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Trading High Unemployment for Bad Jobs

Employment Challenges
in the Maghreb

Lahcen Achy

***Declining unemployment
rates in the Maghreb
are misleading and
should not be interpreted
as a sign of an improved
labor market.***

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Summary

Unemployment rates in the Maghreb fell over the last decade, with Algeria and Morocco making the most impressive gains. But the improving job outlook in the Maghreb cannot be interpreted as a sign of a better labor market performance overall. In most countries of the region, a significant decline in fertility rates has slowed the growth of the working-age population. And despite a significant improvement in women's education, female participation in the labor market remains very low. Informal employment and low value-added activities such as agriculture continue to account for a substantial percentage of jobs created in the Maghreb. The industrial sector, which remains uncompetitive and reliant on a few export markets, has offered fewer and fewer new jobs in recent years, and its share of total employment has been decreasing steadily. Despite the decline in overall unemployment, joblessness among the young and the well-educated remains high, and in some cases has even increased.

To improve conditions in the Maghreb more significantly, policy makers must shift their focus in providing new jobs from quantity to quality. They must pursue growth strategies to create high value-added jobs and strengthen the competitiveness of their exports in the global marketplace. Second, policy makers must tackle the primary cause of high unemployment by reforming their educational and vocational training systems. Partial reforms and quick fixes pursued over recent decades have been mostly unproductive and cannot continue. Effective reform will require strong political will, real participation of key stakeholders, and a better system of governance to ensure that public resources are used efficiently and equitably. Third, policy makers must review labor regulations to balance the rights and obligations of employers and employees, strengthen labor laws, and extend their coverage to workers in the informal sector, who are excluded from any protection. Finally, policy makers must rethink their active labor market policies to improve efficiency, extend coverage to the unemployed and most vulnerable, and increase their effectiveness.

Introduction

Unemployment rates declined in the Maghreb—the region comprising Algeria, Morocco, and Tunisia—over the last decade. While the decline in the Tunisian unemployment rate was negligible and fell short of expectations, the reduction of unemployment in Algeria and Morocco was impressive. Declining unemployment rates in the Maghreb are a misleading phenomenon, however, and cannot be interpreted as a sign of better labor market performance.

There are four reasons for this. First, the fertility rate has fallen substantially over the last two decades, and this demographic change has started to affect the labor market. As a consequence, the growth rate of the working-age population contracted over the last decade compared to the 1990s. Second, despite a significant improvement in the education of women, their participation in the labor market, which increased in the 1980s and the 1990s, lost momentum in the last decade.

Third, the official increase in employment was mostly generated by small, privately owned businesses such as street vending, repairs and maintenance, and construction. These activities are part of the “informal” sector, and employees of these businesses do not enjoy any social protection. The industrial sector, which remains uncompetitive and reliant on a few export markets, has offered fewer and fewer new jobs in recent years, and its share of total employment has been decreasing steadily. Fourth, despite the decline in overall unemployment, joblessness among the young and the well-educated remains high, and in some cases has even increased.

This again reflects the quality of jobs created in the three economies, which mostly benefited less-educated workers.

This paper points to four directions in which policy makers need to go in the coming years.

In order to effectively address these employment challenges, policy makers need to shift their focus from the *quantity* of jobs the economy can provide to the *quality* of these jobs. Maghreb countries need a stronger growth strategy, one that would generate high and sustainable growth, create decent and high value-added jobs, and yet strengthen their competitiveness in a globalized world.

More than fifteen years after its structural adjustment program began, Algeria failed to break its heavy dependence on the hydrocarbon sector. By the end of 2008, this sector accounted for 48 percent of total gross domestic product (GDP), more than 95 percent of exports, and 75 percent of budget revenues. Yet the largely capital intensive hydrocarbon sector is responsible for less than 5 percent of the job creation in the economy. The Algerian government should design a medium-term growth strategy and put forward adequate incentives to channel private-sector investments, domestic and foreign, toward highly productive sectors. Such a strategy requires a substantial improvement of Algeria’s business environment, which is characterized by

poor infrastructure, red tape, a lack of transparency in the decision-making process, and unstable regulations.

Morocco has significantly improved its growth performance over the last decade. However, the decline in the country's unemployment is not a result of its economy's ability to create more jobs but, rather, the slow growth of its labor force. Productivity gains have benefited a limited number of sectors, namely, telecommunications, transportation, financial services, and real estate. The challenge for Morocco is to use the progress achieved in services to enhance productivity and efficiency in other sectors—a goal only achievable through a comprehensive and consistent medium-term growth strategy. The current approach of Morocco's government is sectoral, fragmented, and less than optimal. In addition to addressing institutional deficiencies in designing and implementing development policies, the government should also put more emphasis on improving human capital through on-the-job training. Currently, poor human capital represents a serious obstacle to Morocco's transition to a path of higher productivity growth.

Despite its growth performance over the last three decades, Tunisia's growth appears vulnerable due to its excessive specialization and heavy reliance on a single market, the European Union (EU). In addition, Tunisia has built its growth strategy around low-skilled sectors that rely on cheap labor, such as textiles and the garment industry, agriculture, commerce, and tourism, which do not provide enough jobs for highly educated entrants into the labor market. Over the last decade, the level of education of the labor force substantially increased, but this fundamental change has not been matched by a similar trend in labor demand. The return on investment in education, a key sector in Tunisia's social model, is being wasted both at the individual and collective levels by the economy's limited capacity to absorb highly educated labor. Tunisia needs to design adequate incentives to channel resources toward selected knowledge-intensive sectors and industries, stimulate technological innovation, and overcome its weaknesses in business climate and governance.

The excessive level of unemployment among educated job seekers also points to the need to tackle the main cause of unemployment by effectively reforming educational and vocational training systems. Partial reforms and “quick fixes” pursued over decades in such a vital and strategic sector have been mostly unproductive and can no longer continue. Effective reform requires strong political will, real participation of key stakeholders, and a better governance system to ensure that public resources are used efficiently and serve the interest of the general public. Reformers also require political support to manage potential resistance from those who benefit from the current status quo.

The unusual rigidity of labor regulations and their administrative complexities provide incentives for firms to circumvent regulations by establishing their business informally or by making informal arrangements with their workers.

From the standpoint of equity and social cohesion, labor regulations need to balance the rights and obligations of employers and employees and extend their coverage to workers in the informal sector who are excluded from any protection. Furthermore, policy makers need to strengthen enforcement of labor laws by allocating additional legal and financial resources to the labor inspectors monitoring employers' compliance with regulations.

Maghreb countries now employ a range of labor market policies aimed at facilitating job seekers' entry into the labor market. However, these policies have three main flaws: high cost, low coverage, and limited impact. This is why authorities in Algeria, Tunisia, and Morocco need to rethink their labor market policies to improve their efficiency, extend them to the most vulnerable segments of the unemployed, and make them more effective in reducing unemployment. Policy makers in the Maghreb should also assess the design and implementation of these programs and adjust them when necessary.

Impressive Decline in Unemployment Rate

Unemployment rates declined in the Maghreb over the last decade. While the decline from 15.7 to 14 percent in Tunisia was negligible and fell short of expectations, Algeria and Morocco have seen an impressive reduction in their unemployment rates—falling from 13.4 percent in 2000 to 9.1 percent in 2009 nationally and from 21.4 percent to 13.8 percent in the cities in Morocco, and from 30 percent in 2000 to only 10 percent in 2009 in Algeria.¹

Beyond conceptual and measurement questions related to employment and unemployment and their degree of relevance for contexts such as the Maghreb countries,² recent statistics on unemployment are intriguing and warrant further investigation. Why is the unemployment rate in Tunisia still high despite the country's improved economic performance? How did Morocco and Algeria manage to greatly reduce their unemployment rates? To what extent can this performance be related to macroeconomic or employment policies in these countries?

Rapid Demographic Transition

Demographic factors are essential in understanding the dynamics of the labor market in the Maghreb. High population growth in the 1960s and 1970s (average population growth exceeded 3 percent per year) and fertility rates of six to seven children per woman led to severe pressures on the labor market in the 1980s and 1990s.

