 ranged between about 45% of the population in Morocco and less than 35% in Jordan (see Figure 4). These rates are extremely low compared to the EU, where the average was 72%\textsuperscript{11} in 2017.

![Figure 3. Employment rates, %](image)

**Source:** World Bank, based on ILO

**Note:** Employment to population ratio, 15+, total (%)

Low rates of employment reflect low labour market participation, especially of women. As argued by Assaad et al. (2018), despite rapidly rising female educational attainment and a reversal of the gender gap in education, especially for tertiary education, female labour force participation rates in the region remain paradoxically low and stagnant. Even if increases in participation are taken into

\textsuperscript{11} Based on Eurostat, as % of working age population, 20-64.
account, they still typically manifest in the form of rising unemployment.\textsuperscript{12} One explanation for this is that educated women are usually prepared and aspire to work in the public sector. The lack of public sector capacity for absorbing an increasing number of graduates is resulting in unemployment, or a decline in labour force participation.

A second aspect explaining low unemployment rates is a large informal economy, defined as being employed and with neither a contract nor social security. It is estimated that in Africa the informal economy, or the unofficial economy, accounts for about 60\% of economic activity (Jonasson, 2011). Informality is a major concern in SMCs. According to the ILO, the informal sector accounts for 40\% of non-agricultural jobs in North Africa. Only 30\% of workers in Morocco, 46\% in Tunisia and 50\% in Egypt have an employment contract (Subrahmanyam and Castel 2014, p.4).

Data on active contributors to an old age pension scheme, which is a good proxy measure for informality (Gatti et al., 2011), indicate that in North Africa the share of active contributors to pension schemes is less than 20\% of the working age population (and less than 40\% of the labour force). Such low rates point to the size of the problem in the region. In addition, global evidence suggests that young people and young entrants to the labour market are more likely to face informality and vulnerability (ILO 2016).

Ezzat et al. (2018) investigate informality in Egypt, Jordan and Tunisia and argue that informality is deeply rooted in the culture of these countries, where social security outside the public sector is virtual non-existent and the informal sector is de facto a significant source of employment, whilst formal employment opportunities are very limited.

Large public sector, small private sector

Another feature of SMCs is the large size of the public sector. According to the World Bank (2016), South Med countries have the highest ratio of public employment wage bills to GDP of all regions and one of the highest ratios of wage bill spending to total government revenue and spending. In Egypt and Jordan, the share of public sector employment is disproportionally large, at 25\% and above 30\%, respectively. Whilst this data is clearly highly relevant from a fiscal sustainability perspective, it is also important from the standpoint of a functioning labour market.

\textsuperscript{12} See Ayadi and Mouelhi (2018) on education, labour force participation and entrepreneurship of women in the MENA region.
First, productivity in the public sector is traditionally very low and is even more the case when the public sector becomes employer of last resort and a social protection mechanism. In this context, economic growth is deemed to remain low and, in the long term, jobs cannot be sustained.

In addition, a large public sector is typically the counterpart of a small and underdeveloped private sector. This phenomenon is often driven by a crowding out effect on the private sector. This is the case in terms of investment and growth opportunities, given the asymmetric access to financing sources, but also in terms of the capacity to attract more educated and skilled workers. More advantageous conditions, in terms of social protection and benefits associated with a public sector employment, work like a magnet and are even likely to affect education choices and the formation of skills.

As a result, both financial actors and newcomers into the labour market prioritise public entities over private firms in their choices, resulting in distorted educational outcomes and a crowding-out effect in the economy.

**Institutions do matter**

Understanding the role played by institutions in the economy is important for the formulation of appropriate economic and social policies, as well as for the design of institutional reforms.

Public and market institutions are the outcome of social preferences and the results of practices that have been in place over decades or even centuries, often with strong historical and cultural roots. This feature makes path dependency a very strong attribute of institutions. Historically, deep change in institutions has been very slow and often linked to violent events, like revolutions, with a regime shift in policy. The Arab Spring is probably one of the most recent attempts in this direction and reminded everyone that the management of successful institutional change is very difficult. Yet, poor quality institutions can have very large negative effects on social and economic development.

