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# **Working Paper on Fiscal policy and job creation in MENA**

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## **Fiscal policy and job creation in MENA**

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This paper discusses the effects of domestic macroeconomic policies on growth and employment creation in the Middle East and North Africa (MENA). It reviews the main features of macroeconomic policies in the region and how they relate to employment creation. It also discusses the limits of macroeconomic policies with respect to job creation in the region.

Fiscal policy is the main macroeconomic lever used to stimulate economies and dampen business cycle fluctuations in MENA. Exchange rates in most countries are kept fixed or allowed to move within narrowly specified bands so monetary policy is not independent and plays a limited role as a policy lever. Fiscal policy is also an important macroeconomic policy tool for smoothing consumption as the region relies on oil, gas, and other non-food commodity exports and has one of the highest output volatility in the world. Over the years, fiscal policy in the MENA region has become more counter-cyclical. During the late 2000s, automatic stabilizers played a less dominant role than fiscal stimulus in softening the impact of the financial and economic crisis (Abdih *et al.*, 2010). Following the Arab Spring events, transition governments again resorted to stimulus in order to bolster weakened economies, although this time fiscal buffers were nearly

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exhausted and external assistance proved helpful. Employment creation became an urgent priority as unemployment rates increase above the already high rates prevalent in the 2000s.

In emerging economies, structural reforms in labor, capital, and goods markets are often more important for boosting job creation than fiscal reforms and developing MENA countries are not exceptions. Distortions in developing MENA markets have persisted for years so the benefits, in terms of growth and job creation, from tackling them will be sizable. The effectiveness of specific reforms and the tradeoffs with other policy goals will vary considerably as economies differ in terms of labor market institutions, employment challenges, administrative capacity, and fiscal space. Advanced GCC countries, however, differ from the more populous, developing MENA. The large public sector may continue to play a key role in job creation for Gulf nationals, yet improving tax and expenditure policies and creating incentive for private sector growth could eventually provide attractive alternatives.

Fiscal policy affects employment through its influence on labor demand and supply. IMF (2012) argues that in the short-run, policies to increase labor demand are usually more effective in increasing employment than policies that increase labor supply, but in the medium-term, both demand-side and supply-side policies can increase employment and output because higher labor supply will moderate the upward pressure on wages. In the context of the weak economic conditions across developing MENA, this paper discusses fiscal policies that could affect labor demand. Since informal employment, defined as employment that does not offer social security coverage, is wide-spread in the region and encompasses almost 70 percent of the labor force, this

paper does not include a discussion of tax policies, although we recognize these as critical instruments for improving the quality of jobs and encouraging formal employment.<sup>1</sup>

In MENA, fiscal policy has an impact on economic growth and therefore employment through three main channels. The first channel is through increases in social payments, either in form of higher public sector wages and pensions or through increases in untargeted food and fuel subsidies. These policies have been drivers of consumption, boosting demand for goods and services, although their effect on economic growth and indirectly job creation have been muted because much of the incremental spending has financed the purchase of imported food, fuels, and final consumption goods. The second channel is through increases in public sector employment, coveted for superior benefits and pay. Due to the limited fiscal space in most developing MENA countries, this channel offers limited options for job creation, although in the GCC economies public sector employment might continue to serve as job creation engine for nationals. The third channel is through public investments which enable the building of physical infrastructure, essential for the delivery of public services. This channel has been particularly prominent in oil exporting countries, especially those with vast savings in sovereign wealth funds. In other countries, public investment has been insufficient due to the dominance of re-current over capital spending and inefficiencies. The paper argues that infrastructure investments have the potential to create jobs quickly, while providing a foundation for future growth, especially in oil importing

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<sup>1</sup> Business tax incentives can also help boost labor demand. The average, top statutory corporate tax rate in MENA is higher than the OECD average, but countries have been lowering these rates in the 2000s (OECD 2007). Egypt, for instance, lowered the corporate tax rate and broadened its tax base with its reform of July 2005. There is scope for lowering the corporate tax rate in countries such as Yemen, Tunisia, Morocco, and Jordan. In countries with limited fiscal space, the cuts could be offset with increases in consumption taxes.

countries. In the GCC economies, this channel might have limited direct impact on jobs for nationals as most workers in construction and infrastructure services are migrants.

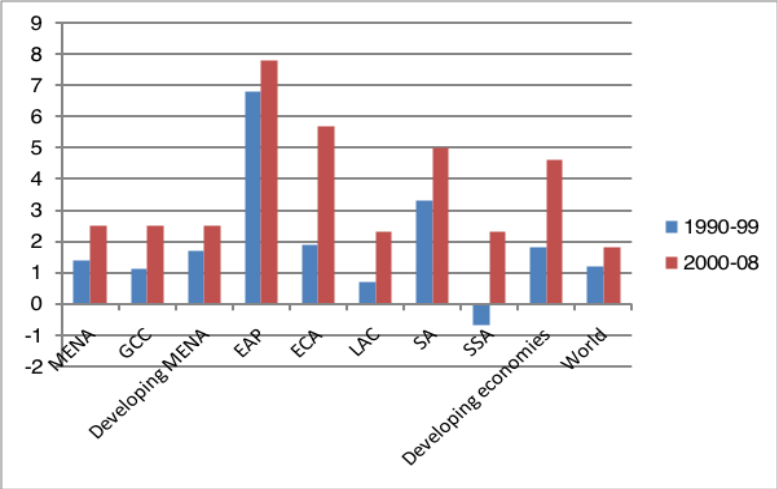
### **1. Effects through social spending**

Even before the Arab Spring, structural unemployment in the MENA region was high at around 10 percent and economic growth was relatively weak in per capita terms, averaging 2.5 percent a year (Figure 1). Economic growth was driven mostly by increases in domestic consumption and investment; export growth was not strong enough and imports grew faster than exports (Figure 2). Economic growth during the 2000s accelerated relative to 1990 (Figure 1) as governments implemented reforms and stimulated the economy. However, many structural impediments remained in place and kept unemployment high. According to estimates, growth during the 2000s was at least a percentage point below the rate required to bring down unemployment in the region closer to global norms. In addition, the supply response of the domestic sector to trade reform was limited and many countries underperformed in terms of export growth (World Bank, 2011a).