Table 1. Demographic indicators in the Maghreb

	Fertility rates (births per married woman)					Annual population growth (%)				
	1985	1995	2000	2005	2007	1985	1995	2000	2005	2008
Algeria	5.8	3.4	2.7	2.4	2.4	3.1	1.9	1.4	1.5	1.5
Morocco	4.8	3.3	2.7	2.4	2.4	2.2	1.7	1.3	1.0	1.2
Tunisia	4.3	2.7	2.1	2.0	2.0	1.9	1.6	1.1	1.0	1.0

Source: World Development Indicators (2009).

The Maghreb has undergone a rapid demographic transition to low fertility rates since the early 1990s, however. This trend was triggered by substantial improvement in female health and education. The lack of affordable housing and rising youth unemployment have also delayed family formation and contributed to a further decline in fertility rates. Population growth had plunged from 3.1 percent in Algeria in 1985 to 1.9 percent in 1995 and 1.5 percent by the end of 2008. In Morocco and Tunisia, annual population growth rates fell from 2.2 and 1.9 percent in 1985 to 1.2 and 1 percent, respectively, in 2008.

The impact of this demographic transition has begun to affect the labor market. The growth of the working-age population started to slow over the last decade and is expected to decline further. In Algeria, the working-age population grew by 2.9 percent for the period 2000–2004, down from 4.2 percent during the period 1980–1985. In Morocco and Tunisia, these rates amounted to 2 percent over the period 2005–2008 compared to 3.7 and 3.1 percent, respectively, during the 1980s. This more modest growth in the working-age population reduced the pressure on the labor market and contributed to reducing unemployment.

Persistent Low Participation Rates

In addition to the demographic transition and its effect on the labor supply, participation rates³ in the labor market remain exceptionally low in the Maghreb: In 2008, these were 50.6 percent in Morocco, 46.9 percent in Tunisia, and only 41.4 percent in Algeria. The world average amounts to 64 percent, and it is 65 percent in Latin America, 69 percent in Southeast Asia, and 73 percent in East Asia.⁴ Table 2 shows the decline of labor force participation rates in the three Maghreb countries.

Table 2. Labor force participation rates

	2001	2002	2003	2004	2005	2006	2007	2008
Algeria	48.1	45.0	39.8	42.1	41.0	40.9	41.7	41.4
Morocco	51.3	50.7	52.4	52.2	51.5	51.3	51	50.6
Morocco Urban	46	45.4	45.9	45.5	44.9	44.7	44.9	44.7
Tunisia	51	50.9	49	45.8	46.3	46.6	46.8	46.9

Source: Data from National Office of Statistics for Algeria, High Commissariat of Planning for Morocco and the National Institute of Statistics and Ministry of Employment for Tunisia.

Despite significant improvements in female education in the Maghreb, women's participation in the labor market remains low. In Tunisia, often considered a model of female emancipation in the Arab region, the participation rate stagnated at around 25 percent over the last decade. In Morocco, female participation amounted to 27 percent at the national level in 2008 (down from 28 percent in 2003) and declined in the cities from 21 to 19 percent over the period 2000–2009. In Algeria, female participation decreased to less than 14 percent in 2009 compared to 17 percent ten years earlier.

The expected convergence in participation rates between males and females experienced in developed countries has not yet occurred in the Maghreb. More difficult access to adequate job opportunities, as reflected in female unemployment rates—more than double those of males—has probably discouraged female participation.

Deceleration of Labor Force Growth

The patterns behind participation rates in the Maghreb since 2000 have generated fewer entrants into the labor markets and indirectly led to substantially lower unemployment rates in Algeria and Morocco. The additional demand for jobs, as expressed by labor force growth, decreased in the three countries over the period 2000–2008 compared to the 1990s. However, the decline from 3.6 to 1.2 percent in Morocco is much more striking than the trends in Algeria and Tunisia, where the labor force continues to grow by roughly 2.5 percent.

Table 3. Labor force size (average annual growth rate)

	Labor force (in thousands)					Labor force growth (%)	
	2000	2002	2004	2006	2008	1990–99	2000–08
Algeria	8 850	9 305	9 470	10 110	10 801	4.1	2.52
Morocco	10 285	10 379	10 745	10 990	11 267	3.6	1.15
Tunisia	3 028	3 181	3 329	3 506	3 678	3.1	2.46

Source: Data from National Office of Statistics for Algeria, High Commissariat of Planning for Morocco and National Institute of Statistics and Ministry of Employment for Tunisia.

On average, each year has seen roughly 240,000 new entrants in the labor market in Algeria, 123,000 in Morocco, and 81,000 in Tunisia during the period 2000–2008. Due to demographic transition and slowed growth in the labor force, these numbers are lower than their levels in the 1990s.

In this context, Algeria and Morocco managed to downsize unemployment by 170,000 and 40,000 each year over the period 2000–2008, respectively. In Tunisia, on the other hand, the pace of job creation has been slower, leading to an annual increase in the number of unemployed of 6,000 persons.

Table 4. Job supply and job demand in the Maghreb 2000–2008

	Yearly average number of new entrants (in thousands)	Yearly average number of jobs created (in thousands)
Algeria	240	417
Morocco	123	162
Tunisia	81	75

Source: Author's calculations from National Office of Statistics for Algeria, High Commissariat of Planning for Morocco and National Institute of Statistics and Ministry of Employment for Tunisia.

Decline in the Quality of Jobs

One key factor that needs to be considered in assessing labor market performance, beyond the decline in the official unemployment figures, is the nature and quality of jobs created. The informal sector played an important role in the process of job creation in the Maghreb over the last decade. As informal activities and underemployment reach sizeable proportions, employment and unemployment rates are rendered meaningless.⁵ The concept of employment used in labor market surveys is very broad. Although some variation exists from one country to the other, no country takes into account the “quality” of the jobs.⁶ Detailed data on the distribution of jobs by their levels of qualifications are not available. Instead, we use official estimates of the size of informal employment in the three countries to assess job quality.

In Algeria, the informal sector represented 27 percent of total employment in 2007, up from 20 percent in 2000. Since all public employment is qualified as formal, this indicator tends to underestimate the real contribution of the informal sector to job creation. The share of informal sector employment reached 42.6 percent in 2007, a rise from 34.9 percent if we only consider urban private-sector employment. Accordingly, the contribution of the informal sector in job creation over the period 2000–2007 amounts to 150,000 new jobs every year, the equivalent of 45 percent of jobs created in Algeria over that period.

Table 5. Contribution of informal sector to employment in Algeria

	2000	2001	2002	2003	2004	2005	2006	2007
Share of informal sector in total employment (percent)	20.2	21.2	21.1	21.1	25.7	26.8	27.6	27.0
Share of informal sector in urban private-sector employment ⁷ (percent)	34.9	36.7	36.6	36.4	42.1	43.0	43.8	42.6

Source: National Office of Statistics (Algeria).

In Morocco, informal sector employment accounted for 37.3 percent of total nonagricultural employment in 2007. The number of jobs provided by the informal sector has increased from 1.9 million to 2.22 million over the period 1999–2007. In other words, the informal sector contributed 37,500 new jobs in the nonagricultural sector every year over the last decade.

High Youth Unemployment

Joblessness among young people and the highly educated remains high in the three countries despite the overall decline in national unemployment rates. In Morocco, the youth unemployment rate (ages 15–29) amounted to 17.6 percent in 2008, up from 15.2 percent in 2003. In Tunisia, unemployment in this age group exceeded 30 percent by the end of 2008 and has not shown any clear decline since 2003. The exception is Algeria, where youth unemployment plunged from its historical high of 45 percent in 2003 to roughly 21.5 percent in 2008, still an extremely high figure compared to the national rate.

