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**This is an updated version of “Labor Market Reforms to Boost Employment and Productivity in the GCC” that was prepared for the 2013 GCC Ministerial meeting in Riyadh and published on November 13, 2013.”**
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The GCC growth model has delivered substantial improvements in living standards over several decades. Access to foreign labor has supported rapid growth in the non-oil sector and price stability in the region. It has also resulted in positive spillovers to the migrant-sending countries through large remittance flows. At the same time, governments have increased public-sector employment and have helped raise standards of living. However, the growth model has involved costs: the public-sector wage bill is relatively high, there is limited employment of nationals in the private sector, labor productivity has declined or stagnated, and there is limited progress on economic diversification.

The costs of the current labor market structure are now becoming more of a concern. With the working-age population in the GCC continuing to grow rapidly and the limits of public-sector employment being reached, there is a growing recognition that nationals need high-productivity, high-paying jobs in the private sector. Economic diversification is the key to enhancing non-oil sector growth and job creation for nationals.

Comprehensive reforms will be needed to re-orient the GCC economies toward greater private sector employment of nationals. Several labor market reforms are underway, but more is needed.

- Reducing the availability and attractiveness of public-sector employment will be critical to create incentives for nationals to seek private sector jobs, and contain future growth in the relatively high public-sector wage bill.

- Quality improvements to education and training are needed to boost the skills and productivity of workers. Spending is increasing, but academic achievement of students in the GCC lags peer countries.

- Liberalizing the domestic mobility of the large foreign workforce could boost productivity by boosting labor market flows, while wage subsidies could help narrow the wage differential between nationals and foreign workers.

- An increased focus on hiring skilled foreign workers can help support higher-productivity, while less reliance on low-skilled foreign workers may increase wages and make employment more attractive for less-educated nationals.

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Prepared by Alberto Behar, Cornelius Fleischhaker, Padamja Khandelwal (lead), Malika Pant, Ananthakrishnan Prasad, Haonan Qu, Sergio Rodriguez, and Harold Zavarce. Research assistance was provided by Peter Gruskin and Ben Piven, editorial assistance was provided by Diana Kargbo-Sical.
In implementing these reforms, consistency between short- and medium-term objectives is essential, and external spillovers need to be considered. For example, boosting public-sector employment in the short term will not help private-sector job creation over the medium term. Moreover, labor market reforms may impact remittances to migrant-sending countries.

Labor market reforms will over time require enhancements to the macroeconomic policy toolkit. Reducing the reliance on foreign labor could reduce flexibility in the labor market and its ability to respond effectively to movements in the terms of trade. Consequently, macroeconomic policies, including the exchange rate, will over time need greater flexibility to respond to shocks.
I. INTRODUCTION

Over the past few decades, GCC economies have relied on imports of foreign labor to achieve development goals and reduce overheating pressures. Public-sector employment has supported high standards of living. With a rapidly rising youth population, however, private-sector job creation for GCC nationals has become a challenge and unemployment could rise in the coming years unless more nationals find jobs in the private sector.

1. Amid the oil boom of the 1970s, GCC countries made a choice to import labor on a large scale to achieve development goals. The need to develop infrastructure and services required by urbanizing societies and the constrained size of the working-age national population, shaped and reinforced the reliance on short-term labor inflows to meet the needs of the labor market (Baldwin-Edwards, 2011).

2. Access to foreign labor has supported rapid economic growth and price stability in the region. Growth in the non-oil sector has been strong since 1990, outpacing oil-sector growth over the last decade. It has helped close development gaps—the quality of the infrastructure has improved substantially, creating spillovers for production and attracting foreign direct investment. Foreign labor has also played a role in containing inflationary pressures. As a result, the region’s ranking on measures of competitiveness and human development has improved significantly. The employment of a large number of foreign nationals in the GCC countries has also resulted in large remittance outflows—estimated at USD70 billion in 2012—which have benefited migrant-sending countries such as Bangladesh, Egypt, India, Jordan, Nepal, Pakistan, the Philippines, Sri Lanka, and Yemen.

3. Public-sector expenditure and employment have helped raise standards of living, albeit private-sector job creation for nationals has been limited. Public-sector expenditure on goods and services has strengthened domestic demand and GCC nationals have enjoyed a higher standard of living through improved infrastructure and social services as well as employment. This strategy has posed difficulties, however, in terms of private-sector job creation for nationals; more than 80 percent of private-sector jobs are held by low-skilled foreign workers. Unemployment is high among nationals in some GCC countries, while in others nationals rely primarily on the public sector for jobs. It has also resulted in relatively poor productivity growth.
4. **A young population and rising labor force participation rates will lead to a large number of new labor force entrants in the coming years.** Although labor force participation of nationals remains low in the GCC (about 52 percent for men and 25 percent for women on average), it has risen over the past decade, with potential for further increases as highly educated nationals, especially women, enter the labor force. Depending on labor force participation rates, the labor force could grow between 3 and 4 percent each year, so an additional 1.2–1.6 million GCC nationals could enter the labor market by 2019 (Figure 1).

5. **On current projections for non-oil GDP growth, new private-sector jobs will only cover a fraction of labor force entrants.** If the current share of nationals in the private sector remains unchanged, about 600,000 private-sector jobs would be generated for nationals by 2019, assuming real non-oil GDP grows in line with the IMF staff’s baseline scenario (Figure 2).\(^2\) For nationals, this would be only about one-half to one-third of the expected labor market entrants. All countries are forecast to have a shortfall, which could be particularly large in some countries. Even if public-sector hiring continues at its recent pace, unemployment could rise.

\(^2\) This excludes the U.A.E. due to data limitations.
6. **The existing growth model has delivered substantial benefits and has helped raise living standards, but is unlikely to be sustainable in the face of a rapidly growing youth population that is looking for jobs.** Public-sector wage bills (as percent of GDP) are at relatively high levels, and further increases in public sector employment to provide jobs for a rapidly expanding national population would increase the already large non-oil fiscal deficit. Comprehensive reforms will thus be needed to re-orient GCC economies toward greater private-sector employment of nationals. In this context, this paper examines how GCC labor markets have supported job creation, growth, and productivity, and provides policy recommendations based on international experience with labor market reforms. The paper is organized as follows: Section II presents an overview of GCC labor markets, while Section III discusses how labor markets in the GCC compare with those in other oil-exporting and migrant-dependent countries. Section IV examines the macroeconomic implications of the labor market structure in the GCC. Section V discusses lessons from the GCC and international experience with labor market policies, and Section VI concludes with some policy recommendations.

II. **JOB CREATION AND CHARACTERISTICS OF GCC LABOR MARKETS**

*Rapid economic growth has supported strong job creation. Jobs in the public sector, where nationals are employed, have grown at a slower pace than in the private sector which mostly employs low-skilled foreign workers. The wage differential between the public and private sectors, especially for low-skilled workers, makes the public sector more attractive to nationals, while private sector employers prefer to hire cheaper and low-skilled foreign labor.*

7. **Economic growth in the GCC has been rapid, and employment has risen faster than in other emerging markets.** A significant driver of GCC non-oil private-sector growth and employment has been fiscal spending, with national development plans focused on infrastructure development often using low-skilled foreign labor (Figure 3).³ GDP growth has been strong in sectors such as construction, wholesale and retail trade, and transportation, which tend to employ low-skilled, low-productivity workers. Financial services and manufacturing (mainly petrochemicals) have also contributed to growth, but with a modest impact on the employment of high-skilled workers in Bahrain, Oman, Qatar, and Saudi Arabia. Growth in government services and the hydrocarbons sector has supported employment of nationals.

³ Large oil revenues in recent years have allowed GCC governments to sustain high levels of expenditure growth that have facilitated growth in employment.
Figure 3. Growth and Job Creation in the GCC

Sources: Country authorities; WEO; Haver; and IMF staff calculations.