Importantly, the fiscal measures during this period, especially those associated with increases in social spending during the financial crisis, lifted consumption but were not successful in boosting growth and employment because this spending financed imports of food, fuels, and final goods. The MENA countries are highly dependent on food imports (Ianchovichina et al. 2012) and have a relatively uncompetitive domestic consumer goods sector (Pigato et al., 2009; Lopez-Calix et al. 2010). As MENA countries opened up to trade during the last two decades, imported goods flooded domestic markets and displaced to some extent locally made products.

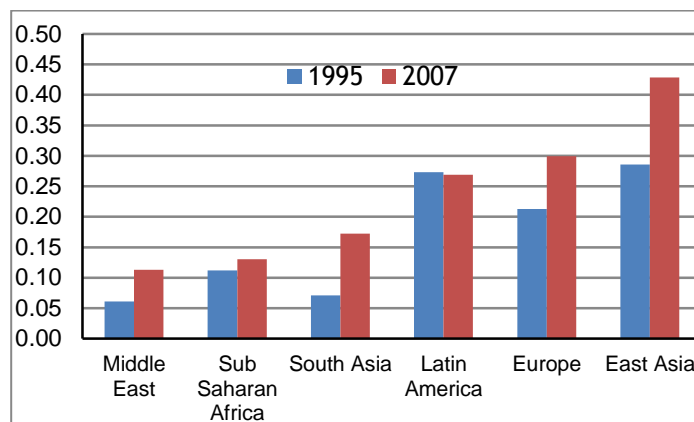
Furthermore, Behar and Freund (2010) show that the MENA region ranks low in terms of intra-industry trade, measured by the intra-industry trade (IIT) index (Figure 2), reflecting the fact that MENA countries import mostly commodities and final goods and export mainly commodities and processed materials. Due to their limited participation in global production networks, imports of parts, components, and intermediates are not a major share of total imports in MENA countries. Thus, while fiscal policy helped boost consumption and investment which jointly contributed about 7 percentage points to average annual growth during the 2000s (Figure 3), the net impact on growth has been modest at 2.7 percentage points due to the fact that import growth was strong, contributing negatively about 4.3 percentage points.

**Figure 1. Annual per capita income growth rates (average, %)**



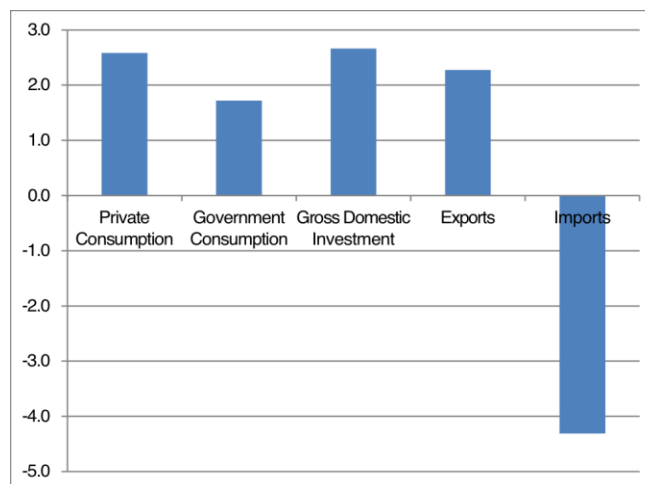
Source: World Bank (2011a)

**Figure 2. Intra-industry trade index by region**



Source: Behar and Freund (2011)

**Figure 3. Demand-side sources of economic growth, 2003-11 (average, % points)**



## 2. Effect through public sector employment

In the 2000s, the share of government administration and social services in total employment in a typical MENA country was much larger than the corresponding share in some of the fast growing, middle-income developing countries such as Brazil, Malaysia, Turkey, and Indonesia (Figure 4, right chart). Still, the relative size of public sector employment varies widely across

MENA, with Jordan, Saudi Arabia, West Bank and Gaza standing out with the largest public sectors in the region and Morocco, Qatar, and Iran having the smallest ones (Figure 4, left chart). Overall, the public sector remains the main employer of nationals in the GCC economies, except Qatar.

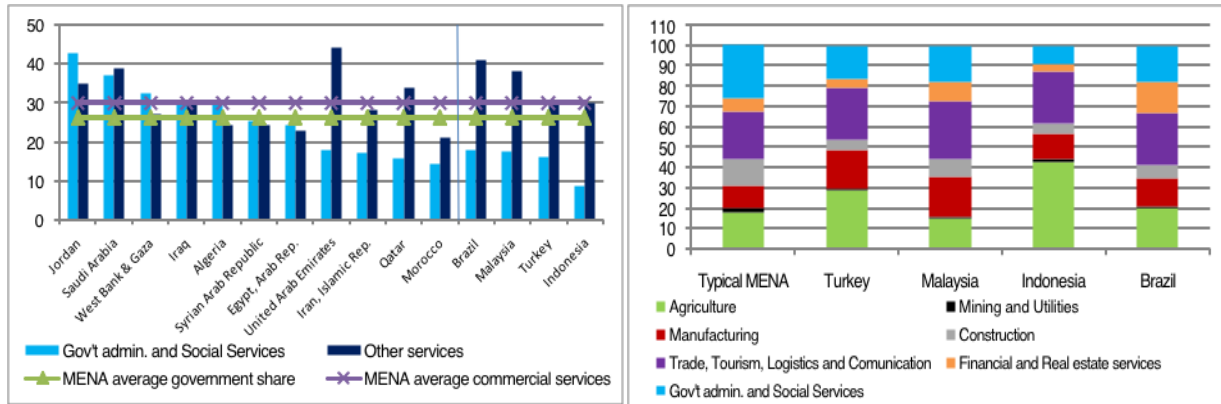
Public sector employment had a limited impact on job creation during the 2000s. In nearly all MENA countries public sector employment contributed either negatively or in an insignificant way to employment growth in services during this period (Figure 5). West Bank and Gaza and Iraq were the only exceptions where public sector employment was an engine of job creation in services. More recently, in response to the Arab Spring events, many countries expanded not only social spending on subsidies, transfers, and social programs, but also public sector payrolls (Annex Table 1). In 2011, Bahrain announced 20,000 new jobs at the Ministry of Interior; Oman established a new public sector employment program with 23,000 new public sector jobs and 32,000 in the private sector; Saudi Arabia added 60,000 new security jobs in the Ministry of Interior; Algeria promised up to 2.5 million public sector jobs and sustainable job creation in agriculture through the creation of new farms; Egypt made a pledge to permanently hire about 450,000 temporary contract employees; and Tunisia to hire 20,000 new civil servants.

