



INFRASTRUCTURE AND EMPLOYMENT CREATION IN THE MIDDLE EAST AND NORTH AFRICA

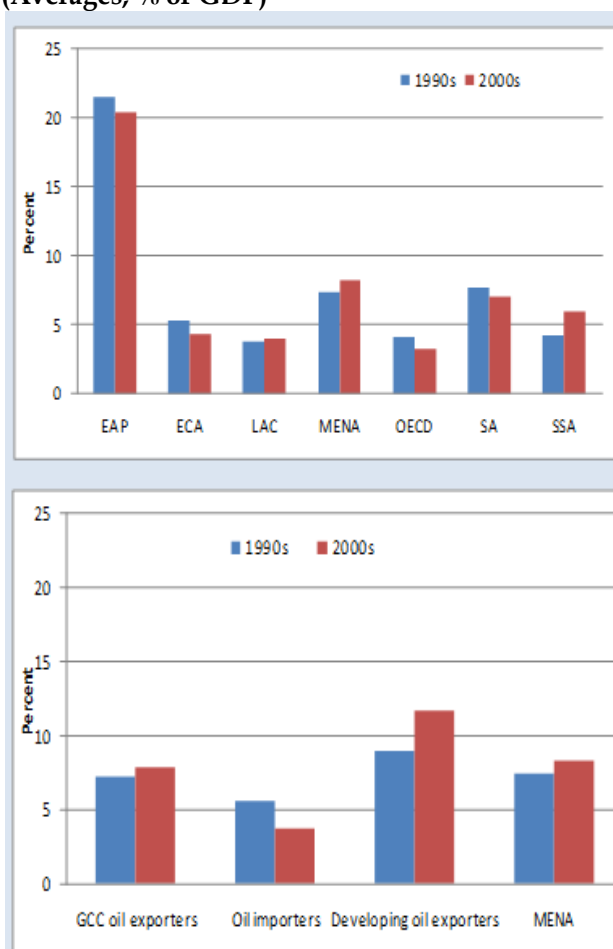
Caroline Freund, Elena Ianchovichina¹

Introduction: Lack of job opportunities is a pressing issue in MENA, especially among youth. A forthcoming report assesses the potential for job creation through infrastructure investments in the Middle East and North Africa (MENA).² It is well known that infrastructure investments can serve as a potential source of immediate jobs, and can boost long-term growth and employment. Indeed, the MENA countries have been investing in infrastructure over the years. Both in the 1990s and 2000s, public investment spending in MENA was higher than in most developing regions (Figure 1), largely because of robust spending in the oil exporting countries which benefited from rising fuel prices. Spending on infrastructure was reflected in employment in the construction sector, which was a major source of job growth in the 2000s relative to both other sectors and other countries (Figure 2). Maintaining momentum in infrastructure will be important to keep growth and job creation from retreating.

Regional Variations in Infrastructure Needs: While infrastructure investment in the region overall has been strong, there is wide variation across countries in the quality and quantity of infrastructure. High income GCC has had a massive build up of infrastructure in the last decade or so. Infrastructure deficiencies in developing MENA are however a concern. Public investment spending has been particularly weak in oil importing countries, which

have much more limited fiscal space than the oil exporters (Figure 3). While public investment rates increased in the oil exporters in the 2000s relative to the 1990s, the opposite happened in the oil importing countries (Figure 1). Recent growth in

Figure 1: Public Gross Fixed Capital Formation (Averages, % of GDP)

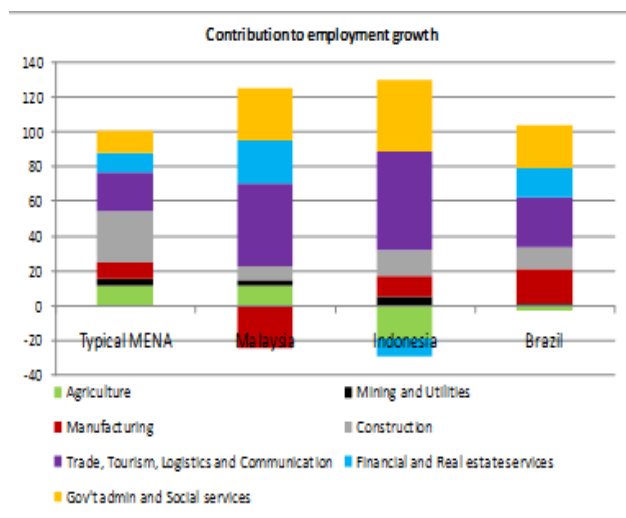


Source: World Bank (2011)

¹ Caroline Freund, Chief Economist, Middle East and North Africa Region (MNACE), World Bank. Elena Ianchovichina, Lead Economist, MNACE, World Bank.