1Kuwait latest data for 2012; Oman latest data for 2011.
2Saudi Arabia and U.A.E. employment numbers are plotted on the right hand scale.
3Qatar begins in 2006; U.A.E. only available 2008.
8. The increase in employment has led to a large increase in foreign labor in the private sector. Between 2006 and 2012, about 5.1 million jobs were created in the GCC (excluding the United Arab Emirates, for which data are unavailable). About 4.3 million of these jobs were in the private sector, while only 0.8 million jobs were in the public sector. Of the 4.3 million private-sector jobs created, nearly 88 percent were filled by foreign workers. In the public sector, nearly 85 percent of the 0.8 million new jobs were filled by nationals. It is useful to note that the employment of foreign labor picked up in all GCC economies as the trend growth rate of oil prices increased over the past decade (Figure 4). Employment growth for foreign workers has been more volatile than for nationals.

9. The public sector is the largest employer of nationals, but employment in this sector has grown at a slower pace than in the private sector. Public-sector employment of nationals is most dominant in the wealthier GCC countries (Kuwait, Qatar, and the United Arab Emirates) where national populations are small and more than three-fourths of employed nationals work in the public sector. The ratio is also high in Saudi Arabia, while in Oman, about 50 percent of the employed nationals work in the public sector. Bahrain has the lowest proportion of nationals working in the public sector, at 35 percent. In this context, the already large government wage bill (in percent of GDP) has entailed slower growth in public-sector jobs, although employment growth picked up in 2012-13 (Figure 5).
The private sector largely employs foreign labor, and efforts to boost private-sector employment of nationals have yielded mixed results so far. In all GCC countries, foreign labor takes up over 75 percent of private-sector jobs. This is despite the implementation of employment quotas that have aimed to raise the proportion of nationals in private-sector jobs over time. Only Kuwait and Oman have seen an increase in the proportion of nationals employed in the private sector over the past decade. Bahrain and Saudi Arabia, on the other hand, have seen an increase in the proportion of foreign labor in the private sector. In Qatar and the United Arab Emirates, the private sector is almost completely staffed by foreign workers. The distribution of nationals in the private sector is strongly skewed towards high-paying activities (e.g. financial sector). Only a small number of nationals work in low-wage sectors (such as construction, trade, and transportation) and most of them are employed in supervisory positions (van Ark et al, 2008).

A majority of foreign workers are low-skilled. In the five GCC countries for which data are available, a clear majority of foreign workers are fairly low-skilled (less than tertiary education). The United Arab Emirates has the highest share of high-skilled foreign workers at about 35 percent which may be attributed to the status of the country as a financial and logistics center requiring highly educated workers. In the other five countries, only about 15 percent of foreign workers on average possess some form of tertiary education (Figure 6).

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4 A majority of foreign workers in the GCC are sourced from Bangladesh, India, Nepal, Pakistan, the Philippines, and Sri Lanka.

5 IMF Country Report No. 13/230 documents the higher education levels among Saudi nationals relative to foreign workers.
12. **The large wage differential between the public and private sectors poses a strong incentive for nationals, particularly those who are less educated, to prefer public-sector employment.** The choice by GCC countries to provide high pay and benefits to public-sector workers has led to high reservation wages for nationals, particularly for low-skilled workers (Box 1). Non-wage benefits, working hours, and job security are also more attractive in the public sector. High public-sector wages and benefits can create a disincentive for nationals to invest in skills that are important for the private sector.6

13. **Private sector wages for foreign labor are significantly lower than those for nationals, at similar education levels.** Data available for some GCC countries (Bahrain and Saudi Arabia) show that the wage gap is particularly pronounced for low-skilled workers. This creates a preference for GCC private sector employers to hire foreign workers, especially at the lower skill levels.7 Apart from the wage differential, the lack of incentives for nationals to acquire skills for the private sector also makes employers prefer foreign workers. Foreign workers are less expensive, less mobile, and more motivated, in part because they depend on the employer for their legal status.

14. **Unemployment of nationals varies across GCC countries, even during periods of strong non-oil growth.** Unemployment in Qatar and Kuwait has remained low on account of a relatively small national population that is largely employed in the public sector. In Saudi Arabia, unemployment among nationals has increased from 10.5 percent at end-2009 to 11.5 percent at end-2013, and is concentrated among highly-educated women and less-educated men (IMF Country Report 13/230). For the United Arab Emirates, unemployment was measured at 14 percent among nationals in 2009. On the other hand, in Bahrain, labor market policies have supported a significant reduction of unemployment.8 Unemployment data are unavailable for Oman. Rising female labor force participation rates are in part due to falling fertility rates and rising education levels among women and have contributed to high female unemployment against the backdrop of limited employment opportunities. In all GCC countries, female unemployment rates are higher than for males, reaching around 30 percent in Saudi Arabia (end-2013) and the United Arab Emirates (2009).

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6 Fang and Norman (2006) illustrate this phenomenon for Malaysia, where preferential access to public-sector jobs for native Malays has reduced their incentives to invest in skills valued by the private sector. Also see Salehi-Isfahani and Dhillon, 2008.

7 Anecdotally, this is an issue in all the GCC countries. For instance, Kotilaine, Khoja, and Nour (2012, p.13) note that Emirati college graduates expect a monthly compensation that exceeds market wages, and that it is common knowledge that companies employ nationals to fulfill quotas as a way to avoid penalties.

8 The sharp drop in Bahrain’s unemployment estimates from nearly 16 percent in 2006 to around 4 percent in 2012 is likely a result of successful labor market reforms as well as some methodological changes in the measurement of unemployment.
Public sector wage bills have increased across the GCC in recent years, and appear high by international standards. While still lower than in the early 2000s, the average public sector wage bill in the region has increased from 7.4 percent of GDP in 2008 to 9.4 percent of GDP in 2013, with the highest increases recorded in Oman, Kuwait, and Bahrain. The public sector wage bills for Saudi Arabia, Kuwait, and Bahrain are among the highest in a sample of advanced and emerging economies.¹

The high and rising wage bill is attributable to both high government employment as well as the relatively high public sector wages. When compared internationally, some GCC countries have relatively high public sector employment as a share of the labor force, notwithstanding the heavy dependence on foreign workers. While wages could differ to account for differences in education and experience, a simple comparison of average wages suggests they are higher in the public than in the private sector. Data for Bahrain, Kuwait, Saudi Arabia, and the United Arab Emirates all indicate that average earnings of nationals employed in the public sector are much higher than earnings of nationals working in the private sector.

¹Due to limited availability of comparable data on the wage bill for the central government, the UAE is not included.
III. HOW DO THE GCC COUNTRIES COMPARE GLOBALLY?

A comparison with other oil-exporting and migrant-receiving countries shows the GCC to be highly reliant on both migrant labor and oil exports. Public expenditure growth has supported a relatively large government wage bill. Although labor markets are perceived as relatively flexible, regulations are considered restrictive in some areas. More could be done to improve education outcomes.

15. Useful lessons can be drawn from a comparison of GCC labor market outcomes and structures with those of other oil-exporting and migrant-dependent economies. Countries that have achieved upper-middle or high (MHH) income status and have either a migrant population above 20 percent of total population or oil exports above 12 percent of total exports are included in the comparator groups (Table 1). The application of these two criteria results in two sets of comparators that overlap frequently as a number of other oil economies also have significant migrant populations (e.g. Brunei, Canada, Gabon, and Kazakhstan).

<table>
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<tr>
<th>Country</th>
<th>GDP per capita (PPP US$)</th>
<th>Population (Millions)</th>
<th>Migrants (Percent of population)</th>
<th>Fiscal oil revenues (Percent of GDP)</th>
<th>Oil exports (Percent of total exports G&amp;S)</th>
<th>Nominal non-oil GDP (Percent of GDP)</th>
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<td>...</td>
<td>26.7</td>
<td>...</td>
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</table>

Sources: World Bank World Development Indicators; WEO; and IMF staff calculations.

1 Averages for GDP per capita and migrants columns are computed using population weights. Averages for fiscal oil revenues, net oil exports and oil exports columns use PPP GDP weights.