Fiscal policies aimed at expanding employment and wages in the already large public services sector are unsustainable, especially in the countries with limited fiscal space (Figure 6), such as Egypt and Tunisia. Only policies intended to boost private sector led growth would deliver sustainable job creation. The decision to increase public sector wages in the majority of MENA countries is distortionary and misguided as it is not based on productivity improvements in the



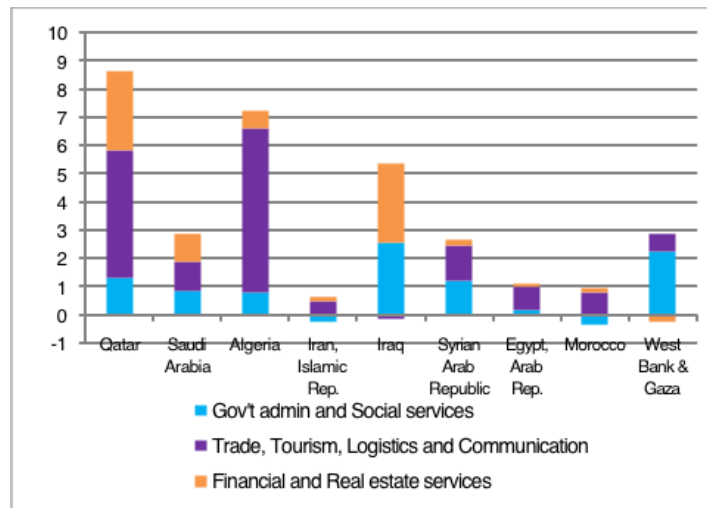
sector and expands a gap between private and public sector wages, making it difficult for private firms to attract qualified workers. This would be particularly the case in the GCC countries where nationals would be even more tempted to turn their back on private sector offers.

**Figure 4. Employment shares – international and regional comparisons**



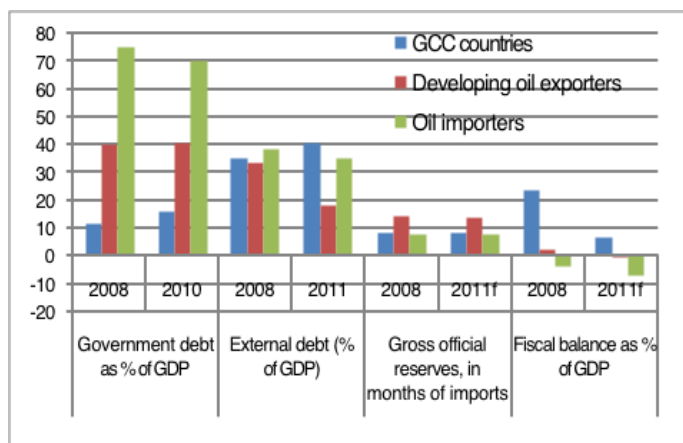
Source: World Bank (2011b)

**Figure 5. Contribution to average, annual employment growth in services**



Source: World Bank (2011b)

**Figure 6. Fiscal space indicators**



Source: Ianchovichina et al. (2013)

### 3. Effect through public investments

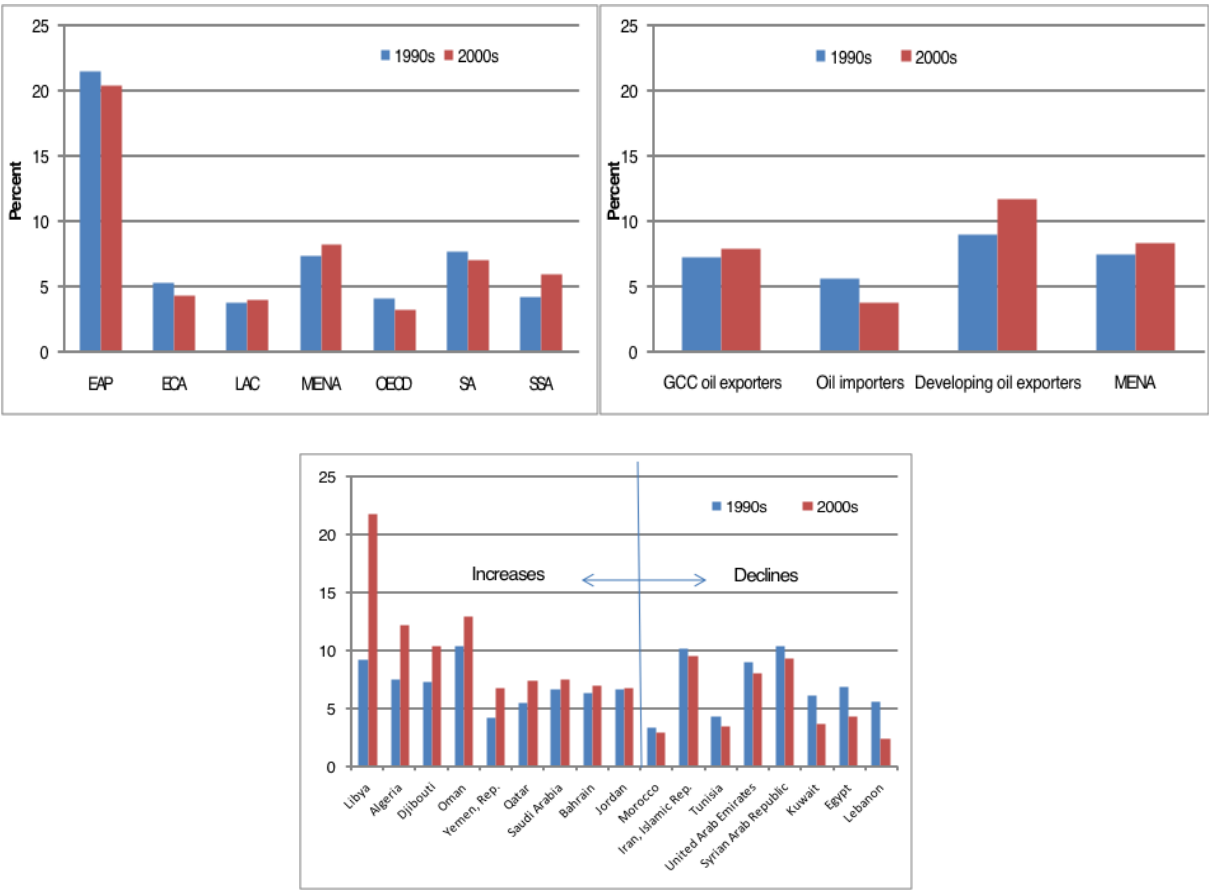
Public investment – the third channel through which fiscal policy could boost job creation and growth – has risen in importance in the 2000s relative to the 1990s in oil exporting countries.