Table 6. Youth unemployment in the Maghreb (2008)

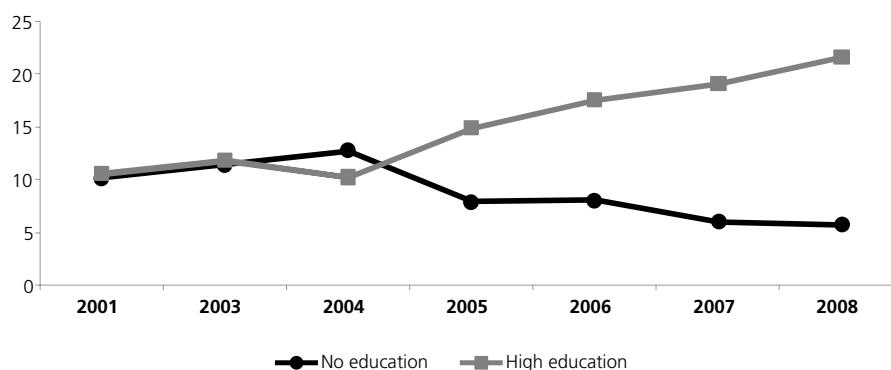
	National unemployment	Youth unemployment	Proportion of youth among total unemployed
Algeria	11.3	21.5	75
Morocco	9.6	17.6	62
Tunisia	14.2	31.2	72

Source: Author's computation from national surveys.

Jobless young people between ages 15 and 29 in 2008 represented 62 percent of the unemployed in Morocco, 72 percent in Tunisia, and 75 percent in Algeria. Two complementary arguments explain the rate of youth unemployment. First, unlike other job seekers, the young can afford to wait for a job that matches their skills and meets their pay expectations. They live with their parents and usually have no great family responsibilities. Second, the young are generally more educated than other job seekers and have higher expectations,

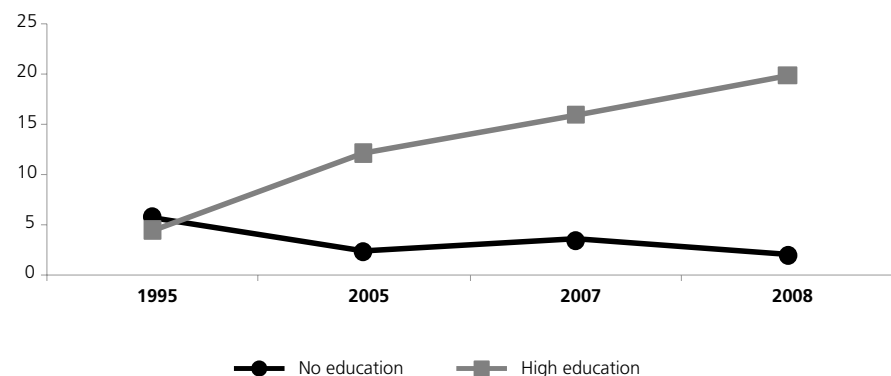
which are not easily matched by the available opportunities on the market. The latter argument reflects the quality of jobs created in the three economies, which have mostly benefited less educated workers.

Figure 1. Unemployment rates for the uneducated and highly educated in Tunisia



Unemployment rates among the highly educated are also much higher than national unemployment rates in the three Maghreb countries—increasing from 10.4 and 10 percent in 2001 to 21.6 and 19.8 percent in the case of Tunisia and Algeria, respectively, by the end of 2008. Although the unemployment rate among the highly educated decreased in Morocco from 29 percent in 2001 to roughly 20 percent in 2008, it was still twice the national rate.

Figure 2. Unemployment rates for the uneducated and highly educated in Algeria



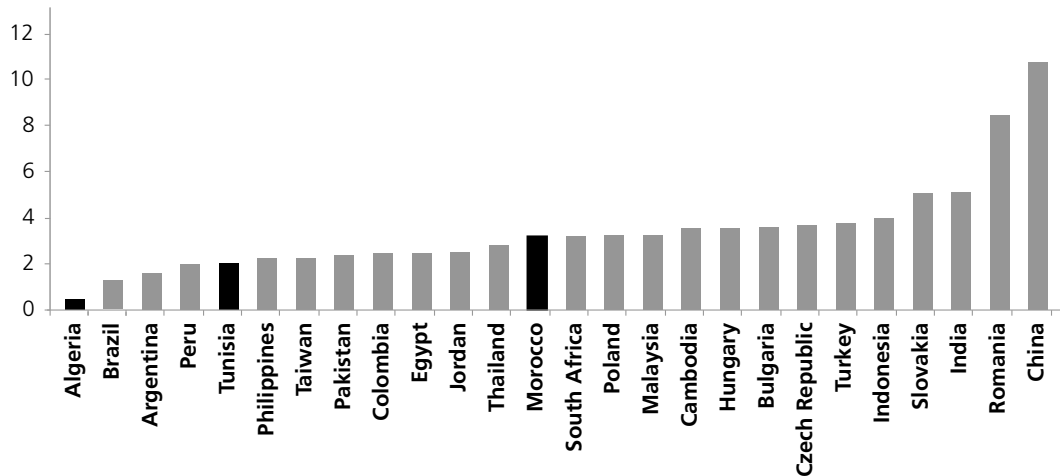
Conversely, unemployment rates among uneducated workers are relatively low in the Maghreb countries and declined further in 2008. By the end of 2008, only 5 percent of uneducated job seekers were unemployed in Morocco and Tunisia. In Algeria, this rate was a mere 2 percent.

Rethinking Growth Strategies

Over the last decade, GDP in the Maghreb countries grew more quickly than in the 1990s, particularly in Morocco and Algeria. Average economic growth increased from less than 2 percent in Morocco in the late 1990s to 5 percent over the 2000–2008 period and from less than 3 percent to more than 4 percent in Algeria over the same period. Tunisia maintained its average economic growth of approximately 5 percent for the whole period with signs of deceleration in recent years. The process of job creation, however, has been disappointing. In Tunisia, job creation has been slow. In Algeria and, to a certain extent, in Morocco, rapid employment growth and an impressive decline in unemployment have been achieved largely at the expense of job quality. In Morocco, improvements in the labor market over the last few years have also been driven in part by relatively slow labor force growth.

Labor productivity, as measured by GDP per worker, confirms our previous findings. In Algeria, average annual productivity was stagnant between 2000 and 2008 and negative for the non-hydrocarbon sector. In Tunisia, labor productivity has grown by 2 percent a year. Starting from a lower level, Morocco has achieved a relatively better performance: its labor productivity growth increased by roughly 3 percent on average from 2000 to 2008.

Figure 3. Average annual labor productivity growth (2000–2008)



Labor productivity growth figures in Morocco and Tunisia seem encouraging and exceed those of some Latin American countries, such as Brazil, Argentina, and Peru, over the 2000–2008 period. However, they fall far short of labor productivity numbers in Morocco's and Tunisia's real competitors in the European markets, such as Poland, Turkey, and Romania. They are also low compared to the largest emerging countries in Asia, namely, China, India, and Indonesia. In addition, unlike most emerging countries, where

manufacturing has been the main source of productivity growth, average labor productivity growth for the manufacturing sector has only been around 2 percent in Morocco.

Maghreb countries need a stronger growth strategy, one that would generate high and sustainable growth, create highly productive jobs, and strengthen their competitiveness in a globalized and increasingly competitive world.

Tunisia: High Growth but Low Demand for Educated Labor

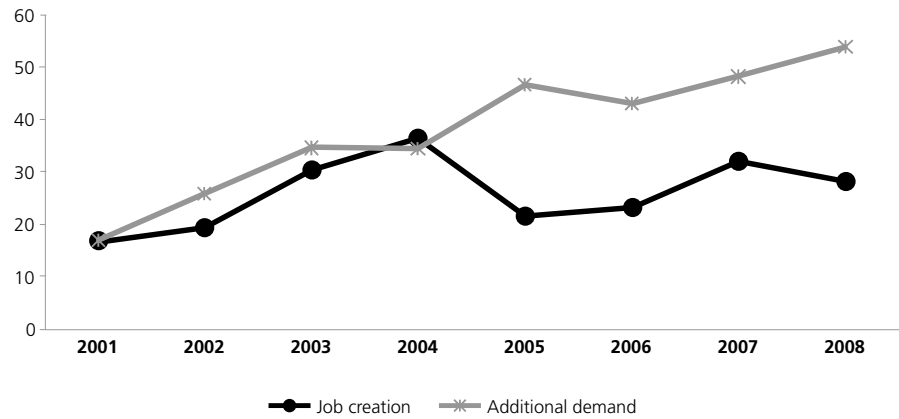
Tunisia is heavily reliant on a single export market, the EU, which absorbs 76 percent of Tunisia's exports and is responsible for 83 percent of Tunisia's tourism revenues and 73 percent of its foreign direct investment inflows. The EU is also the origin of 90 percent of remittances transferred to Tunisia. In other words, the equivalent of two-thirds of Tunisia's GDP depends on the EU.