2 Most recent data on international migrant stock from 2010

9 Here, we use an arbitrary cutoff of PPP GDP per capita USD12,000 (in 2011) to identify a selection of upper-middle or high-income countries. From the sample of countries with large migrant populations, we exclude countries with significant numbers of refugees, countries with population below 1/3 million, and members of the EU where internal migration flows are often difficult to identify.
16. **Relative to comparator countries, the GCC is highly reliant on both migrant labor and oil exports.** The migrant population on average is nearly 40 percent of the total population in the GCC, and about 70 percent in Kuwait, Qatar, and the United Arab Emirates. In other migrant recipient countries, the average migrant population is about 26 percent of total population, similar to levels in Bahrain, Oman, and Saudi Arabia. Like the GCC, many oil-exporting countries are also very dependent on oil exports, although some countries (Canada, Malaysia, Mexico, Norway, and Trinidad and Tobago) are more diversified.

**Figure 7. International Comparison of GCC Labor Markets**

**Employment of Nationals and Fiscal Expenditure 2000–13**
(Average annual percent change)

**Government Wage Bill, 2013**
(Percent of GDP)

**Flexibility and Efficiency of Labor Markets, 2014**

**Redundancy Costs, 2014**
(Weeks of salary)

Sources: Country authorities; IMF staff calculations; and World Economic Forum, *Global Competitiveness Report 2014–15*. 
17. **Supported by government spending, GCC job creation for nationals has outpaced that of other countries over the last decade.** While the average national employment growth for Bahrain, Kuwait, Qatar, and Saudi Arabia ranged between 4 percent and 5 percent, it was close to 9 percent in Oman (Figure 7). In other countries, the average speed of job creation for nationals is about 2 percent annually with Brunei, Venezuela, Kazakhstan, Malaysia, and Singapore above the mean but still significantly below the GCC countries. At the same time, real fiscal expenditure growth has been higher in the GCC, supporting the hiring of nationals in the public sector. Oman is a relative outlier in the GCC, having achieved a high growth rate of employment of nationals despite a slower growth rate of fiscal spending.

18. **In the GCC countries, the public-sector wage bill is considerably higher than in other oil exporters.** The average GCC public-sector wage bill relative to GDP (9.4 percent in 2013, excluding the United Arab Emirates) is almost twice that (5.2 percent) in other oil exporters (excluding Libya, which is an outlier) and has supported rising living standards among nationals. In Saudi Arabia, the wage bill is over 11 percent of GDP. The difference in the size of the public-sector wage bill (in percent of GDP) could indicate either the relatively large size of public-sector employment in the GCC or the high public-sector wages and benefits, or both.

19. **GCC labor markets are relatively flexible, but could do more to utilize talent.** Measured by data from the World Economic Forum’s *Global Competitiveness Report 2014–15*, many countries with large migrant populations score very highly with regard to both labor market flexibility and efficient use of talent. Although GCC countries have relatively flexible labor markets, intra-GCC differences in labor market flexibility are unrelated to the share of migrant workers in the population. Thus, both the United Arab Emirates and Bahrain have relatively high labor market flexibility, while Kuwait and Saudi Arabia rank lower. GCC countries achieve lower scores on the efficient use of talent, partly because of cultural factors that affect the employment of educated women. Female labor force participation rates are low compared to other emerging market countries and from a global perspective (see Box 2).

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10 For non-GCC countries, it is assumed that the share of migrants in employment is the same as the share of migrants in the population.

11 Data availability limits the comparison in terms of wage levels with other countries.

12 Labor market flexibility and the efficient use of talent are the two subcomponents of labor market efficiency as measured in the *Global Competitiveness Report*. Labor market flexibility is measured as an average of country scores on four dimensions: cooperation in labor-employer relations, flexibility of wage determination, hiring and firing practices, and redundancy costs in weeks of salary. The efficient use of talent is also measured along four dimensions: link between pay and productivity, reliance on professional management, brain drain, and women in labor force (ratio to men). These data do not explicitly distinguish between locals and migrants. For additional details, see World Economic Forum, *Global Competitiveness Report*, 2014–15.
Box 2. What Explains Low Female Labor Force Participation in the GCC?

Across the world, female labor force participation has increased as women have become more educated and have fewer children. This change can in part be explained as the result of labor supply decisions, where women choose how to allocate their time based on an evaluation of the relative costs and benefits, as in Becker’s (1965) time allocation framework. In this framework, women choose between leisure, supplying labor to home production (such as child rearing), and supplying labor to the market and earning a wage (i.e., being part of the labor force). The outcome will then depend on the return to market labor, which will tend to increase with education levels, and the costs and quantity of home production, which will tend to decrease with fewer children.

Observed drivers of female labor force participation (FLFP) in other countries are also at play in the GCC. Based on analysis of detailed data for OECD countries covering 1960–2008, Steinberg and Nakane (2012) estimate the impact on FLFP from a series of explanatory variables. Applying their coefficients to GCC data indicates that increased schooling and the declining number of children per woman explain the bulk of the increase in FLFP seen in the GCC since 1990. The fit of the model is generally fairly good, with comparatively small unexplained residuals for most GCC countries. For Saudi Arabia, however, the actual increase in FLFP has been considerably smaller than predicted.

The model also explains some—but not all—of the gap in FLFP between GCC countries and the OECD mean. This gap currently ranges between 19 percentage points in Qatar and 53 percentage points in Saudi Arabia. The part of the gap that is explained by differences in schooling and the number of children per woman ranges from 14 percentage points in the UAE to 24 percent in Saudi Arabia. In all countries, however, there remains an unexplained residual of the same sign. These results indicate that there are additional factors, such as different cultural norms, that stand behind the GCC’s low FLFP rates and that these factors have remained relevant over time.
20. **Labor regulations are a concern for the private sector in the GCC.** According to the Executive Opinion Survey undertaken by the World Economic Forum, restrictive labor regulations rank at the top of the list of the most problematic factors for doing business in the GCC.\(^{13}\) Moreover, while labor markets are generally flexible in terms of cooperation between employers and workers, hiring and firing practices are considered to be complicated by high redundancy costs in some GCC countries.

21. **Despite impressive advances, education outcomes lag in most GCC countries.** GCC countries rank below most comparators in both quality and quantity of education (Figure 8). The quantity is measured by a World Economic Forum Index (based on enrollment rates in secondary schooling) while quality is measured by the 2011 Trends in International Mathematics and Science Study (TIMSS) math score.\(^{14}\) All the GCC countries rank below the international average in measures of the quantity and quality of education. Most of the selected comparators that participate in the study rank above average on both dimensions.

### IV. THE MACROECONOMIC IMPLICATIONS OF THE LABOR MARKET STRUCTURE IN THE GCC

*The GCC growth model has delivered strong social and economic development outcomes.* Access to foreign labor has helped strengthen infrastructure while mitigating inflationary pressures from fiscal spending. However, this growth model has also resulted in declining or stagnating levels of productivity, and difficulties in private-sector job creation for nationals. *Progress towards export diversification has remained limited.*

22. **The existing labor market structure in the GCC has both advantages and disadvantages for supporting favorable macroeconomic outcomes.** By providing an elastic supply of relatively cheap foreign labor, the economies in the GCC have been able to develop more quickly than if they had relied on domestic labor alone: However, at the same time, productivity performance has generally been understandably poor because of the chosen development model that has employed low-wage and less-educated foreign workers to help develop domestic infrastructure and many service sectors. Moreover, the employment of nationals in the private sector has not responded to strong growth, and there has been limited progress in economic diversification.