The rise in public investment rates in these countries was associated with increases in oil wealth as oil and gas prices rose during the 2000s (Figure 7). The advance has been particularly pronounced in Libya and Algeria. In contrast, developing oil importers' public investment rates declined as many of these countries faced fiscal pressures.

The literature suggests that the impact of public investment on economic growth is ambiguous as public investment might crowd out or crowd in private investment. If crowding out is an issue, the relevant question for policy purposes is how to reduce this effect so that developing countries can increase their benefits from public investments (crowding out occurs when government

borrowing to finance public investment, bidding up interest rates. But if financed from oil surpluses, this may be less of an issue.). Others, however, argue that public investment could promote private investment if it provides complementary goods and services that markets fail to provide. If public investment crowds in private investment, then the relevant question in terms of aggregate social welfare would be how to improve the complementarities by prioritizing public investment projects and focusing on those with highest productivity and those that will address issues of inclusion.

**Figure 7. Public gross fixed capital formation (average, % of GDP)**



Source: World Bank (2011b)

Another concern is that public investment might be less efficient than private investment. This is likely to be especially relevant in economies characterized by a high level of rent-seeking behavior and where special interests dominate. In particular, under these circumstances, a large share of public funds may be spent on low-productivity projects or bloated budgets. If this is the case, an increase in (measured) public investment would contribute less to growth than an equivalent amount of private investment. Thus, a third issue – a combination of the first two – is about the role of public investment versus private investment in growth.

A large body of literature has examined the effect of public expenditure on medium- to long-term growth. The results are mixed, but the majority of papers that use regressions on large cross-sections of countries find some evidence of positive growth effects, especially for infrastructure (see Devarajan, Swaroop and Zou, 1996 for negative effect) (see IMF 2004 for a survey). A related body of literature examines the relationship between public and private investment. Cavallo and Daude (2011) analyze the linkages between public and private investment using a large sample of 116 developing countries with annual observations between 1980 and 2006. Their empirical results, obtained using dynamic panel data techniques which exploit both time series and cross sectional variation in the data, suggest that, on average, the crowding-out effect dominates, but that this effect is dampened or even reversed in countries with better institutions and that are better integrated with world markets so that there is no financing constraint. Blejer and Khan (1984)<sup>2</sup> and Odedokun (1997)<sup>3</sup> show that public

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<sup>2</sup> Blejer and Khan (1984) use a sample of 24 developing countries over the period 1971-1979.

infrastructure investment is complementary to private investment, while other types of public investment lead to crowding out of private investment. Some studies report evidence on the effect of government expenditure on investment efficiency as proxied by the incremental capital-output ratio. Gallagher (1991)<sup>4</sup> and King and Levine (1992)<sup>5</sup> report a negative effect of government expenditure on investment efficiency. Odedokun (1997) finds that public infrastructure investment promotes efficiency, while other types of public investment do the reverse.

To examine the likely effects of public investment in MENA, we show correlations between per capita growth and public investment rates for countries with a strong rule of law and those with a weak rule of law. We use the governance indicator for rule of law in Kaufmann, Kraay, and Mastruzzi (2010) averaged over the 2000s. Countries with a strong rule of law are defined to be those with an index above the median of the country sample. Countries with a weak rule of law are those with an index below the median of the country sample. During the 2000s all the GCC countries and four oil importers – Morocco, Tunisia, Egypt and Jordan – fall into the category of countries with a relatively strong rule of law, while all MENA developing oil exporters are considered countries with a weak rule of law.

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<sup>3</sup> Odedokun (1997) uses the approach proposed by Blejer and Khan (1984) but applies it to a larger sample of 48 developing countries over the period 1970-90.

<sup>4</sup> Gallagher (1991) uses a cross-section of African countries.

<sup>5</sup> King and Levine (1992) employ annual time-series data for the period 1960-1989 for 80 developing countries.

For countries with a strong rule of law, we find a positive and significant correlation between public investment and growth (Figure 8).<sup>6</sup> For countries with a weak rule of law, we find no correlation between public investment and growth (Figure 8). In these countries poor governance weakens the impact of public investment on growth. Since the 2000s was a period of extraordinary economic fluctuations, we tested the relationship between public investment and growth for the period 1995-2005 and confirmed the finding.

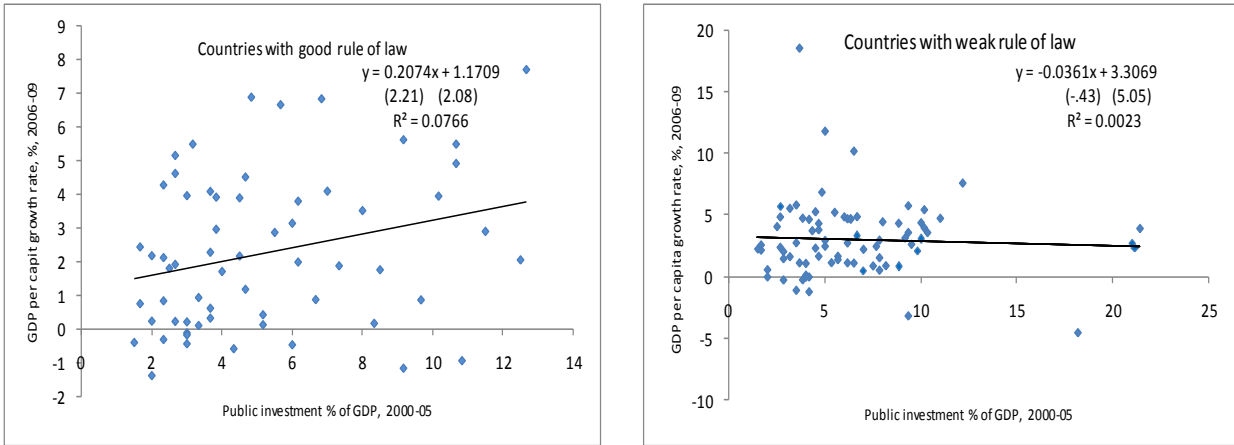
These results suggest that in developing oil exporters which represent countries with a weak rule of law and relatively small private sectors, the growth impact of public investment is likely to be weakened (Figure 8) and investment efficiency is likely to be relatively low. In oil importers which rely mostly on private investment for growth, public investment is likely to encourage private investment and reinforce the positive relation observed between private investment and growth.