In addition, Tunisia has not succeeded in reducing its unemployment rate, especially among young and well-educated job seekers. Productivity growth can explain this situation.⁸ Tunisia lags behind most of its Eastern European and Asian competitors in labor productivity growth. In a consistent growth model, higher labor productivity increases revenues and boosts competitiveness. Both factors generate more demand for products and services, which creates more jobs and puts the economy on a sustained growth path. The real problem for Tunisia is that it built its growth strategy around low-skilled sectors that rely on cheap labor.

Over the last decade, the average annual growth rate of the Tunisian labor force with post-secondary education was more than 9 percent, compared to a negative growth rate of 2 percent for those without any education. As a result, the share of post-secondary education among job seekers increased from 20 percent in 2000 to more than 55 percent by the end of 2008. This fundamental change in the profile of new entrants to the labor market in Tunisia has not been accompanied by a similar trend in labor demand. In general, the same sectors continue to generate employment. The return on investment in education, a key sector in Tunisia's social model,⁹ is being wasted both at individual and collective levels by the economy's limited capacity to absorb highly educated labor.¹⁰

The eleventh National Development Plan for 2007–2011 aims at shifting the economy to higher value-added and knowledge-intensive activities. However, the government has not yet been able to effectively transform this intention into reality. Despite its advanced ranking in the World Bank's *Ease of Doing Business Index*, Tunisia's business environment is still characterized by weak investor protection and limited access to financing, especially for small- and medium-sized enterprises. Both factors limit entrepreneurship and constrain private-sector investments. Tunisia must design adequate incentives to channel resources toward knowledge-intensive sectors and industries, stimulate technological innovation, and overcome remaining weaknesses in its business climate and governance.

Figure 4. Job creation and new entrants in the labor market with post-secondary education in Tunisia (in thousands)



Algeria: From Overstaffed Public Sector to Dominance of Informal jobs

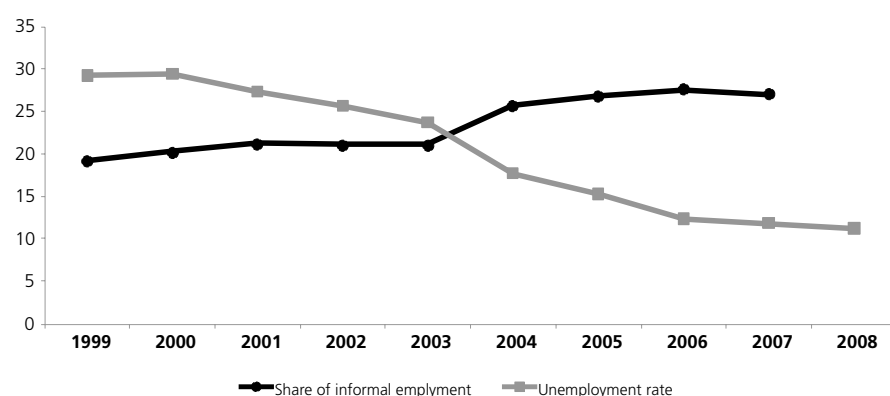
Algeria suffered a wave of political violence, an economic downturn, and social unrest in the late 1980s and early 1990s that deeply transformed its labor market. Until the early 1980s, the public sector had provided two-thirds of total employment,¹¹ and there was substantial overstaffing. This was made possible by abundant hydrocarbon revenues, which made the government the main employer in the economy. In the mid-1980s, less than 10 percent of Algeria's labor force was unemployed. However, most public companies were suffering from inefficient resource and capacity utilization, obsolete technologies, and inadequate management and governance.¹²

By the late 1980s, the substantial decline in oil prices caused a meltdown of Algeria's export revenues and seriously threatened its solvency.¹³ Between 1988 and 1993, the government had to allocate, on average, 86 percent of its export revenues to debt repayment. By 1994, the government was left with no option but to embark on a structural adjustment with International Monetary Fund and World Bank support to restructure state-owned enterprises and downsize public-sector employment. From 1994 to 1997, more than 405,000 employees were laid off from public enterprises¹⁴ without any noticeable job creation from the largely underdeveloped private sector. Those who kept their jobs lost between 20 and 40 percent of their purchasing power.¹⁵ The notion of a protected and well paid job was seriously undermined.

Starting in 2000, job seekers, whose numbers were growing, had to create their own employment. Official statistics show that the decline in unemployment went hand in hand with a growing informal sector. As the unemployment rate dropped from 30 percent to roughly 10 percent over the last decade, the informal sector boomed. Its contribution to all jobs created by the economy rose from less than 20 percent in 1999 to more than 27 percent in 2007.

The government preferred a “quick fix” and fragmented approach to addressing unemployment based on a myriad of micro-credit programs. Driven by political motives, it preferred to ignore the efficiency dimension of its employment policy and its perverse impact on job quality. As a result, Algeria’s overall labor productivity stagnated over the 2000–2008 period, lagging behind most emerging and developing countries in and outside the region.

Figure 5. Informal employment and unemployment rate in Algeria



More than fifteen years after the structural adjustment program, Algeria has failed to break its heavy dependence on the hydrocarbon sector. By the end of 2008, this sector accounted for 48 percent of GDP, more than 95 percent of exports, and 75 percent of budget revenues.¹⁶ Yet the capital-intensive hydrocarbon sector accounted for less than 5 percent of job creation in the economy. In the meantime, the contribution of agriculture and manufacturing to GDP declined from 11 percent and 10 percent to 8 and 5 percent, respectively, over the last decade.

The Algerian government should design a medium-term growth strategy and propose adequate incentives to channel private-sector investments, domestic and foreign, toward highly productive sectors. Such a strategy would require a substantial improvement of Algeria’s business environment, now characterized by poor infrastructure, red tape, a lack of transparency, and unstable regulations.¹⁷ The World Bank’s 2010 *Doing Business* report ranks Algeria 136th of 183 countries; it lags behind Tunisia (69th), Morocco (128th), and most other Middle Eastern and North African (MENA) countries. The banking sector in Algeria, which is largely publicly owned, contributes little toward financing the economy. Banking credits advanced to the private sector do not exceed 13 percent of GDP in Algeria, whereas they amounted to 46 percent of GDP in Tunisia and 78 percent in Morocco in 2008. Poor access to financing impedes private-sector development and keeps potential entrepreneurs from engaging in large and innovative investments.

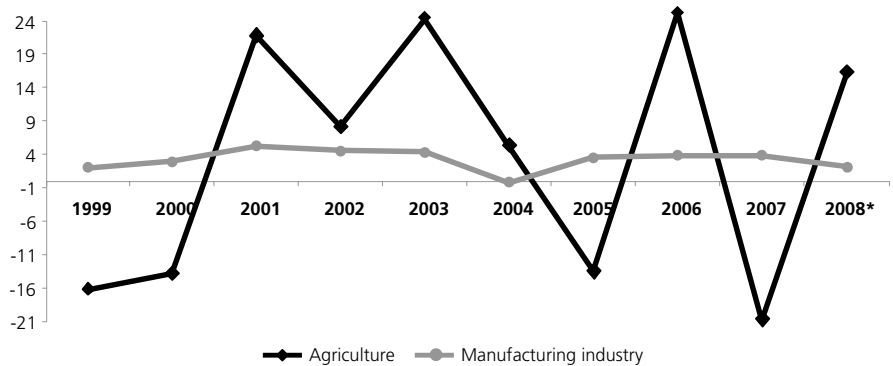
Morocco: Higher Growth but Puzzlingly Slow Labor Force Expansion

Growth in Morocco reached an average of 5 percent annually for the 2000–2008 period, but employment has only increased by 1.7 percent per year. In other words, each percentage point of economic growth has generated only 0.34 percent growth in employment. This is lower than Tunisia, where the corresponding figure is 0.55 percent.