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\(^{14}\) TIMSS data have been collected in 1995, 1999, 2003, 2007, and 2011. In 2011, more than 60 countries participated. The next data collection is in 2015.
Growth and Development

23. **Considerable progress has been made in strengthening social and economic development outcomes in the GCC.** Over the past 20 years, oil economies have made progress in social and economic development as approximated by UNDP’s Human Development Index (HDI), but the GCC countries have remarkably outpaced their oil-exporting peers and closed the gap with migrant-receiving countries in their path of development (Figure 9). Public policy has fostered significant improvements in infrastructure and the business environment, the former helped by the large pool of available migrant labor. GCC countries rank comparably with other migrant-receiving countries with respect to the quality of infrastructure (measured as the World Economic Forum’s Infrastructure Index) and the business environment (proxied by the World Bank’s Doing Business Index). On average, other oil exporters lagged behind in these areas. However, the GCC scores below other migrant-receiving countries on the UNDP’s Human Development Index (HDI).15

![Figure 9. International Comparison of Development Indicators](image)

Inflation

24. **Empirical evidence suggests that access to low-cost foreign labor has helped GCC countries maintain low inflation, even as they have grown quickly.**16 At about 3 percent on average since 2000, inflation has been lower in GCC economies than in most

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15 The HDI measures the average achievements in a country in three basic dimensions of human development: a long and healthy life (proxy by life expectancy at birth), access to knowledge (proxy by mean years of schooling and expected years of schooling), and a decent standard of living (proxy by GNI per capita in dollars PPP adjusted). It is the geometric mean of normalized indices from each of these three dimensions. Minimum and maximum values (goalposts) are set in order to transform the indicators into normalized indices between 0 and 1. The maximums are the highest observed values in the time series (1980–2012).

16 There are few previous empirical studies documenting the link between the rising supply of foreign labor and inflation in the GCC. See Alogeel and Hasan (2008) and Kandil and Morsy (2009) for a review of the literature.
other non-OECD oil-exporting economies. Though the credibility of the exchange rate pegs has contributed importantly to the stable inflation outcomes, the almost fully elastic supply of foreign labor has limited inflation by lowering wage pressures in times of strong demand or falling productivity, as well as through the remittance outflows that decrease domestic demand for nontradable goods and services. Empirical analysis has found that above-trend growth has little impact on inflation, and employment growth of foreign workers partially offsets the inflationary impact of fiscal spending in GCC countries (Box 3). Along the same lines, remittance outflows are considered to have reduced the real exchange rate appreciation impact of oil revenues and Dutch disease in GCC countries (IMF Country Report 12/272; Espinoza, Fayad, and Prasad, 2013).

**Box 3. Inflation and Employment of Foreign Workers in the GCC**

An important question is how access to foreign labor affects inflation in the GCC during periods of strong growth. An approach similar to that of Jaumotte and Morsy (2012) is followed whereby the growth in foreign workers is added to an empirical equation that looks at the determinants of inflation. Specifically, the determinants of inflation that are looked at are: lagged inflation, the output gap, the fiscal spending gap, the growth in employment of foreign workers, inflation in trading partner countries, and the change in the nominal effective exchange rate (with one lag). The output gap for the non-oil sector and the fiscal spending gap are estimated as the percentage deviation from trend using an HP filter. Growth in foreign worker employment is measured as change in foreign workers in percent of the previous period’s total employment. A panel regression with fixed effects is estimated using annual data for all GCC countries from 1990 onwards.

The results suggest that strong growth has little impact on inflation, and that an increase in employment of foreign workers during periods of fiscal expansion partially offsets the inflationary impact of the fiscal spending. Inflation is found to be persistent in the GCC (inflation in the previous year is a significant determinant of inflation this year), and is affected by inflation in partner countries and by exchange rate movements (not reported in the table). Unlike the case of other countries, inflation in the GCC does not increase when output is above trend, consistent with the notion that an elastic labor supply may limit inflationary impact. However, using an interaction term between the growth in the employment of foreign workers and the fiscal spending gap suggests that above-trend fiscal spending has an inflationary impact, but this impact is significantly reduced by the increasing employment of foreign workers (column (2)). The estimates suggest that with the average growth rate of employment of foreign workers of 4 percent in sample, the inflationary impact of public spending is dampened by roughly 40 percent. As a robustness check, the output gap variable is excluded in column (3) and the results remain similar. Finally, column (4) shows the estimation results when both the output gap and its interaction with the growth in employment of foreign workers are included. The previous results still hold, and estimates of the output gap, including the interaction term, are insignificant.

<table>
<thead>
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<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
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<td>Inflation (t-1)</td>
<td>Inflation (t-1)</td>
<td>Inflation (t-1)</td>
</tr>
<tr>
<td>Inflation (t-1)</td>
<td>0.456***</td>
<td>0.464***</td>
<td>0.507***</td>
<td>0.453***</td>
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<tr>
<td>(0.0306)</td>
<td>(0.0394)</td>
<td>(0.0418)</td>
<td>(0.0675)</td>
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<td>Output Gap</td>
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<td>0.0593</td>
<td>-0.0396</td>
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<td>(0.0814)</td>
<td>(0.0550)</td>
<td>(0.0426)</td>
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<tr>
<td>Δ Foreign Worker Employment</td>
<td>0.0372</td>
<td>0.0373</td>
<td>0.0750*</td>
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</tr>
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<td>(0.0250)</td>
<td>(0.0236)</td>
<td>(0.0306)</td>
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<td>Output Gap X Δ Empl.</td>
<td>0.0184</td>
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<tr>
<td>(0.00936)</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Fiscal Spending Gap</td>
<td>-0.0129</td>
<td>0.101*</td>
<td>0.117**</td>
<td>0.126*</td>
</tr>
<tr>
<td>(0.0381)</td>
<td>(0.0421)</td>
<td>(0.0322)</td>
<td>(0.0518)</td>
<td></td>
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<tr>
<td>Spending Gap X Δ Empl.</td>
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<td>-0.0103*</td>
<td>-0.0127**</td>
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<td>(0.00392)</td>
<td>(0.00368)</td>
<td>(0.00331)</td>
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Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

1/ Other variables included but not reported are: partner counties’ inflation, change in the nominal effective exchange rate, with one lag.

Source: IMF staff calculations.
Productivity

25. **Productivity growth has generally been unsatisfactory in the GCC over the past two decades.** This is probably the result of the chosen growth model, whereby strong growth has been underpinned by the availability of relatively low-cost foreign labor. Looking at the GCC countries over the past two decades, capital investment and labor force growth have been the main drivers of growth in the non-oil sector, while total factor productivity (TFP)—a measure of how efficiently capital and labor inputs are being used in the production process—has generally declined (Table 2 and Box 4). For the period since 1990, TFP growth has been negative for all the GCC countries, with only Saudi Arabia experiencing some positive TFP growth in the non-oil sector (Figure 10). Comparing the 1990s to the period since 2000, TFP growth in the non-oil sector was positive for some GCC countries in the 1990s, but has deteriorated and turned negative over the last decade. In Saudi Arabia, TFP growth in the non-oil sector improved and became positive in the 2000s, compared to the 1990s. The negative TFP growth in many countries may reflect constraints on absorption capacity and potential weaknesses in the quality of public spending that limit the growth impact of investment.