This finding signals the need for complementary reforms to stimulate growth. Freund and Bolaky (2008) show that trade does not promote growth when business conditions are poor. The intuition is that resources cannot move to their most productive uses, subsequent to trade liberalization, when firm entry is restricted and labor mobility is poor. Similarly, in the case of public investment, a lack of accountability means that public investment may flow to low-return projects and is less likely to crowd in private investment. Moreover, weak governance is a double blow to investment, as private investment requires protection of property rights and transparency in legal administration.

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<sup>6</sup> This section discusses public investment, but does not analyze sources of investment finance and public spending issues such as investments in human capital. These issues are beyond the scope of this paper.

**Figure 8. Annual per capita GDP growth and public investment, 2000-05**

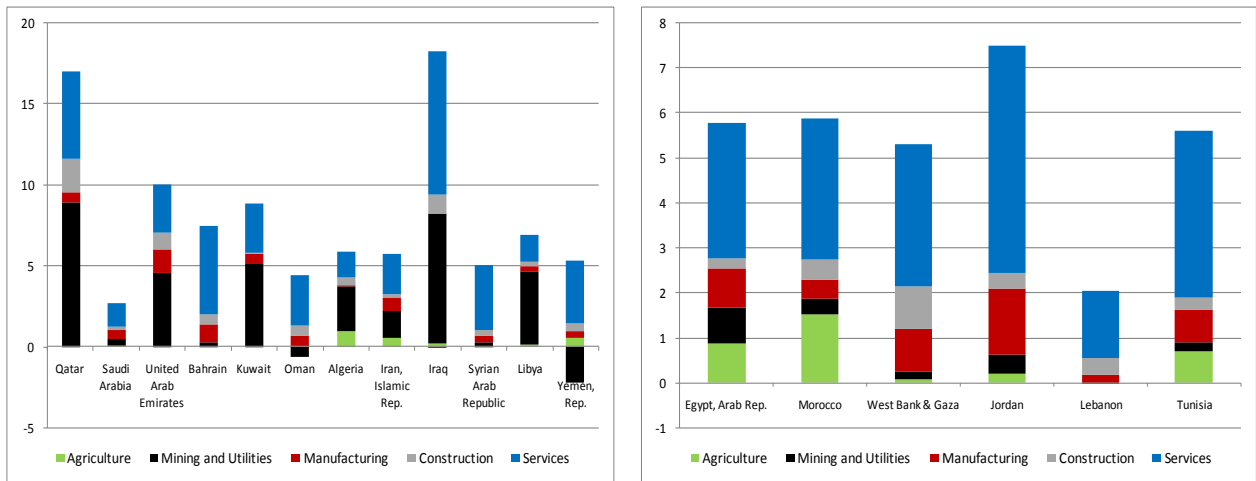


Note: t-statistics in parenthesis below trend equation. GDP=Gross Domestic Product.

Infrastructure spending had a positive, direct effect on employment and value added growth in MENA's construction and infrastructure services sectors in the 2000s (Figures 9 and 10). The employment effect was particularly strong in Qatar, Algeria, and Syria (Figure 9). A recent paper by Ianchovichina *et al.* (2013) also shows that maintaining and spreading the momentum in infrastructure investment will be an important support to growth and job creation in the region. However, the recent surge in re-current spending has depleted financial resources and thus undercut job creation, particularly in developing MENA. Infrastructure spending has been particularly weak in the oil importing countries where infrastructure needs, measured as a percent of GDP are projected to average 6 percent, while the total investment spending rate is unlikely to surpass the 4 percent average for the 2000s (Ianchovichina *et al.* 2013). Since the vast majority of funding for infrastructure comes from public budgets, it would be critical to protect

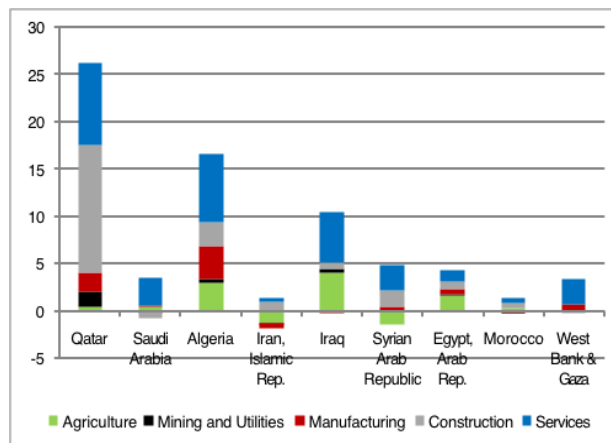
public investment budgets and try to increase resources (including foreign grants and loans) going to the sector.

**Figure 9. Sectoral contributions to average annual value added growth (% points)**



Source: Estimates from World Bank (2011b) using UNSTAT data on value added by sector.

**Figure 10. Sectoral contribution to average, annual employment growth (% points)**



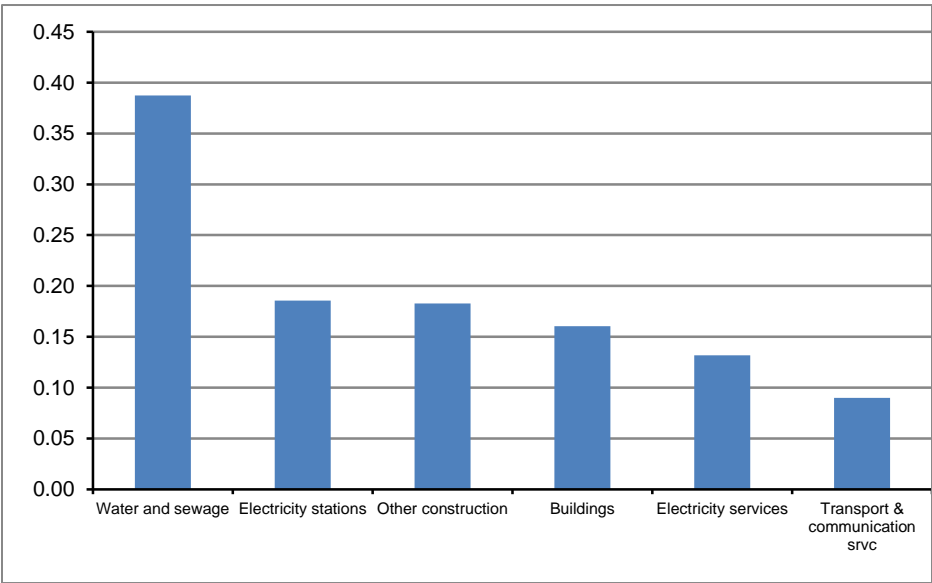
Source: Estimates from World Bank (2011b) using ILO data on employment by sector