What explains the dichotomy in Morocco between growth and employment is the fact that average labor productivity increased by 3 percent per year, an exceptional performance in Morocco's history. However, productivity gains have mainly benefited a limited number of sectors: telecommunications, transport, financial services (banking and insurance), and real estate. Morocco introduced important reforms in these sectors by opening them to privatization and competition, allowing them to benefit from large inflows of foreign investments and transfers of technology.

Nevertheless, performance in the rest of the Moroccan economy continues to be modest. The agricultural sector, which generates 15 percent of GDP and 40 percent of jobs, remains volatile and excessively reliant on weather conditions. The manufacturing sector, despite the government strategy to industrialize the country, has been losing ground; with yearly average growth below 4 percent, manufacturing's contribution to GDP declined from 17 percent in 2000 to 14 percent in 2008. Morocco is also falling behind in measures of external competitiveness. Its imports coverage has fallen sharply in recent years from 66 percent in 2002 to less than 48 percent in 2008. The deficit in its current account reached 5 percent of GDP and would have been much worse without remittances received from Moroccan emigrants, which have accounted for 9 percent of GDP on average over the last five years.¹⁸

Figure 6. Real GDP growth in agriculture and manufacturing in Morocco



The challenge for Morocco is to make use of the progress achieved in services to enhance productivity and efficiency in other sectors of the economy. This can be done only through a comprehensive and consistent medium-term growth strategy. The current approach of Morocco's government is sectoral, fragmented, and inadequate. Morocco gave up designing comprehensive economic plans after early 2000. These have been replaced by a myriad of sectoral plans, designed at different points in time and for different time frames.¹⁹ Each sectoral plan has its own objectives, policy instruments, and incentives. In addition, no institution is in charge of coordinating efforts, monitoring, and assessing the results of these plans.

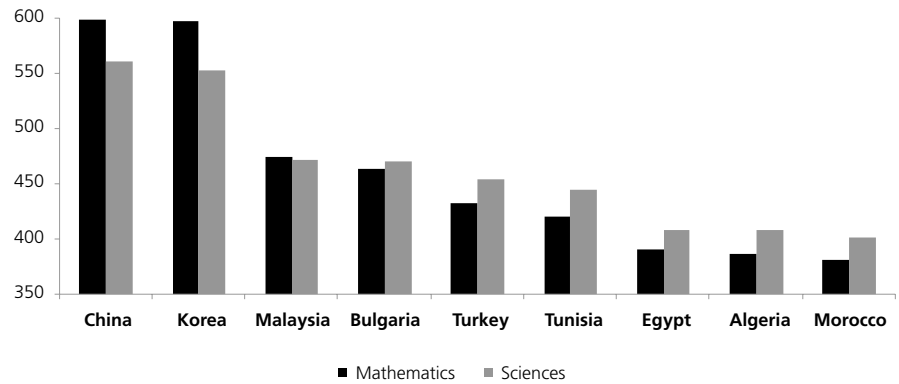
In addition to addressing institutional deficiencies in designing and carrying out development policies, the government should put more emphasis on improving its human capital through on-the-job training. Currently, poor human capital represents a serious obstacle to Morocco's transition to a path of higher productivity growth.²⁰ In 2008, more than 40 percent of those employed were illiterate, and 68 percent had no diploma. The government needs to review incentive schemes to stimulate firms' investments in on-the-job training and improve their implementation through an effective communication policy. The current procedures in Morocco to take advantage of on-the-job training schemes are slow, complex, and ineffective.²¹

Currently, fewer than 20 percent of formal manufacturing firms provide training to their employees, an extremely low proportion; the average rate is 50 percent in emerging countries, and China and Poland provide training at rates above 90 percent.²²

Education in the Maghreb and Labor Market Outcomes

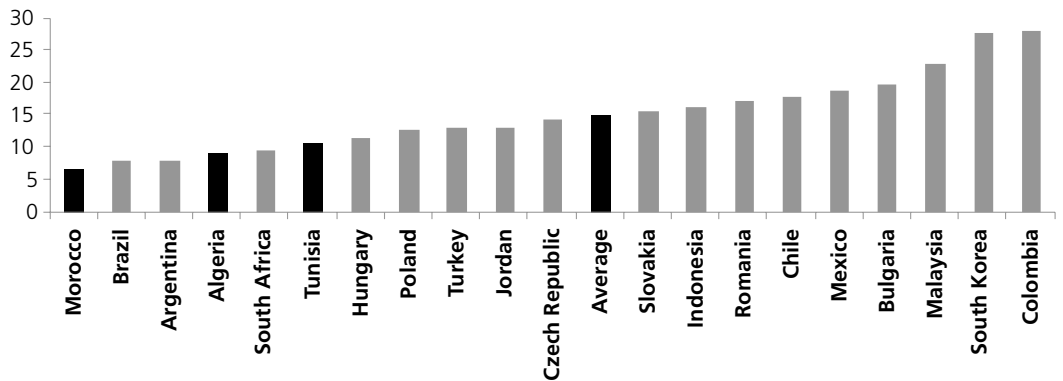
All Maghreb countries have high unemployment rates among highly educated job seekers. While the "demand side" argument, which focuses on the inability of the economy to create highly skilled work, cannot be ignored, this phenomenon also reveals the poor quality of education. This is confirmed by looking at the *Trends in International Mathematics and Science Study* (TIMSS),²³ which is based on an international assessment of the math and science knowledge of fourth and eighth grade students around the world. TIMSS establishes performance thresholds in measuring students' capabilities. Those with scores under 400 have only the most basic knowledge. Conversely, students with scores above 500 are able to apply their understanding and knowledge in a variety of complex situations. Asian students score, on average, above 500 in both math and the sciences. On the other hand, Algerian and Moroccan students are generally below average in math and around average for the sciences. Tunisian students, despite having the highest scores in the Maghreb, are falling behind emerging countries outside the region.

Figure 7. TIMSS scores for selected countries (2007)



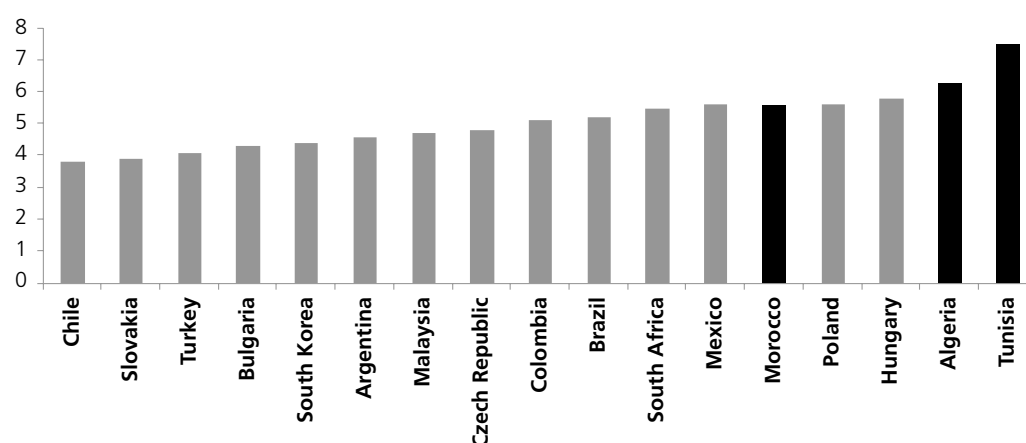
The distribution of post-secondary students in different fields of specialization shows that, on average, 15 percent of students in a sample of 20 emerging countries, are enrolled in the field of engineering. Most Asian and Latin American countries are above this average, while the three Maghreb countries fall below it. Only 6.7 percent of post-secondary students in Morocco, 9.2 percent in Algeria, and 10.7 percent in Tunisia are completing engineering programs. Students in the Maghreb tend to cluster in the humanities, social sciences, law, and education. Without making any value judgments about any of these fields, there seems to be an unbalanced distribution of Maghreb students in fields that generate an undersupply of the skills most needed by the private sector.²⁴ Available data on the unemployment of university graduates by field show that fewer than 3 percent of engineers suffer from unemployment, compared to an average of 20 percent of all graduates in other fields.