<table>
<thead>
<tr>
<th></th>
<th>Bahrain</th>
<th>Kuwait</th>
<th>Oman</th>
<th>Qatar</th>
<th>Saudi Arabia</th>
<th>U.A.E.</th>
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<tr>
<td>1990–99</td>
<td>4.2</td>
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<td>5.8</td>
<td>3.8</td>
<td>3.4</td>
<td>9.0</td>
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<td>1.8</td>
<td>0.2</td>
<td>-0.1</td>
<td>0.0</td>
</tr>
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<td>3.6</td>
<td>2.5</td>
<td>2.5</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Labor</td>
<td>2.0</td>
<td>6.1</td>
<td>1.6</td>
<td>1.1</td>
<td>1.5</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>Growth</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>2000–12</td>
<td>6.8</td>
<td>6.2</td>
<td>7.3</td>
<td>14.5</td>
<td>6.3</td>
<td>6.7</td>
</tr>
<tr>
<td>TFP</td>
<td>-2.4</td>
<td>-0.6</td>
<td>-2.3</td>
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<tr>
<td>Capital</td>
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<td>4.0</td>
<td>4.8</td>
<td>6.0</td>
<td>2.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Labor</td>
<td>5.5</td>
<td>2.9</td>
<td>4.8</td>
<td>8.6</td>
<td>3.0</td>
<td>4.1</td>
</tr>
</tbody>
</table>

*Source: IMF staff calculations.*

*Cost share of capital=0.4*
Box 4. Estimating Productivity Growth in the GCC

This box briefly outlines the methodology used to derive the productivity estimates reported in the main text. A growth accounting approach based on the Cobb-Douglas production function is used:

\[ \Delta \ln(Y_t) = \Delta \ln(A_t) + \alpha \Delta \ln(K_t) + (1 - \alpha) \Delta \ln(L_t), \]

where \( \Delta \ln(Y_t) \) is output growth, \( \Delta \ln(K_t) \) is capital accumulation rate, \( \Delta \ln(L_t) \) is employment growth, and \( \Delta \ln(A_t) \) is the TFP growth. The cost share of capital, \( \alpha \), is assumed to equal 0.4, a value that is commonly used in empirical work (see Espinoza, Fayad, and Prasad, 2013). The initial capital stock is estimated using perpetual inventory method (Harberger, 1978). The contributions of capital, labor, and TFP to overall and non-oil sector growth for the period 1990 onwards and for two sub-periods, 1990–99 and 2000–12, are estimated.

The results show that investment and employment have been the main drivers of growth in the GCC. Factor inputs have risen significantly over the past two decades, with real investment growth outpacing employment growth. The growth of real investment in the GCC during this period was on par with other fast-growing emerging markets: real investment in China grew by more than 1500 percent, while the average increase in the BRICS was 520 percent. Moreover, investment grew rapidly in both the public and private sectors of the GCC countries between 1990 and 2012. On the other hand, TFP growth has generally been negative except in Qatar (virtually zero) and Saudi Arabia (in the non-oil sector).

These results are robust to alternate estimates of the cost share of capital. The cost share of capital is set at 0.4 in the estimates reported in the text. An alternative specification, where the cost share of capital is estimated directly from the data, was also looked at. Using this methodology, the results are qualitatively the same, although TFP is estimated to have declined at a faster rate.
26. **Labor productivity has also declined in many GCC countries.** Labor productivity, estimated as non-oil output per worker, decreased in Bahrain, Oman, Qatar, and the United Arab Emirates over the past decade. In contrast, labor productivity increased in Saudi Arabia and Kuwait by close to 1 percent annually on average, although in the latter it has declined since 2008 (Figure 11). The long-term fall in labor productivity in many GCC countries is in contrast to the experience of comparator countries over the past decade, and is likely partly linked to the development strategy of large investments in infrastructure which have relied on temporary and low-skilled migrant labor. Nevertheless, the productivity trends also hint at inefficiencies in investment spending.

27. **Increasing labor productivity over the long term is necessary for promoting competitiveness, improving resource allocation, and promoting sustainable investment and growth in the non-oil sector.** In the GCC there may be two potential explanations for the long-term decline in labor productivity coexisting with strong growth. First, low-skilled migrant workers may put downward pressure on wages of similarly skilled nationals (Box 5). This decline in private-sector wages may have helped offset falling labor productivity to stabilize unit labor costs. Alternatively, rising unit labor costs in the GCC may be less of a concern for businesses if low-skilled foreign workers are paid a reservation wage below their marginal labor productivity. It is noteworthy that, in the tradable goods sector and in the services sector, particularly financial services, high-skilled foreign workers and nationals are paid internationally competitive salaries, which may be higher than public sector wages at similar skill levels. Additionally, falling labor productivity in the non-oil private sector does not impact nationals who are employed in the public sector, or those that are hired at the minimum wage in the private sector. Nevertheless, the trend of falling labor productivity shows the presence of significant challenges, as falling real private-sector wages for low-skilled workers will not prove attractive to nationals.

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17 There are very limited time-series data on wages in GCC countries. However, two studies on Saudi Arabia document falling real wages: Ramady (2010) and Hertog (2012) document a fall in average private-sector Saudi and foreign wages between 1995 and 2002, and between 2004 and 2007, respectively.

18 Reservation wages of less-skilled foreign workers are set in their home countries, as they have limited bargaining power and mobility in the GCC labor market.

19 Private sector minimum wages have been implemented relatively recently in some GCC countries. See Table 3 below.
Box 5. Migrant Workers—International Experience

Most migrant-receiving countries target the entry of high-skilled foreign workers. Workers in low-income countries often find it attractive to migrate to high-income countries in search of better-paying jobs and a higher standard of living. High-income countries have an interest in attracting scarce skills among high-skilled foreign workers to boost productivity and growth, and the availability of low-skilled migrant labor can have advantages in enabling rapid development when domestic labor is in short supply. However, large labor inflows may increase the pressure on infrastructure and other social services, and the availability of low-skilled foreign labor may reduce wages for comparably skilled national workers.¹

Policies are implemented to manage the skill composition of foreign labor and limit the adverse wage impact of low-skilled foreign workers. Specifically:

*Policies such as labor market tests and wage restrictions are implemented to ensure that foreign workers do not displace nationals through lower wages.* According to an ILO study (Ruhs, 2002), a labor market test is often used to verify the unavailability of comparably skilled nationals for the job, and wage restrictions are used to ensure that employers pay foreign workers the prevailing wage. In Singapore, a lack of wage restrictions has meant that foreign workers (especially less-skilled) earn less than nationals, resulting in a segmented labor force with entire sectors dominated by foreign workers (Ruppert, 1999, and Seol Dong-Hoon, 2005). Labor market tests have been recently announced for high-skilled foreign workers to ensure opportunities for nationals. In the GCC, labor market tests and wage restrictions have not been implemented.

*Employment quotas are used to target the hiring of high-skilled foreign workers.* Quotas may be set for the country as a whole, or by region, sector, employer, or occupation. For instance, the United States imposes numerical quotas for high-skilled workers for the entire country. Like the GCC, Singapore imposes sector-specific employment percentage quotas for less-skilled workers that are uniform across firms. However, Singapore’s quota system differentiates by skill so that employment of less-skilled foreign workers is actively discouraged. In these countries, quotas are strictly enforced.² In contrast, sector-specific quotas have been inconsistently implemented in the GCC (see below), and the annual number of (skilled and unskilled) admitted foreign workers is determined by market forces with very little government intervention.

¹Some studies find that immigration reduces the wages of less-skilled workers while increasing wages for high-skilled workers (e.g. Dustmann et al, 2012); others find that immigration depresses wages at all levels (e.g. Aydemir and Borjas, 2007).

²Illegal immigration of unskilled workers is a concern to varying degrees in migrant-receiving countries.
The employment of nationals in the private sector

28. The access to cheap foreign labor has rendered low-skilled GCC nationals uncompetitive in the private-sector labor market. High levels of national unemployment in some GCC countries coexist with rapid job creation for foreign workers. This is despite the fact that most of the foreign workers are low-skilled, and the degree of their substitutability with nationals is likely to be higher than for high-skilled workers. In this regard, it is likely that the absence of labor market tests or wage restrictions, together with large-scale labor imports, has resulted in labor market segmentation in all sectors, and employment quotas have been necessary for nationals (especially low-skilled) to find private-sector employment.

29. Public-sector employment has also contributed to lower private-sector employment of nationals. Recent international econometric evidence (Behar and Mok, 2013) shows that, on average, the creation of a public-sector job comes at the cost of a private-sector job and therefore has no impact on total employment (Figure 12). This crowding-out can occur for three reasons: (i) reduced private sector economic activity; (ii) incentives for individuals to take public instead of private sector jobs; and (iii) skills acquisition by the labor force becoming geared toward what is needed to get a job in the public sector.