² This Quick Note is based on the World Bank report entitled *Infrastructure and Employment Creation in MENA* – to be available shortly at worldbank.org/MENA.

Figure 2: Sectoral Contribution to Annual Figure Employment Growth in the 2000s (percent)



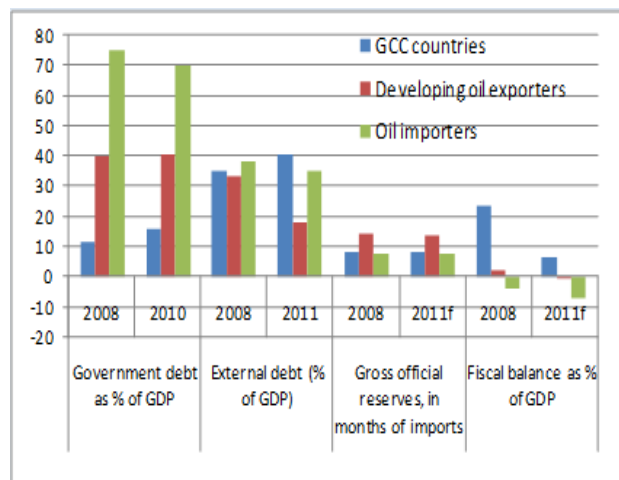
Source: World Bank (2011)

public-private partnerships was beginning to fill the gap in some oil importers. But, the economic consequences of the Arab uprisings, combined with economic difficulties in Europe, are straining fiscal budgets in developing MENA as well as reducing private investment, with possible negative implications for infrastructure spending.

Estimates of Infrastructure Needs Through 2020:

The report estimates MENA's infrastructure investment and maintenance needs through 2020 at 106 billion dollars per year or 6.9 percent of the annual regional GDP. Developing oil exporting countries (OEC) will need to commit almost 11 percent of their GDP annually (\$48 billion) on improving and maintaining their national infrastructure endowments, while the oil importing countries (OIC) and the GCC oil exporters need approximately 6 and 5 percent of their GDP, respectively. Investment and rehabilitation needs are especially high in the transport sector, particularly roads, and the electricity sector, jointly accounting for almost half of total needs. Fulfilling the electricity needs alone would require 3 percent of the yearly regional GDP.

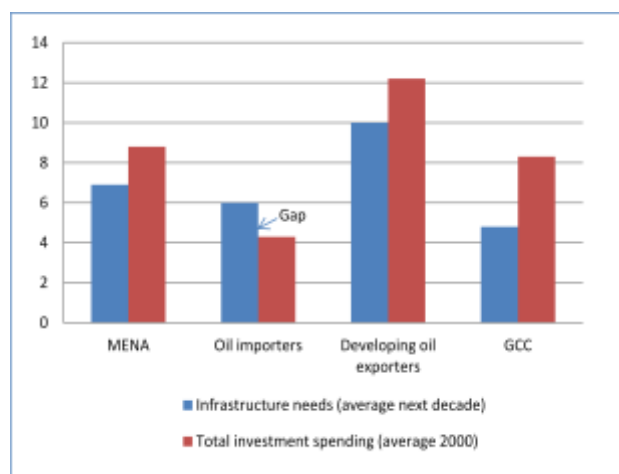
Figure 3: Fiscal Space Indicators



Source: World Bank, IMF and Government sources.

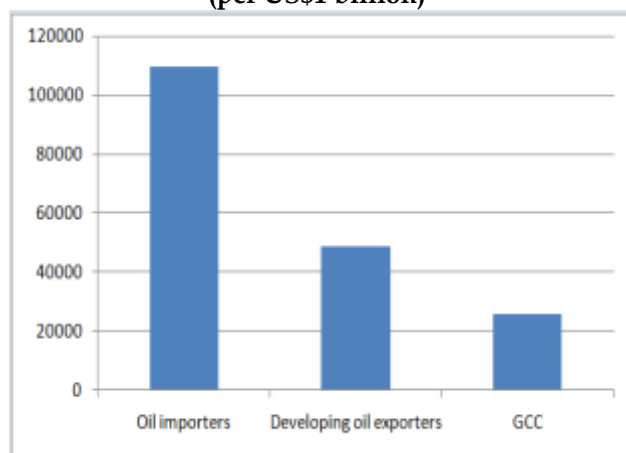
While oil exporters will be able to meet their national infrastructure needs if they maintain investment spending at rates prevailing in the 2000s, oil importers will fall short (Figure 4). Since the majority of funding for infrastructure comes from public budgets, it will be critical to protect public investment budgets and try to increase resources going to the sector in the case of oil importers. Doing so will be a smart choice for governments looking to create jobs and growth.