Figure 8. Share of students enrolled in engineering programs (2007)



The most striking finding is that, contrary to popular wisdom, the state of education in the Maghreb does not seem to be explained by a scarcity of resources. The share of public expenditure on education in a sample of eighteen emerging countries amounts to 5 percent of GDP. The three Maghreb countries are above average in this regard, yet their performance fails to keep pace with countries that spend less. Most countries with excellent educational achievement mobilize no more than 5 percent of their GDP for education.

Figure 9. Total public expenditure on education as % of GDP



Tunisia: Higher Access and Better Quality

Tunisia has the highest adult literacy rates in the Maghreb.²⁵ It enrolls every child in primary education, and its measures of access to secondary and higher education are comparable to those of Latin America and East Asia. Tunisia has also succeeded in closing the gender gap in educational access. Girls represent 48 percent of enrolled pupils, and their share in post-secondary education reached 60 percent in 2008.²⁶

Despite these achievements, the quality of education in Tunisia still lags behind emerging countries outside the region. Tunisian students' scores, although better than those of their Algerian and Moroccan peers in math and the sciences, according to TIMSS 2007, are below average. Furthermore, more than two-thirds of Tunisian students specialize in the fields of humanities or the arts and social sciences, and fewer than 25 percent in science or engineering. This pattern of specialization is unlike that observed in higher-scoring countries²⁷ in East Asia and Latin America and contributes to higher unemployment rates among graduates. The education system in Tunisia is also largely monopolized by the public sector.

The challenge for Tunisia is to create a public-private partnership that would reduce the burden on the state budget and make education more responsive to labor market needs in terms of skills and qualifications. Tunisia recently

opened vocational training to the private sector to increase its capacity to train students and strengthen partnerships with private firms. But policy makers need to encourage students to pursue vocational training, because most students perceive it as a dead end for those who fail at general education.

Algeria: Multiple Reforms but Disappointing Outcomes

Since gaining independence in 1962, Algeria has introduced different reforms of its education system aimed at easing access and improving quality. Considering its lower starting point compared to Tunisia, Algeria has made substantial improvements in its adult literacy rate among both males and females.²⁸ It has also achieved full access to primary education and an impressive enrollment rate in secondary education, comparable to Tunisia's rate. More remarkable is how Algeria has closed gender gaps at all levels of education. Females in post-secondary education, for example, accounted for 57 percent of all students in 2007. Overall enrollment in post-secondary education, although improved, remains relatively low.²⁹

However, even as Algeria has made progress in quantitative indicators of education, the substance and quality of education have only grown worse. Policy makers introduced a succession of partial and inconsistent reforms, marked by a top-down approach and no involvement of key stakeholders. Teachers and educators are generally poorly paid and lack incentives to engage effectively in their work. Traditional methods of teaching—little interaction between teachers and students and little room for critical thinking—still prevail.

The high unemployment rate among graduates undermines the image of the university and reflects its inability to meet the labor demands of the economy. Private entrepreneurs complain about the quality of educated job seekers and their lack of the basic skills required in the marketplace. Fewer than 20 percent of students are enrolled in the sciences and engineering, compared to 80 percent in the humanities, social sciences, and education.

Morocco: Poor Achievements in Quantity and Quality

Basic education for those aged six to fifteen is technically compulsory in Morocco and provided at no cost by the state, as it is in Algeria and Tunisia. More than one-quarter of the government budget is allocated to the Ministry of Education, a high proportion by both regional and international standards. Ironically, the adult illiteracy rate in Morocco is among the highest in the world, and girls lag far behind boys. The share of uneducated workers in the Moroccan labor force amounts to 40 percent, compared to 18 percent in Algeria and 12 percent in Tunisia. Full access to primary education has still not been achieved in many remote villages. Furthermore, high dropout rates in primary schools lead to even lower enrollments in secondary and post-secondary institutions.

These findings point to the necessity of deep reforms in the educational and vocational training systems in Morocco. Partial reforms and quick fixes pursued over decades in this vital and strategic sector have been mostly unproductive, and their continuation makes no sense. Effective reform requires strong political will, the real participation of key stakeholders, and a better governance system to ensure that public resources are used efficiently. Reform also must have political legitimacy to withstand potential resistance from those who benefit from the status quo.

Reforming Education Should Be a Priority

Maghreb countries should learn from the best international practices in designing and managing their education systems. Such practices include public-private partnerships in designing curricula and funding education, performance-based incentive schemes for educators and school directors, and more autonomy and accountability for public schools and universities. Reform could both improve academic performance and provide much-needed flexibility and responsiveness on the part of educational institutions to labor market demand.

Revisiting Labor Market Regulations

Labor regulations in the Maghreb need to balance the rights and obligations of employers and employees and extend coverage to workers in the informal sector, who are currently without any protection.

Compared to most emerging countries, labor regulations in the Maghreb appear rigid and constraining. The World Bank's *Doing Business* survey assesses employment rigidity on three measures: difficulty of hiring, rigidity of working hours, and difficulty of laying off workers. Its index shows that the three Maghreb countries have more rigid regulations than emerging countries generally, Morocco being a particularly rigid case.

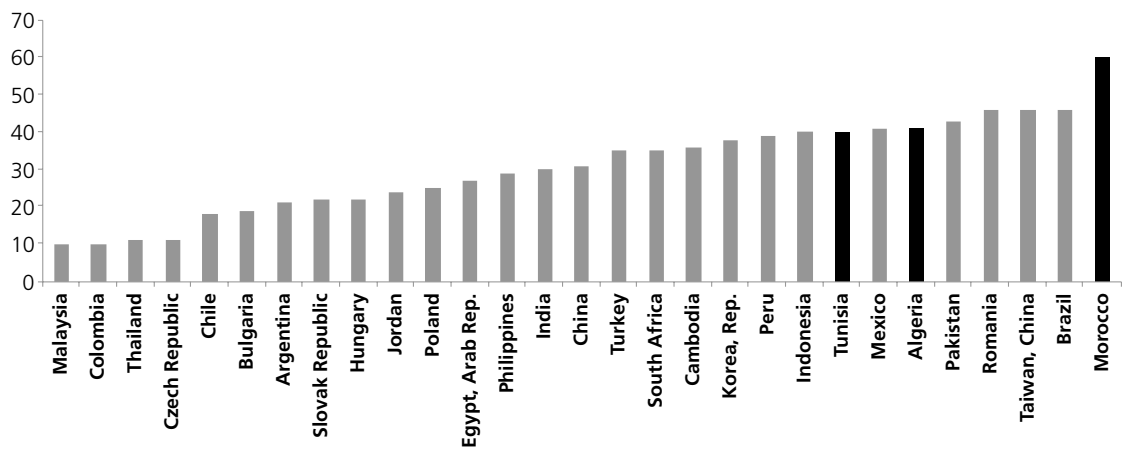
Tunisia: Flexibility in Hiring and Excessive Rigidity in Firing

Labor regulations should strike a balance between reasonable protection for workers and flexibility for companies. In Tunisia, highly rigid regulations governing firing and their administrative complexities give many firms incentives to circumvent them. They do so by setting up their business informally or, if they are in the formal sector, by making informal arrangements with their workers.³⁰

Tunisia's restrictions on hiring are comparable to both the MENA region and the Organisation for Economic Co-operation and Development (OECD) averages. On the other hand, the index measuring the rigidity of working hours is significantly lower in Tunisia than in these two regions. However, the index measuring restrictions on firing workers is extremely high. Unemployment

compensation paid by employers to fired workers is, however, rather low in Tunisia. On average, it amounts to the equivalent of 17 weeks' salary, compared to one year in the MENA region and six months in OECD countries. Thus, despite the complex and lengthy firing procedures, once a worker is laid off, compensation is low. The government needs to review firing procedures and compensation with an eye to overcoming this inconsistency. Furthermore, the government needs to design a safety net mechanism for laid-off workers, so they can receive a minimum income and aid in finding new employment.