Figure 12. Crowding-out Effects of Public Sector Employment

In theory, foreign labor can either be a substitute or a complement for nationals; however, the degree of substitutability between foreign workers and nationals is likely to be much higher for low-skilled workers than for high-skilled workers. IMF Country Report 13/230 documents the high levels of unemployment and low labor market participation among less-educated Saudi males.
30. As a result of these factors, higher growth in the GCC non-oil sector does not quickly translate into jobs for nationals. Estimates of the employment elasticity for nationals indicate a slow response of employment to growth in the short term (Box 6). The slow response reflects adjustment costs, which could reflect labor market rigidities and skills mismatches, as well as a preference for public-sector work.

**Box 6. Job Creation and the Elasticity of Employment for GCC Nationals**

There is evidence to suggest that the employment of nationals in the private sector in the GCC responds slowly to economic growth. The employment elasticity of output measures the percentage change in employment in response to a one percentage point change in output. The elasticity may be different across sectors, especially between oil and non-oil GDP, between nationals and expatriates, as well as over the short run and the long run. Econometric estimation (Behar, forthcoming) shows that the long-run elasticity of private-sector nationals’ employment to non-oil GDP is about 0.9 in the GCC, which is consistent with recent IMF estimates and similar to that for private-sector expatriate employment. This implies that a 1 percent increase in non-oil GDP increases employment by 0.9 percent in the long run. The employment response for nationals is high by global standards; however, the econometric estimates indicate that the short-run elasticity for nationals’ private sector employment to non-oil GDP is about 0.45. The estimates also indicate that, as shown in the text chart, the medium-run elasticity is also low—the initial response is a 0.45 percent rise, and after four years, the employment response is still only 0.6 percent. This means that it takes a long time for additional output growth to translate into employment growth for nationals. For foreign workers, in contrast, the response is almost immediate. The slow response for nationals is consistent with labor market adjustment costs, which, as discussed elsewhere in the text, could reflect rigidities in the hiring and firing process, skills mismatches impairing the rate of hiring, and reluctance on the part of nationals to accept private-sector jobs. The faster response for expatriates could reflect their elastic supply and temporary contracts.
Export Diversification

31. The reliance on migrant labor has not helped export diversification in the GCC (Figure 13). Although the United Arab Emirates, Oman, and Saudi Arabia have made some progress compared to the early 1980s, exports of goods and services from GCC countries are still heavily concentrated in oil and gas, with adverse implications for economic volatility and growth (Lederman and Maloney, 2012). The lack of progress in export diversification in the GCC suggests that the employment of less-skilled foreign workers has supported the nontradable sector. In some GCC countries, relatively fewer skilled foreign workers have found employment in high-skilled sectors (e.g. financial services in Bahrain).

V. Labor Market Reforms in the GCC and the International Experience

GCC countries have pursued labor market reforms in recent years to boost the private-sector employment of nationals. These policies have had a mixed record of success. Improvements in the quality and quantity of education as well as active labor market policies can help boost private sector employment of nationals. However, a more comprehensive reform package will be needed to boost both employment and productivity.

32. Now that all the GCC countries have reached an advanced stage of economic development, the relative balance of the advantages and disadvantages of the current labor market structure are shifting. A high priority needs to be placed on productivity growth, the employment of nationals, and diversification.

33. This section examines lessons from the GCC and international experience with respect to labor market policies to boost productivity and employment of nationals in the private sector. Specifically, it focuses on improvements in education to boost productivity of nationals; employment quotas; improvements to the mobility of foreign workers; active labor market policies to support nationals (including training, job search assistance); policies to reduce wage differentials (wage subsidies, fees on foreign workers); and the availability of unemployment benefits.
A. Education

34. GCC countries have made significant advances in education, but more needs to be done. Recognizing this issue, the authorities have invested in raising school enrollments over the past few decades (Figure 14). Improvements in the quality of education are being made through greater technical education and through partnerships with well-reputed international universities. However, except in Saudi Arabia and the United Arab Emirates, public expenditure on education in percent of GDP is lower than in other high- and middle-income countries (Figure 15). These investments will also take time to yield results and will only impact the coming generation of labor market entrants. In the meantime, increasing professional opportunities for educated women by improving access to childcare services, flexible work-arrangements such as teleworking, and in some cases transportation would help. Improving the skills of workers that are less educated and already in the labor force remains a challenge. International experience suggests it can be difficult to address unemployment resulting from weakness in education through public expenditures on job training (Betcherman et al, 2007).
35. To date, improvements in education have not been accompanied by rising labor productivity in the GCC. For instance, Bahrain, Qatar, and the United Arab Emirates have seen large increases in enrollment and improvements in the quality of education, but labor productivity has fallen over the past decade. On the other hand, Kuwait and Oman appear to have seen greater employment of nationals in the private sector, and Kuwait has seen rising labor productivity. Only Saudi Arabia has seen both improvements in education of nationals as well as rising total labor productivity, suggesting that educated nationals are contributing to increased productivity. While these trends may seem counterintuitive, they probably point to the existence of institutional constraints that make it difficult to utilize human capital efficiently (including that of women) or to an education system that does not provide sufficient skills for the workplace.

36. Skills mismatches could be addressed through greater emphasis on vocational training. A dual-education system, which combines industry apprenticeships with formal vocational schooling, could be effective in addressing the skills mismatch. The dual-education system is practiced in Germany, where it has helped match training with employers’ needs and enabled low unemployment and success in high-end manufacturing (Rojewski, 2004).

B. Employment Quotas

37. Employment quotas have been used to raise the share of nationals in the private-sector labor force, but implementation has been difficult. Over the past two decades, private sector employment quotas have been implemented in the GCC countries to varying degrees. They have been implemented actively in Saudi Arabia and Oman, but less so in Bahrain (Baldwin-Edwards, 2011; and Hertog, 2012). However, the share of nationals in private-sector employment increased in only two countries—Kuwait and Oman. The authorities have found it difficult to enforce private-sector quotas as firms have often cited the inadequate training and weak job commitment of nationals and have developed circumvention strategies. Weaknesses in labor market data and monitoring capacity may have also impeded the authorities’ efforts. The recent revamping of the Saudi “Nitaqat” program has had a positive impact so far in boosting private sector employment of nationals, although the public sector remains the main source of jobs for nationals (see IMF Country Report 14/292).

38. Gradualism in the implementation of employment quotas is needed to mitigate adverse incentive effects. Studies on affirmative action in the United States and Malaysia (Fryer and Loury, 2005; Coate and Loury, 1993; Fang and Norman, 2006) show that preferential treatment can result in reduced incentives for skills investment by the preferred group. Additionally, to the extent that preferential access to jobs/opportunities for unqualified candidates creates an increased risk of failure down the road or negative stereotyping in the workplace, such preferential access can be counterproductive. In this regard, gradual implementation of quotas, set in a way to allow employers to choose from a pool of already
available skilled workers, can incentivize skills investment by the preferred group of workers.

39. **Employment quotas can also be used to encourage the hiring of high-skilled foreign workers and boost productivity.** Boosting productivity over the long-term will require wide-ranging product and labor market reforms, as well as addressing inefficiencies in investment spending. In this context, targeting the hiring of high-skilled foreign workers could support a shift towards higher-productivity economic activities. At the same time, gradually reducing the share of low-skilled foreign workers could raise wages and generate opportunities for similarly-skilled (and unemployed) nationals. Improvements in the design of employment quotas as well as enhanced monitoring capacity will be essential to achieve these goals.

C. **Mobility of Foreign Workers**

40. **Increasing the internal mobility of foreign workers would help improve the labor market outcomes.** The lack of internal mobility due to the sponsorship system makes it harder for low-skilled foreign workers to negotiate wages and working conditions, and contributes to the wage differential between foreign workers and nationals. It could also impede competition and efficiency in the labor market, despite an elastic external supply of foreign labor (Baldwin-Edwards, 2011; and Hertog, 2012).