In the short-run, every US\$1 billion invested in infrastructure has the potential of generating, on average, around 110,000 infrastructure-related jobs in the oil importing countries, close to 49,000 infrastructure-related jobs in the oil exporting countries, and approximately 26,000 jobs in the



GCC economies, according to Ianchovichina *et al.* (2013). The region could therefore generate 2.5 million direct, indirect, and induced infrastructure-related jobs just by meeting estimated annual investment needs, but the potential varies greatly across countries, and these jobs account for less than 2 percent of the labor force in the region. In other words, these jobs would never materialize if countries decide to trim their public investment rates going forward. Infrastructure investment could provide a quick response and be part of the solution to the unemployment challenge, but infrastructure alone will not resolve this problem.

**Figure 11. Cost of a Direct Job in Roads and Bridge Construction Relative to Other Sectors in 2009 in Egypt**



Source: Estache et al. (2013)

Spending on construction of roads and bridges would generate more jobs as the same amount of spending in any other infrastructure sector. This is because the cost of an infrastructure job in the roads and bridge construction sector is less than one-fifth of the cost of a job in the electricity-generating sector, and slightly less than one-tenth of the cost of a job in the transport and

communication services sector (Figure 11). Furthermore, sectors 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. In Egypt, the ratio of all jobs to the number of direct jobs was as low as 1.09 for construction in roads and bridges, whereas it was 1.82 for transport and communication. This indicates that when investment decisions are made with the objective of creating jobs, consideration should be given to both direct and indirect employment effects, as well as the type of skills required to implement projects.

The long-term employment effects of infrastructure investments could be significant. Estache *et al.* (2013) estimate 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 10 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.

#### **4. Policy implications**

As fiscal buffers depleted in the course of prolonged transitions in the Middle East and North Africa, the limits of fiscal policy as a tool for boosting economic growth and employment have become even more pronounced than before. At present nearly all developing MENA countries have large and growing fiscal deficits and considerably less fiscal space to respond to unexpected shocks or to use fiscal policy for job creation. This paper shows that untargeted social spending, public sector wage increases, and public sector employment have had limited impact on job

creation in the region and in some cases have deepened existing distortions hampering the ability of the private sector to generate sustainable growth and employment.

The paper argues that infrastructure investments have the potential to create jobs quickly, while providing a foundation for future growth. This is especially important in oil importing countries, where the infrastructure gap is the greatest and employment needs have grown. However, it is also likely to be most difficult in these countries because of strained finances. Infrastructure investments could help but not resolve the region's unemployment problem. The limits of fiscal policy underscore the importance of improving public spending efficiency and implementing structural reforms, especially those that will remove distortions, strengthen institutions, and improve transparency and governance.

Going forward, government decisions on what types of spending to expand and what to downsize in order to achieve balanced budgets will have important implications for jobs. In designing country specific solutions, governments will have to take on predictable challenges: the governance of job creation, the proper targeting and fiscal costs assessment of subsidies needed to create jobs, the design and fiscal costs of the (re)training programs needed and the expectations on the job creation effects of infrastructure.

### *The governance challenge*

Prudent infrastructure development will be critical for short- and long-term growth and job creation because the greatest risk to using infrastructure as part of an employment and growth

strategy in MENA countries is poor governance. Not all jobs are equal in terms of skills and not all infrastructure investments are equal in terms of ability to create jobs of different skills. This means that investments in infrastructure will need to be prioritized based on the employment and infrastructure needs and opportunities of the country. For example, road and bridge construction projects will have direct impact on creation of relatively low-skilled jobs. These types of projects will be especially effective in addressing job-related concerns in countries where there is a large pool of relatively unskilled and unemployed nationals. This is the case in most MENA countries where the majority of the unemployed do not have tertiary education. By contrast, projects in transport and communication services have large indirect effects, and therefore the ability to create a diverse set of jobs for workers with different skill levels. These projects will appeal to policy makers in countries where the unemployed have the ability to acquire specialized skills relatively quickly.

#### *The subsidy targeting challenge*

Public works and different types of subsidized employment programs have been used widely to make it easier for people who cannot find unsubsidized jobs to find employment and acquire on the job skills. These programs are necessary, for instance, to address structural issues which will not be addressed through market forces alone as economies grow bigger and can be particularly effective when dealing with unemployment issues in a regional context. Subsidies to job creation in infrastructure and construction will have to be designed to make the most of employment opportunities for low-skilled workers. The design of the targeting will also have to address the pressing nature of the need to create job. Indeed, boosting short-term job creation in developing MENA is desirable, particularly in the context of recent political developments. But subsidized

employment programs are costly and should be designed to ensure that there is a positive spillover to long-run employment and employability.

#### *The employment subsidies costing and financing challenge*

The net costs of subsidizing job creation are difficult to estimate, although the temporary nature of the subsidies, which last only during the investment phase of an infrastructure project, minimizes any potential losses. In addition to the direct fiscal costs of providing the subsidies and any associated training and program management, there are less obvious costs in the form of deadweight loss, substitution and displacement effects. The costs would also be overestimated if the induced formalization of the labor market and hence the potential revenue from labor taxes are ignored, and underestimated if this formalization leads fast to added expenses in unemployment benefits and other indirect related costs. There is also the opportunity cost of how the funds are spent. In an economy with poor institutional quality and high levels of rent-seeking behavior public spending on infrastructure could lead to projects with low value added and cost overruns. Thus, good governance is a key complement to infrastructure spending.

#### *The training challenge*

Experience shows that the long-run payoffs of employment subsidies can be achieved only if subsidized employment programs are combined with training and counseling. Therefore, the design of these programs should be given as much attention as the design of the subsidized employment programs. Specific training should be considered only if there is market demand for these qualifications or if there is a need to buy time in a labor market restructuring transition.