Figure 4: Infrastructure needs and Financing (annual, % of GDP)



Source: World Bank (forthcoming, see reference 2).

Figure 5: Infrastructure Related Job Creation (per US\$1 billion)

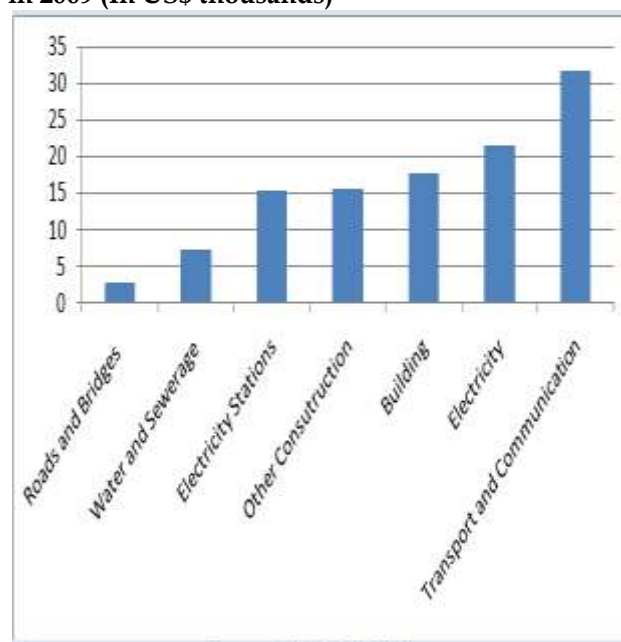


Source: World Bank (forthcoming see reference 2).

Investment in infrastructure contributes significantly to job creation in MENA. In the short-run every one billion of US\$ invested in infrastructure has the potential of generating, on average, around 110,000 infrastructure-related jobs in the oil-importing countries, 26,000 jobs in the GCC economies, and 49,000 jobs in the developing oil-exporting countries (Figure 5). The region could therefore generate 2 million direct jobs and 2.5 million infrastructure-related jobs just by meeting estimated domestic investment needs, but the potential varies greatly across sectors and countries. Put differently, these jobs would be foregone if countries instead decide to trim their public investment rates by one billion dollars going forward.

Because of per capita income differences, one billion dollars of spending generates more than six times as many jobs in a sector in Djibouti as in Lebanon, but the latter would find it considerably easier to finance investment expenditure. Spending on construction of roads and bridges would generate more than twice as many direct jobs as the same amount of spending in any of the other sectors. Construction of water and sewage infrastructure is the second most job-intensive activity relative to spending while transport and communication is the least job-intensive activity. To get a sense of the wide variation across sectors, Figure 6 shows the estimated cost of one direct job in various sectors in Egypt in 2009. Sectors also differ in their propensity to generate indirect jobs. It depends on the extent to which the sector requires inputs from other sectors to produce its output.

Figure 6: Estimated Cost of one Direct Job in Egypt in 2009 (In US\$ thousands)



Source: World Bank (forthcoming see reference 2).

The long-term employment effect of infrastructure investment could be significant. The report finds that the employment response induced by infrastructure investment resulting in 1 percentage point additional growth is expected to be 9 million additional jobs in the course of ten years in MENA, or a little less than 1 million jobs per year. Such a response is significant as it accounts for approximately 30 percent of the jobs created in the region during the 2000s. Had these jobs been created during the last decade, the unemployment rate would be substantially lower than the 10 percent registered in 2009.

Conclusion: Infrastructure investment has the potential to create jobs quickly, while providing a foundation for future growth. This is especially important in the oil importing countries, where the infrastructure gap is the greatest and employment needs are growing. However, it is also likely to be most difficult in these countries because of strained finances. Going forward, government decisions on what types of spending to expand and what to contract to achieve balanced budgets will have important implications for jobs. Prudent infrastructure development will be critical for short- and long-term growth and job creation.

References

1. World Bank (2011) Middle East and North Africa, Economic Development & Prospects Report, Investing for Jobs and Growth, September.
2. World Bank (forthcoming) Infrastructure and Employment Creation in the Middle East and North Africa.

Contact MNA K&L:

Laura Tuck, Director, Strategy and Operations.
MENA Region, The World Bank

Regional Quick Notes Team:

Omer Karasapan, , Roby Fields, and Hafed Al-Ghwel
Tel #: (202) 473 8177

The MNA Quick Notes are intended to summarize lessons learned from MNA and other Bank Knowledge and Learning activities. The Notes do not necessarily reflect the views of the World Bank, its board or its member countries.