41. **While some improvements to internal mobility have been made, more is needed.** Allowing a more competitive labor market could help gradually raise the wages of foreign workers and make low-skilled nationals more attractive to employers. Additionally, it would allow labor to move to its most productive use and provide employers and employees with incentives to invest in human capital and increase productivity (Blanchard, Jaumotte, and Loungani, 2013). In recent years, the sponsorship system has been fully liberalized in Bahrain, and partially in Kuwait, Saudi Arabia and the United Arab Emirates. In Qatar, partial liberalization of the sponsorship is planned, but in Oman, the earlier liberalization has been reversed.

D. **Active Labor Market Policies and Unemployment Benefits**

42. **International experience shows that active labor market policies can help improve employment prospects for some workers.** Studies that examine the impact of job training, job search assistance, and wage subsidies on employability find that when carefully designed, targeted, and implemented, these programs can improve the employment prospects for some workers, but that they are not a panacea for unemployment (Betcherman, 2012; Betcherman et al, 2007; Kluve, 2010). Positive outcomes are most often associated with comprehensive programs that integrated wage subsidies and training with other services such as additional education, job search assistance, and social services. Conditioning the availability of social benefits on participation in training programs has been found to be
beneficial. At the same time, high employment protection for workers has been found to reduce the effectiveness of social benefits in boosting labor market flows.

43. **Job search assistance and training programs have been actively implemented in some GCC countries.** Bahrain introduced labor market reforms in 2004 to provide job search and training assistance to nationals, with unemployment benefits that were conditional on participation in these programs (Table 3). These reforms are considered to have helped reduce unemployment. Additionally, job search assistance and training services have been provided in several GCC countries over the past decade. More recently, efforts have been stepped up in Saudi Arabia (since 2011) with a multifaceted approach to deliver job search assistance and training, and featuring private sector involvement. Except for Bahrain, there is insufficient information to assess the impact of these programs, and unemployment rates have remained relatively high.

44. **Unemployment assistance programs could help support the unemployed while improving labor market flexibility.** Redundancy costs in some GCC countries are relatively high. The availability of unemployment assistance could allow the authorities to ease these constraints and improve the allocation of human resources. Such a move would be in line with international experience, which indicates that a successful model for labor market policies is to “protect workers, not jobs.” In Saudi Arabia, an earlier jobseekers allowance scheme (*Hafiz*) was recently renewed to provide young workers with a stipend, conditional on participation in job search and training activities. A more generalized unemployment insurance scheme has also been implemented and is targeted towards higher-skilled workers. In Oman, making unemployment assistance conditional on participation in job search and training activities could prove beneficial. The lack of unemployment benefits in Qatar and the United Arab Emirates is also an opportunity to improve the welfare of the unemployed as well as support the introduction of other policies that would help the functioning of the labor market.

**E. Wage Subsidies and Wage Differentials**

45. **Internationally, wage subsidies have been found to be useful to assist workers from disadvantaged backgrounds in building job skills.** Wage subsidies are often provided on a temporary basis, and targeted at certain categories of youth from disadvantaged backgrounds as the employment experience allows the acquisition of job skills and boosts labor productivity. Evidence from OECD countries suggests significant positive employment effects from wage subsidies when these are directed to firms that also offer job training (Betcherman et al, 2007).

46. **In the GCC, wage subsidies are used not only to support the acquisition of job skills, but also to narrow the wage differential between nationals and foreign workers.** In Bahrain, Saudi Arabia, and the United Arab Emirates, wage subsidies for nationals provide temporary support for nationals as they build skills that are relevant for the private
sector. In Kuwait, wage subsidies take the form of permanent allowances that are provided to all privately employed nationals, and are considered to have been effective in reducing the wage differential between nationals and foreign workers in the private sector. In GCC countries where wage subsidies are temporary and wage differentials are large, employers often have an incentive to terminate employment once the subsidy period is over.

47. **Generalized wage subsidies are expensive, but well-targeted and temporary wage subsidies can provide a cost-effective alternative to public employment.**

International experience shows that the cost of using a generalized wage subsidy to create new jobs can be a multiple of the wages paid to the new employees (Box 7). However, this may still be less than the cost of creating public sector jobs due to crowding-out effects. Given the large wage differentials in the GCC, wage subsidies may need to be larger than in other countries. Therefore, providing subsidies on a temporary basis and careful targeting will be essential to contain costs.

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>General case 1/</th>
<th>More targeted case 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment rate, percent</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>Labor demand elasticity</td>
<td>-0.5</td>
<td>-0.75</td>
</tr>
<tr>
<td>Implications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wage response to 10 percent subsidy, percent</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Change in cost to firm after 10 percent subsidy, percent</td>
<td>-7.0</td>
<td>-8.5</td>
</tr>
<tr>
<td>Employment response to 10 percent subsidy, percent</td>
<td>3.5</td>
<td>6.4</td>
</tr>
<tr>
<td>Cost of job as multiple of its salary</td>
<td>2.9</td>
<td>1.6</td>
</tr>
</tbody>
</table>

1/ Example from Cahuc and Zylberberg (2004). Unemployment rate is illustrative. Labor demand elasticity is the midpoint of international estimates.

2/ Parameters adjusted to reflect youth, who have higher unemployment rates and higher labor demand elasticities worldwide.

**Public-sector jobs are not a cheaper way to create employment.** Consistent with evidence presented above (see paragraph 29), crowding-out effects imply a high effective cost to create public sector jobs. For example, if we assume there is partial crowding out i.e. three public-sector jobs lead to two fewer private-sector jobs, the effective cost of the one incremental public-sector job will be 3 times the public sector wage.
Fees on foreign workers can also help narrow the wage differential between foreigners and nationals, while minimum wages targeted at nationals are likely to go in the opposite direction. Monthly fees on foreign workers are used in some migrant-dependent countries (e.g., in Singapore and Malaysia) to cover the costs of providing public goods to foreign workers and to raise the cost of foreign workers to employers. As these fees are smaller in the GCC than in other countries and in relation to the wage differential, they are unlikely to close the wage differential on their own, but can be used in conjunction with wage subsidies, which the fees could help fund. With respect to minimum wages, international evidence suggests only a modest negative impact on employment from a small increase in the minimum wage. However, in many GCC countries, minimum wages have been set at high levels, and are likely to have widened the wage differential vis-à-vis foreign workers.

Table 3. Labor Market Policies and Reforms in the GCC

<table>
<thead>
<tr>
<th></th>
<th>Unemployment benefit</th>
<th>Minimum wage per month</th>
<th>Monthly fee</th>
<th>On the Job Training, Job Search Assistance</th>
<th>Wage subsidy for nationals</th>
<th>Internal mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bahrain</strong></td>
<td>For nationals, conditional on participation in training.</td>
<td>BD 250 for nationals</td>
<td>10 BD</td>
<td>Financed by foreign worker fee; organized jointly with private sector</td>
<td>Maximum period 2 years, targeted to new graduates</td>
<td>Full mobility since 2009</td>
</tr>
<tr>
<td><strong>Kuwait</strong></td>
<td>For nationals, conditional on job search and training, acceptance of one of three suitable job offers.</td>
<td>KD 60 for all workers</td>
<td></td>
<td>General allowances extended to private-sector employees; not temporary.</td>
<td></td>
<td>Non-domestic workers allowed since 2009, after completion of 3 years of work</td>
</tr>
<tr>
<td><strong>Oman</strong></td>
<td>RO 150 for nationals</td>
<td>RO 325 for nationals</td>
<td>7 percent levy</td>
<td>Financed by foreign worker fee</td>
<td></td>
<td>Full mobility of foreign workers was introduced in 2006, but was reversed in mid-2014</td>
</tr>
<tr>
<td><strong>Qatar</strong></td>
<td>Training programs</td>
<td>Training programs</td>
<td></td>
<td>Targeted to new hires in companies that meet quota requirements, for a maximum period of up to five years.</td>
<td></td>
<td>Reforms are planned.</td>
</tr>
<tr>
<td><strong>Saudi Arabia</strong></td>
<td>For nationals, conditional on job search and training and acceptance of one of three suitable job offers.</td>
<td>SAR 3000 for nationals, for firms to earn Nitaqat credits.</td>
<td>Quota-based, SAR 200 if firm employs majority of foreign workers.</td>
<td>Financed by foreign worker fee</td>
<td></td>
<td>Workers in firms that do not meet their quotas can move freely since 2012.</td>
</tr>
<tr>
<td><strong>United Arab Emirates</strong></td>
<td>Quota-based fees are bi-annual in nature</td>
<td>Training and job search assistance</td>
<td></td>
<td>Since 2013, targeted to new hires for a period of 8 months.</td>
<td></td>
<td>Since 2011, liberalization for workers meeting specific criteria; higher mobility in free zones.</td>
</tr>
</tbody>
</table>

Sources: Baldwin-Edwards, 2011; Country authorities; and IMF staff.