In labour markets, institutions have a cross-cutting impact on labour supply and demand. Informality is the most patent example of poor institutions in the labour supply; Ezzir et al. (2018) show that entry into the informal sector is based on a rational and informed choice, driven by cost/benefit analysis. As explained above, very limited access to social security protection, even in the formal private sector, lessens its relative attractiveness.
Ezzir et al. (2018) also argue that values and norms are a significant factor in the decision to be informally employed. Living in a community where refusing bribes and cheating is commonplace, decreases the likelihood of being informally employed; more generally, the greater the perception of the rule of law not being applied, the greater the probability of being informally employed. Similarly, the greater the perception of corruption and that public power is exercised for private gain, the greater the share of informality.

**MIGRATION AS SAFETY VALVE**

Both growing population and high unemployment rates usually work as push factors for migration. The South-Med region is no exception. According to Eurostat data (see Figure 4, LHS), in the last 8 years, every year almost 400,000 people moved from SMCs to the EU, using legal pathways.\(^{13}\) Morocco, given its historical ties with France and the proximity to Spain, has been the largest sender of migrants to the EU.

\(^{13}\) Irregular crossings from the region are, on average, in the order of 10,000 every year, peaking at 40,000 in 2011.
However, according to the data (see Figure 4, RHS), at least formally, the largest part of inflows to the EU – about 50% - are driven by family reunification reasons and a much smaller part – about 15% - by work reasons. On one hand, this casts some doubt on the statement that unemployment is the main push factor for migration. On the other hand, ‘family reunification’ may simply be the easiest legal pathway available to most economic migrants from the region.

Whilst factors like political instability and migrant networks can play an important role in fostering outflows, economic considerations are the dominant push factor in the region. As long as differences in wages between origin and destination exist, but above all, job opportunities in the origin country are lacking, migration will continue. Furthermore, the increase in educational attainment will contribute to this. Educated individuals are more mobile and, in the literature, educational attainments are often considered a predictor of migration.

**Figure 4. First time permits into the EU, by country of origin (LHS) and by type (RHS), in thousands**

**Source:** Eurostat

**Note:** Educ= education, FAM= family reunion, Occup=work reasons, Oth=other reasons
This is in line with the evidence described in Arguc et al. (2019). An increasing share of outflows from South Med region to the EU is of individuals with tertiary education (more than 20%, amongst youths aged 18-34, in 2017).

Such raw data often raises concern about the brain drain, in the sense of a critical loss of human capital for the sending country. However, as argued by the authors, this does not seem to be case for SMCs. The reason for this is that educational attainment has dramatically increased in the region and the share of highly educated people amongst those remaining is still increasing, in most countries larger than those who are leavers. The brain drain is even less of a concern if remainers are unemployed and the emigration process does not disrupt the functioning of the origin economies.

In practice, migration of educated individuals does not necessarily have a negative impact on the sending country and it can also lead to economic gains and social improvements. This is the case if remittances, both financial and cultural, are substantial, which seems to be the case for SMCs. The second reason is related to the positive effect of possible migration on the aspirations of the young being educated (the so-called ‘brain gain’ phenomenon). If this is true, there is an increase in the share of highly educated young people as the number of educated migrants increases. The third reason why emigration is not necessarily negative for the sending country is that educated people are highly likely to remain unemployed. This is costly for the state in terms of public expenditure, typically contributing to political instability, as no hope for a better future often encourages protest movements and even violence.