Figure 10. Rigidity of employment index



Algeria: Moderate Flexibility With Provision of Unemployment Insurance

Algeria reformed its labor market regulations after long decades of excessive rigidity. These reforms produced more flexible labor contracts and more freedom for employers to let workers go in terms of procedures and paying compensation. To balance those liberal regulations, Algeria grants unemployment benefits, under specific conditions,³¹ to workers dismissed for economic reasons. Their duration ranges from one to three years, depending on a worker's seniority, and the amount is an average of the most recent wage before dismissal and the minimum wage in the economy. However, due to restrictive entitlement criteria, fewer than 20 percent of dismissed workers can apply for unemployment benefits.

Moreover, despite recent labor market reforms, Algeria still has a high level of employment rigidity compared to most emerging and transitional countries.

Morocco: Excessive Rigidity

Morocco has the most rigid labor regulations in the Maghreb on the basis of the World Bank index. On the hiring side, fixed-term labor contracts can only last for a limited time before they must be converted into permanent contracts.

On the firing side, unemployment costs are extremely high, reaching 85 weeks' salary on average, compared to seventeen in Algeria and Tunisia and 53 for the whole MENA region.

However, those labor regulations only benefit formal workers in the formal sector.³² They are irrelevant for most workers in the agricultural sector or those in the informal sectors, who represent the majority of workers in Morocco. Official statistics indicate that 70 percent of wage earners in Morocco have no employment contract.

From the standpoint of equity and social cohesion, social partners in Morocco—policy makers, labor unions, and employers' organizations—need to adopt labor laws and regulations that provide a reasonable level of protection for all workers. Excessive regulations protect the interests of insiders (those working in the formal sector) and create obstacles for outsiders (the unemployed and informal workers) who wish to enter the formal labor market. This creates a social divide in the country and helps perpetuate inequality.³³

Toward Effective Enforcement of Labor Provisions

While rigid regulations that impose strict procedures on firing may increase job stability for incumbent employees, they make firms reluctant to hire formal workers and lead to precarious forms of employment. In an environment of volatile economic growth and openness to global competition, firms need some flexibility to absorb external shocks and adjust their workforce's size. Flexibility is also critical for smooth reallocation of workers from declining to new industries. On the other hand, employment flexibility should not lead firms to simply transfer their exposure to external shocks to employees without any compensation.

Maghreb countries, particularly Morocco and Tunisia, need to ensure that, once laid off, the unemployed can have access to income assistance for a reasonable time and to adequate support and training to help them quickly re-enter the labor market.

Finally, in addition to streamlining labor regulations and designing more inclusive protection systems, Maghreb governments need to strengthen the enforcement of their labor laws. Various findings point to limited compliance with labor provisions by a large number of firms. Changing this situation requires that governments allocate more legal and financial resources to labor inspectors, so they can monitor employers' compliance with labor regulations.

Toward Inclusive Labor Market Policies

Active labor market policies include wage and employment subsidies granted to employers to stimulate them to hire more employees, training and retraining programs to increase employability of job seekers, public works programs, and preferential credits to promote self-employment initiatives. In recent years,

governments in the three countries have allocated relatively substantial public resources to support these policies.

Each of the three countries emphasizes different elements of labor policies. Algeria focuses on providing jobs through public works programs and wage subsidies. Support to job seekers who intend to create their own employment is the main pillar of labor market policies in both Tunisia and Morocco.

Tunisia: Costly Labor Policies, With Minimal Effect

Tunisia spends the equivalent of 1 percent of its GDP every year on labor market policies, which is comparable to the EU's average budget for the same purpose. Easing entry into entrepreneurship among job seekers by extending loans under preferential conditions and providing state guarantee and other fiscal incentives are the key components of labor market policies in Tunisia. These schemes, which mainly target young university graduates, vocational training establishments, and laid-off workers, cover four out of five beneficiaries of labor market policies.

Assistance and intermediation for job searching represents the second pillar of Tunisian labor market policies. This task is the exclusive responsibility of a public agency³⁴ that tries to match job seekers and labor demand. It handles an average of 400,000 job seekers' cases and 140,000 job offers every year. In addition, to encourage private firms to hire graduates of post-secondary institutions, the Tunisian government introduced a wage subsidy scheme in 2005.³⁵

Training and retraining programs are the third pillar of Tunisia's employment policy. These programs are supplied by both the private and public sector. Beneficiaries total, on average, more than 60,000 every year.

A limited number of institutions are responsible for designing and instituting labor market policies in Tunisia. Such institutional architecture enhances government coordination and lessens the chance of miscommunication and duplication of efforts. However, Tunisia grants the private sector very limited room to help match labor demand and supply and to provide labor-related services. In addition, due to restrictive eligibility criteria, only a small segment of the labor force can benefit from these programs, which mainly target youth and highly educated job seekers.³⁶ Available estimates indicate that only 25 percent of those unemployed in Tunisia take advantage of these programs. As a result, the average amount spent per beneficiary is extremely high and causes both inequity and inefficiency. This helps explain why labor market policies in Tunisia have done little to reduce unemployment.

Algeria: Overlapping Institutions and Creation of the Wrong Kinds of Jobs

Unlike Tunisia, labor market policies in Algeria focus much more on providing jobs through public works programs and wage subsidies. Public works programs, managed by the Social Development Agency, target both young,

unskilled job seekers and other segments of the disadvantaged adult population. The issue, however, is that most jobs created under public works programs are temporary and in poorly remunerated occupations. They are perceived much more as assistance programs and do not address the structural issues of unemployment.

Wage subsidies granted to private-sector employers also play an important role in Algeria. Their contribution to job creation amounted to more than 400,000 jobs in 2008. In contrast to Tunisia and Morocco, all segments of youth entrants into the labor market are eligible for such subsidies, regardless of their level of education.³⁷ Private-sector employers tend, however, to set remuneration lower than the minimum wage, despite the fiscal exemptions and subsidies they receive from the state. Training and retraining programs are intended for young graduates of universities and vocational training institutions who are either first-time job seekers or laid-off beneficiaries of unemployment insurance. Regarding labor market brokering, available data indicate that, on average, 400,000 applicants register every year. However, only 60,000 job offers are collected from firms, and only 45,000 job seekers (11 percent of total applicants) are effectively recruited.

Two institutions manage training programs in Algeria: the Social Development Agency and the National Fund for Unemployment Insurance. The latter is also involved in administering unemployment insurance and ensuring labor market intermediation jointly with the National Agency of Employment. Such institutional overlap is a source of inefficiency and excessive bureaucracy.

Promotion of self-employment has a relatively marginal role in Algeria and focuses on providing micro-credits to young entrepreneurs. Most projects created under this support mechanism are very small and often informal.

Morocco: Restrictive Eligibility Criteria and Ambiguous Outcomes

As in Tunisia, self-employment programs, managed by the National Agency for the Promotion of Employment and Competencies, represent the main component of labor policies in Morocco. They support first-time entrepreneurs, providing various services that cover the period from the design of their project through its effective establishment. In 2008, 6,200 persons benefited from self-employment programs, far below the initial objective of 30,000. In addition to banks' reluctance to offer loans to young, inexperienced entrepreneurs despite the state guarantees, most eligible job seekers lack the basic skills to be successful entrepreneurs.