1/ Targeted to tax hiring of foreign workers.
VI. **Policy Recommendations and Conclusions**

The GCC growth model has supported rapid growth and price stability over the past several decades. However, the costs of the existing model are becoming more apparent. Comprehensive reforms will be needed to re-orient the GCC economies towards economic diversification, rising labor productivity, and private-sector job creation geared towards nationals. Containing the growth of public sector jobs will be essential to reset expectations and realign incentives. Strengthening education outcomes can help create a high-skilled workforce, while better targeting the entry of high-skilled foreign labor could boost productivity and support a shift away from low-productivity activities. Complementary labor market reforms and enhancements to the macroeconomic policy toolkit will also be needed.

49. **The GCC growth model has delivered substantial improvements in living standards over several decades.** Access to foreign labor has supported rapid growth in the non-oil sector and price stability in the region. It has helped improve the quality of the infrastructure, creating spillovers for production and attracting foreign direct investment. Public spending has supported progress in social and economic development. The model, however, has had costs in terms of low productivity, lack of economic diversification, and few nationals working in the private sector.

50. **Creating enough high-paying private-sector jobs for nationals in the coming years will require far-reaching reforms across many areas.** With non-oil private-sector growth likely to be slower in the coming years than it has been over the past decade, the private sector would only be able to absorb about one-third of projected labor force entrants if the recent relationship between private-sector growth and job creation for nationals holds. With a rapidly growing young population, creating jobs in the public sector to absorb new entrants into the labor force would further increase the already large non-oil fiscal deficit in many countries. The public-sector wage bill in the region is relatively high.

51. **Economic diversification is the key to enhancing non-oil growth and job creation for nationals in the private sector.** Absorbing the rapidly increasing domestic labor force calls for structural reforms to spur diversification and sustain non-oil growth, continued investment in education and training, and product and labor market reforms. In addition to identifying strategic areas for diversification, reforms will be needed to further improve the business environment, promote a greater role for small- and medium-sized enterprises, develop skill improvement programs in coordination with the private sector, and enhance the educational quality and vocational training of nationals. Furthermore, improving access to transportation, better childcare services, and more flexible work arrangements could help increase professional opportunities for women.

52. **Several labor market reforms are underway to improve job prospects in the private sector.** These include increasing minimum wages, strengthening quotas for nationals, providing on-the-job-training and job search assistance, providing wage subsidies,
increasing internal mobility, and amending labor laws to facilitate a more flexible work environment. These are steps in the right direction, but a greater focus needs to be placed on: (i) containing growth in public-sector employment; (ii) reducing wage differentials between public and private sectors; (iii) and enhancing education, training, and skills quality.

53. **Containing the growth of public-sector jobs is necessary.** The access of nationals, particularly those who are low-skilled, to public-sector jobs with relatively high wages has reduced incentives for nationals to invest in skills and seek private-sector employment. Reducing over time the wage and benefit differentials where they exist between the public and private sectors by limiting public-sector wages and reducing government job creation would increase the incentives for nationals to work in the private sector.

54. **An increased focus on attracting high-skilled foreign workers may help boost productivity and increase job opportunities for lower-skilled nationals in the private sector.** There is some evidence that the relatively large inflows of low-skilled foreign labor may have put downward pressure on private-sector wages, reducing the willingness of nationals to take less-skilled private-sector jobs. Similar to policies in other countries, labor market tests and wage restrictions on private-sector employment of foreign workers could prove useful in limiting their adverse wage impact, thus encouraging employers to hire low-skilled nationals. While GCC countries will continue to rely on foreign labor, there may be scope to shift the balance toward more skilled workers through employment quotas. Additionally, employment quotas for nationals could be raised gradually to preserve incentives for nationals to invest in skills and ensure the availability of a pool of skilled workers for employers to choose from. To the extent that these policies are implemented on a pre-announced and gradual basis so that employers are able to invest in productivity-enhancing capital, unit labor costs may not be affected.

55. **Significant improvements to the quality and quantity of education have been made in the GCC, but more is needed.** International comparisons suggest that skills mismatches and the low quality of the educational system pose constraints to the GCC business environment. While incentives for investment in the skills needed for the private sector can be addressed through reduced availability of public sector employment, continued investments in the education system to improve both enrollments and the quality of education are critical to improve employment outcomes and boost labor productivity. This is especially important as weaknesses in education are difficult to address through job training and other active labor market policies.

56. **Increasing labor market mobility while strengthening safety nets would help improve labor market outcomes.** Increased mobility of foreign workers would help to gradually narrow wage differentials and improve labor market resource allocation. Reducing redundancy costs could also promote labor market flexibility, while workers could be protected by providing unemployment benefits that are conditional on participation in job search and training activities.
57. **Fees on foreign workers and temporary wage subsidies for nationals can narrow wage differentials between foreign workers and nationals.** Fees on foreign workers raise the cost to employers and have been used to finance training programs and wage subsidies for nationals in many GCC countries. Wage subsidies for nationals fulfill a similar role in narrowing the differential between the costs of hiring foreigners and nationals, while also reducing the public-sector pay premium for nationals. Given the expense of wage subsidies, these should be implemented for certain segments of the population, for example, the young and unskilled, together with a credible move away from public-sector employment. Temporary wage subsidies, however, are only effective if they do not result in the substitution of existing workers and if they encourage subsequent employment.

58. **Consistency between short- and medium-term policies is needed as reforms move forward.** The beneficial effect of various labor market programs may have been offset by the increased public sector employment and wages in many GCC countries in recent years, if expectations of future public-sector employment have increased among the young population. Further, the ongoing infrastructure investment programs will draw in foreign workers, making it difficult for employers to adhere to quotas for employing nationals. It is important that policies are consistent so as to reinforce the momentum for private-sector job creation for nationals.

59. **Over time, a gradual reduction in the reliance on foreign labor will also require enhancements to the macroeconomic policy toolkit.** Access to an elastic supply of foreign labor has helped reduce inflation pressures and real exchange rate appreciation during times of strong growth. If the reliance on foreign labor becomes more limited over time, government spending policies will need to increasingly take account of the economy’s implementation and absorption capacity. The monetary policy toolkit will also need to adapt to help stabilize domestic inflation and output in the face of terms of trade and asset price shocks. At present, the pegged exchange rate regimes are supported by highly flexible labor markets, but over time, if labor market flexibility is reduced, it will have implications for the exchange rate regime.

60. **Consideration will also need to be given to the impact of reforms in domestic labor markets on other countries.** Remittances from the GCC countries are an important source of external financing for a number of countries in the Middle-East and Asia. These countries may be negatively affected over time by any changes to the availability of jobs in the GCC.

61. **Lastly, economic policymaking depends on good data.** Improvements to data availability on wages, duration of employment, and unemployment are essential for monitoring and implementing labor market policies. Assessing the effectiveness of public expenditures on education, job search assistance, and training programs will also require better data. The recently established GCCStat is ideally placed to take the initiative to collate and disseminate information on GCC labor markets as part of its mandate.
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