Often general training supporting labor market flexibility will be sufficient and more efficient in increasing productivity than specialized training.

### References

- Abdih, Y., Lopez-Murphy, P., Roitman, A., and Sahay, R. (2010) "The Cyclicity of Fiscal Policy in the Middle East and Central Asia: Is the Current Crisis Different?" IMF Working Paper 10/68, International Monetary Fund, March.
- Behar, A. and Freund, C. (2011) "The Trade Performance of the Middle East and North Africa," MENA Region Working Paper Series No. 53, the World Bank.
- Blejer, M. and Khan, M. (1984) "Government Policy and Private Investment in Developing Countries," International Monetary Fund Staff Papers No. 31(2): 379-403.
- Cavallo, E. and Daude, C. (2011) "Public Investment in Developing Countries: A Blessing or A Curse?" *Journal of Comparative Economics* 39(1): 65-81.
- Devarajan, S., Swaroop, V., Zou, H. (1996) "The Composition of Public Expenditure and Economic Growth," *Journal of Monetary Economics* 37: 313-344.
- Estache, A., Ianchovichina, E., Bacon, R., and Salamon, I. (2013) *Infrastructure and Employment Creation in the Middle East and North Africa*, Directions in Development: Infrastructure, the World Bank, Washington DC.
- Freund, C. and Bolaky, B. (2008) "Trade, Regulations, and Income," *Journal of Development Economics* 87: 309-321.
- Gallagher, M. (1991) *Rent-seeking and Economic Growth*, Westview Press, Boulder, Colorado.
- Ianchovichina, E., Estache, A., Foucart, R., Garsous, G., and Yepes, T. (2013) "Job Creation through Infrastructure Investment in the Middle East and North Africa," *World Development* 45(C): 209-222.
- Ianchovichina, E., Loening, J., and Wood, C. (2012) "How Vulnerable Are Arab Countries to Global Food Price Shocks?" Policy Research Working Paper No. 6018, the World Bank.

IMF (2004) *Public Investment and Fiscal Policy*, International Monetary Fund, Washington DC, March.

IMF (2012) *Fiscal Policy and Employment in Advanced and Emerging Economies*, Fiscal Affairs Department, International Monetary Fund.

Kaufmann, D., Kraay, A., and Mastruzzi, M. (2010) "The Worldwide Governance Indicators," World Bank, mimeo.

King, R., and Levine, R. (1992) "Financial Indicators and Growth in the Cross Section of Countries," Policy Research Working Paper No. 819, the World Bank, Washington DC.

Lopez-Calix, J., Walenhorst, P. and Diop, N. (editors) (2010) *Trade Competitiveness of the Middle East and North Africa, Policies for Export Diversification*, Directions in Development, the World Bank.

Odedokun, M. (1997) "Relative Effects of Public Versus Private Investment spending on Economic Efficiency and Growth in Developing Countries," *Applied Economics* 29: 1325-36.

OECD (2005) Tax Incentives for Investment – A Global Perspective: Experiences in MENA and non-MENA countries, MENA-OECD Investment Programme.

Pigato, M. (editor) (2009) *Strengthening China's and India's Trade and Investment Ties to the Middle East and North Africa*, Orientations in Development Series, the World Bank.

World Bank (2011a) *Middle East and North Africa: Sustaining the Recovery and Looking Beyond*, Economic Developments and Prospects Report, Office of the Chief Economist, Middle East and North Africa, the World Bank, January.

World Bank (2011b) *Middle East and North Africa: Investing for Growth and Jobs, Economic Developments and Prospects Report*, Office of the Chief Economist, Middle East and North Africa, the World Bank, September.





**Annex Table 1. Social measures implemented in the region in 2011**

	Wages	Subsidies	Tax cuts	Transfers	Infrastructure	Jobs	Total cost
<b>GCC OIL EXPORTERS</b>							
<b>Bahrain</b>	Public sector pay increases of up to 37 percent for the lowest paid public employees.	Increase in food subsidies, including flour and meat by 44 million dinars. National Dialogue proposals include better targeting of subsidies towards lower income households, but measures are still being studied.	25% cut in housing installment payments. Expatriate labor fee of US\$27/worker/month suspended for 6 months.	Transfers of US\$2600 per family.	Construction of at least 6000 public housing units per year.	Creation of 20,000 new jobs at Ministry of Interior. One year tenure required before expatriate workers can switch jobs without employer approval (previously no time limit).	Total cost of pay increase in public sector at 2.5% of GDP.
<b>Kuwait</b>	Flat pay increase of KD100 (US\$360) per month for most public employees. Additional increases in allowances for qualifications.	An offer of free food for 13 months through a discount price program.		A grant of US\$3600 to all Kuwaiti citizens and a special increase in pensions for military retirees.	An allocation of US\$4 billion for construction of new housing.		
<b>Oman</b>	Increase in cost of living allowances for all civilian and military employees. Unemployment benefit program of US\$390 per month and a minimum wage of US\$520 per month.	All increases in prices of consumer goods and services subject to approval by Public Authority for Consumer Protection.		Increase in pensions for all public sector retirees and general pension recipients (bigger % increase for lower level pensions).		A new public sector employment program covering 50,000 citizens.	Ministry of Finance estimates total cost of new measures at 4.5% of GDP or 12% increase in fiscal budget.
<b>Qatar</b>	Salary, social allowance, and pension increases of 60% (state employees), 120% (military officers) and 50% (general military).						
<b>Saudi Arabia</b>	Unemployment allowance was set at SR2000 (US\$530) per month, and SR3000 (US\$800) per month. Minimum wage was instituted for nationals working in the public sector. Two months' salary bonus payment to all public sector employees. "Temporary" cost of living allowance for public sector workers from 2008 incorporated in basic pay, and 15% "nature of work" allowance for Saudis working as private security guards.			Grants for charities and needy students of US\$300 million; a bonus payment equal to 2 months of salary/stipend to all public employees and scholarship students; two month bonus for all public and state pension recipients; and higher stipends for tertiary education students.	An allocation of SR250 billion (US\$67 billion) to build 0.5 million new houses.	Add 60,000 new security jobs at the Ministry of Interior; add 500 new jobs at Ministry of Commerce and Industry.	Cost of measures equivalent to 25% of GDP.