Labor market intermediation also plays a key role in labor policies in Morocco. In addition to the National Agency for the Promotion of Employment and Competencies, which focuses on highly educated job seekers, the private sector actively helps match supply and demand for positions at various levels. On average, the national agency registers some 300,000 job seekers every year,

but there are fewer than 80,000 job offers and 50,000 applicants effectively hired; in other words, 17 percent of registered job seekers.

Wage subsidies in Morocco to help individuals acquire their first labor market experience are also restricted to young, post-secondary graduates.³⁸ Wage subsidies benefited 172,000 persons by the end of 2009. The Ministry of Employment recently conducted an assessment of the impact of wage subsidies and found that four out of five beneficiaries had found a permanent position by the end of the program.

However, due to restrictive eligibility criteria, only a small segment of the unemployed benefit from labor market policies; only an estimated 18 percent of job seekers take advantage of these programs. As in Tunisia, this makes average spending per beneficiary extremely high, causing both inequity and inefficiency. The concentration on a limited category of job seekers precludes the rest from any public support, particularly poorly educated adults.

Finally, although active labor market policies started in the late 1980s in Morocco and Tunisia and in the mid-1990s in Algeria, their impact on unemployment, if there is any, is hard to identify. Policy makers should view these policies as fine-tuning instruments that address residual imbalances in the labor market. The excessive unemployment among educated job seekers recorded in the three countries makes it clear that the authorities need to address the main causes of unemployment by reforming educational and vocational training systems and creating physical and institutional conditions conducive to high and sustainable growth.

Notes

- 1 Employment and unemployment statistics are drawn from national surveys on employment carried out in each of the three countries. The surveys are conducted with households and cover all forms of employment (formal and informal). The unemployment rate is calculated by dividing the number of persons who are unemployed in a given period by the total number of employed and unemployed persons.
- 2 The concepts of employment and unemployment used by the three countries are globally consistent with those of the International Labor Organization. The relevance question arises from the prevalence of underemployment rather than unemployment, particularly in the agricultural sector. In addition, in the absence of any safety net schemes in the Maghreb, unemployed individuals rely on informal occupations and poorly paid occasional jobs.
- 3 The size of the labor supply in the labor market depends on two parameters. The first is the growth rate of the *working-age population* (all persons fifteen years and older), and the second is the *participation rate*, which measures the propensity of persons in the working-age population to decide to work or to search for a job.
- 4 International Labor Organization, *Trends in the Labor Force* (Geneva: International Labor Organization, 2009).
- 5 Zafiris Tzannatos, *The Global Financial, Economic and Social Crisis and the Arab Countries: A Review of the Evidence and Policies for Employment Creation and Social Protection* (Beirut, International Labor Organization, 2009).
- 6 In the Moroccan survey, all persons aged fifteen and over who participated in the production of goods and services for at least one hour during the 24 hours that preceded the survey date and all persons who normally have a job but were temporarily absent from work are considered to be employed. In the Algerian survey, all persons who have worked or been engaged in an economic activity for pay, in cash or in kind, for at least six consecutive days during the month preceding the survey are counted as employed. In Tunisia, employed persons include all persons aged fifteen and over who worked for one hour or more during the week preceding the survey.
- 7 Private-sector employment does not include public-sector employment. It also excludes the agricultural sector (13 percent of total employment), which mostly qualifies as informal.

- 8 This means that because labor productivity improves, there is less job creation for the same level of GDP growth.
- 9 Tunisia allocates the equivalent of 7 percent of its GDP to education.
- 10 The argument that high unemployment reflects low quality of education is discussed later when we discuss reforming education systems.
- 11 Fatiha Talahite, *Alegria, Female Employment in Transition* (Florence, European University Institute, 2009).
- 12 *Algeria: Selected Issues and Statistical Appendix*, Country Report No. 03/69 (Washington, D.C.: International Monetary Fund, 2003).
- 13 Ahmed Bouyacoub, “L’économie algérienne et le programme d’ajustement structurel,” *Confluences Méditerranée*, no. 21, Spring 1997.
- 14 Mohammed Saïb Musette, Mohamed Arezki Isli, and Nacer Eddine Hammouda, *Marché du travail et emploi en Algérie* (Algiers: International Labor Organization, 2003).
- 15 Bouyacoub, op. cit., p. 80.
- 16 These figures are drawn from the Bank of Algeria’s reports.
- 17 In 2008 and 2009, the Algerian government enacted new regulations that limit foreign ownership and ensure that the national holding remains the majority shareholder. Foreign import companies are subjected to participation by Algerian individuals or legal entities in their capital for 30 percent of share. Any foreign investment must pledge that it will result in a foreign exchange surplus in favor of Algeria over its lifetime.
- 18 The share of remittances declined in 2008 from 10 percent registered in 2007 to 8.7 percent. The downward trend continued in 2009 due to the impact of the international economic crisis on Europe, where most Moroccan migrants settle.
- 19 The most important of those sectoral plans are: the Azur Plan for tourism, the Emergence Plan for Manufacturing, the Green Plan for Agriculture, and the Export-Plus Plan for Exports.
- 20 The last edition of the United Nations Development Programme’s Human Development Index of 2009 ranked Morocco 130th out of 180 countries; it trailed all Arab countries except Sudan and Yemen.
- 21 “Special training contracts” is the training mechanism implemented in Morocco. It enables firms that regularly pay their “professional training tax” to be reimbursed for up to 90 percent of their training expenses. In 2004, an important case of embezzlement involving reimbursement of a nonexistent firm came to light. This case has led to even more complex procedures.
- 22 *Morocco: Country Economic Memorandum* (Washington, D.C.: The World Bank, 2006).
- 23 TIMSS was developed by the International Association for the Evaluation of Educational Achievement (IEA) to allow participating nations to compare students’ educational achievement across borders. TIMSS was first administered in 1995 and has occurred every four years since. In 2007, 48 countries participated in the evaluation.
- 24 Engineers are more likely to support the economic growth process than other graduates in other fields due to the increasing role of technological absorption and innovation in development.

- 25 Data for the last available year provided by the United Nations Economic and Social Organization (UNESCO) indicates that the adult literacy rate (for those fifteen years and older) for Tunisia is 77.6 percent (86.4 percent for males and 71 percent for females).
- 26 Education for All-Global Monitoring Report, *Reaching the Marginalized* (Paris: UNESCO, 2010).
- 27 *The Road Not Traveled: Education Reform in MENA* (Washington, D.C.: The World Bank, 2007).
- 28 The adult literacy rate for Algeria is 72.6 percent (81.3 percent for males and 63.9 percent for females).
- 29 The enrollment rate in post-secondary education is 24 percent in Algeria, 31 percent in Tunisia, and 11 percent in Morocco.
- 30 There are frequent anecdotes about employers requiring applicants to sign undated resignation letters before they are officially hired. These letters can later be used, when needed, to avoid firing procedures and their cost.
- 31 Unemployment insurance is provided only to permanent employees affiliated with the social security system for at least three years, who have contributed to the unemployment fund for at least six months before their dismissal for economic reasons, have no other alternative source of income, who are registered as searching for a job for at least two months, and who have not refused any job offer or retraining opportunity.
- 32 There is a difference between data on formal sector employment and social security data. The difference shows the existence of undeclared workers in the formal sector.
- 33 Jha Praveen and Sakti Golder, *Labor Market Regulation and Economic Performance* (Geneva: International Labor Organization, 2008).
- 34 The Agency for Employment and Self-Employment (ANETI), created in 1993.
- 35 The wage subsidy lasts for a period of one year. The subsidy amounts to 50 percent of the salary paid, with a ceiling of 250 dinars per month (US \$175). Hiring a university graduate exempts the employer from social security contributions for seven years.
- 36 Generally, they are restricted to unemployed young people with vocational training or post-secondary degree holders searching for their first jobs.
- 37 The duration of the subsidy and its amount differ, however, depending on the job seeker's qualification. The duration is three years for university graduates, two years for job seekers with secondary education or vocational training, and one year for those without qualification.
- 38 Wage subsidies in Morocco take the form of exemption from social security contributions and income tax for a period of 24 months, extended by another twelve months if the employment contract becomes open-ended.

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