For the positive effects of migration to materialise it is of crucial importance that those leaving find a job, potentially a good one, in the destination country. Unfortunately, according to Eurostat data, this is not always the case for EU migrants. In 2017, of the estimated one million young (aged 18-34) immigrants from Algeria, Egypt, Morocco and Tunisia only 40% were employed, whilst 42% were inactive and 18% unemployed. Amongst the employed, the share of those with tertiary education is about 20% (223,000), a number which has been increasing over time, but which means that only slightly more than half of them (55%) were able to achieve a successful labour market outcome.14 Overall, migration is an important safety valve for the region but needs to be managed. From the perspective of the sending country, reaping the benefits of emigration does not only mean signing emigration agreements, which have been quite common for a number of countries looking to reduce pressure on the labour supply. It also means promoting partnership to make the choice of migration

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14 See Akgüç et al. (2019) for a complete overview of education and migration trends in SMCs.
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a success for those leaving and, above all, to change policies at home. Setting conditions favourable to employment creation must be the key priority.

POLICY CHALLENGES AND RECOMMENDATIONS

The evidence reported above points to serious challenges in SMCs when it comes to labour markets. Most of them, commonplace across countries, need to be addressed at the national level. Nevertheless, there are two issues generating externalities, for which a common approach is desirable.

The first one is about data collection. Data availability in the region is a major obstacle to identifying labour market problems and formulating appropriate policy measures, as well as to monitoring their implementation. In SMCs, information systems can be set from scratch at the national level and harmonised from the outset, to form an intra-regional information system for labour matching. Such a system could enable information exchange on best practices and labour market opportunities throughout the region.

The second issue is migration. Labour migration within the region and between the region and the EU can alleviate the unemployment problem in SMCs and lead to the better allocation of human capital. However, information on labour market opportunities in other countries is not always easily accessible to potential migrants and, vice versa, for employers. Furthermore, given the limited existing legal pathways for international labour migration, many would-be economic migrants from SMCs resort to family or even illegal entry channels. As a result, they cannot fully benefit from the economic opportunities in destination countries. Legal channels for labour migration in the Mediterranean region and between the region and the EU should be established in a collaborative effort by the countries concerned, using a sustainable migration policy framework that benefits both origins and destinations. Related policy tools would comprise a joint information system on emigration candidates and employment opportunities, as well as the implementation of migrant support measures from an employment and skills perspective.

This could help to reduce the brain drain, which takes place when those educated individuals migrate and end up in lower-end jobs with low salaries, but also to increase benefits for the sending countries in terms of remittances. If the cause of the brain drain is lack of qualification recognition, origin countries could take steps to negotiate ways to foster the recognition of qualifications with the destination countries. In addition, such programmes could help redefine specific training and
qualifications that can serve both the local and destination market, thus also increasing the employability of those remaining at home (e.g. see Global Skills Partnership scheme described by Clemens, 2017). Over-educated and lowly paid skilled migrants are not a desired outcome for the sending country. Moreover, the connections with diaspora should also be strengthened, to develop further economic linkages with the origin country.

Other challenges have a very strong domestic dimension and should be dealt with by national governments. The rethinking education systems, not only aiming at a growing number of pupils or tertiary graduates, but also delivering good employees for companies and potentially new entrepreneurs, is of crucial importance in SMCs. In some countries, this will require a cultural and mind set transformation. Rather than seeing university degrees as a form of social status instead of an opportunity to find a job that positively contributes to the development of the country’s economy and society will take a long time, but could bring about a very significant change.

The strong segmentation of labour markets, whereby the public sector tends to absorb most opportunities and the most talented workers, is deemed to keep the economy underdeveloped for long time. This feature of the economy potentially has two policy relevant dimensions. The first one is the need to foster entrepreneurship, i.e. private sector development, through individual initiative. The second dimension relates to how to make the private sector at least equally attractive as the public sector for workers. In this respect, social security coverage is one of the main sources of divide. Incentivising firms in the private sector to affiliate workers into social security would be an important step forward.

Changes in the approach to social security could also have an important impact on the informal sector. The informal sector is a complex issue in most SMCs. Whilst it is unrealistic to believe that very large swathes of the economy could become formal from one day to another, incentives to become formal can be created. These could include the offer of insurance, a decrease in the transaction costs (mostly administrative) to increase transparency, for instance through making digital transactions more accessible and mandatory licensing of professional sectors.
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