	<b>Wages</b>	<b>Subsidies</b>	<b>Tax cuts</b>	<b>Transfers</b>	<b>Infrastructure</b>	<b>Jobs</b>	<b>Total cost</b>
<b>United Arab Emirates</b>		Combination of subsidies and voluntary price controls to return prices of bread and rice at co-ops to 2004 levels. Broader agreement with supermarket chains to avoid price increases on 400 commodities during 2011.		Special increase in pensions for military retirees. Special bonus payment to nationals working as taxi drivers.			
<b>DEVELOPING OIL EXPORTERSs</b>							
<b>Algeria</b>	Pay increases for public sector workers.	Higher state subsidies on flour, milk, cooking oil and sugar. Waived value added tax (VAT) and customs tariffs on imports of cooking oil and raw and white sugar.			Increase spending on building new houses.	Up to 2.5 million public sector jobs and sustainable job creation in agriculture by creating 100,000 new farms.	Increased public sector spending by 25% of GDP.
<b>Iran, Islamic Rep.</b>		Removal of subsidies including energy, services and basic food subsidies. Set up a graduated tariff system, with energy prices increasing as a function of use. Savings from subsidy removal will be distributed as follows: 60% to households, 30% to firms in the form of subsidized loans, technologies and training programs; and 10% to central and local governments as a compensation for higher energy prices.		Every Iranian person is eligible to receive bi-monthly the equivalent of 80 US\$. An estimated 60 million Iranians (80%) received bi-monthly transfers.			
<b>Iraq</b>		Direct fuel subsidies have been eliminated. Indirect fuel subsidies have gradually declined from 10.6 percent to 1.5 percent of GDP in 2010.			Capital spending is expected to increase from ID 19.5 trillion (actual 2010) to ID 33 trillion (budgeted in 2011). The oil sector is projected to be the main recipient of public investments (about 21 percent of total public spending).	The government intends to stimulate small projects through a development fund with an initial capital of ID150 billion at the Ministry of Labor.	Iraq's wage bill as a percentage of total expenditures increased from 30 percent in 2005 to 47 percent in 2009.

	<b>Wages</b>	<b>Subsidies</b>	<b>Tax cuts</b>	<b>Transfers</b>	<b>Infrastructure</b>	<b>Jobs</b>	<b>Total cost</b>
<b>Syrian Arab Republic</b>		Reversed subsidy cuts on energy by increasing heating oil allowances for public workers by 72%.		Public sector employees' allowances (especially fuel) will be increased, and poor households will benefit from higher cash transfers in 2011.			2-3% of GDP
<b>Yemen, Rep.</b>	A 25% pay increase for government and military workers.	Increased food subsidies.	A 50% tax cut on salaries for government and military workers.	Up to 4,000 Riyals per month for households qualifying for support by the Social Welfare Fund.		New jobs for 25% of new graduates.	Over 4% of GDP.
<b>OIL IMPORTERS</b>							
<b>Jordan</b>	Raised salaries of civil servants, the military, and retirees by JD 20 (US\$28) per month for a cost of US\$233 million. One time cash transfer of JD100 (US\$140) for civil servants, military, retirees and NAF beneficiaries during Ramadan. The transfer is estimated to equal JD80 million (US\$113 million).	Subsidies of US\$839 million: (i) to fix the prices of oil products (Octane 90, Solar, kerosene) for 6 months; and (ii) to subsidize cooking gas, wheat and barley.	Suspending the special sales tax on kerosene and diesel; reducing the tax on gasoline from 18 to 12 percent. Tax cuts add up to US\$169 million.	Allocating transfers to the state-run consumer corporations to subsidize the price of sugar, rice and frozen poultry. Transfers add up to US\$57 million. Implementing income-generating projects in poor areas.	Municipality fund of US\$35 million to tackle small infrastructure bottlenecks in underprivileged areas.		5% of GDP.
<b>Lebanon</b>				A transfer of US\$300 per month worth of gasoline to taxi and truck drivers (approved in May, still pending execution). Total cost estimated at US\$36 million over three months.			
<b>Egypt, Arab Rep.</b>	15 percent increase in wages and pensions (LE2 billion or 0.17 percent of GDP).	Subsidy increase of about 0.2 percent of GDP due to the rise in global food prices (LE2.8 billion).		Adding 150,000 families to the social solidarity program (LE100 million).		Offering permanent positions to temporary contract employees (about 450,000).	0.8% of GDP.
<b>Tunisia</b>		Food and fuel subsidies were increased in February / March.	Postponing the payment and declaration of taxes for 2010 to 2011, with possibility to seek further extension to March 2012.	Monthly allowances of 80 dinars in 2011 for additional 15,000 young people; expansion of direct cash transfers to poor families. The reach of the program will increase from 135,000 to 185,000 households; expansion of free medical insurance cards to additional 25,000 individuals; provision of	Accelerating the execution of public infrastructure investment projects and supporting pilot projects in the telecommunications sector.	Adding 20,000 new civil servants.	

	<b>Wages</b>	<b>Subsidies</b>	<b>Tax cuts</b>	<b>Transfers</b>	<b>Infrastructure</b>	<b>Jobs</b>	<b>Total cost</b>
				microcredit or gifts to support home improvements of 20,000 households; one-off lump sum transfer of TDN 400 per person and TDN 600 per family to Tunisians coming back from Libya.			
<b>Morocco</b>	Salary increases by US\$75 (net) per month for all civil and military public employees, both at the federal and local levels. The salary increase measure was effective as of May 1, 2011.	Injected approximately US\$ 1.3 billion in subsidies to curb price hikes for food staples.		The minimum pension was increased from MAD600 to MAD1,000 per month for retired public employees and their families, benefitting 90,000 people. The budget cost is estimated to be US\$54 million annually. The AMAL-2 program for the unskilled unemployed provides 100 TDN per month to approx 25,000 people, at a total cost of approximately 30 million.		Creation of an employment program for educated unemployed. Half of graduates will be hired by the government, while the other half will be integrated into autonomous public establishments. The new budget law has provided 18,802 new jobs.	The total cost of these measures is estimated at US\$508 million in 2011 and US\$760 million in 2012.

Source: World Bank (2011b). Note: GCC=Gulf Cooperation Council; GDP=Gross Domestic Product; KD=Kuwaiti Dinar; SR=Saudi Riyal; ID=Iraqi Dinar; JD=Jordanian Dinar; LE=Egyptian Pound; TDN=Tunisian Dinar; MAD=Moroccan Dirham.