

Public Employment Dilemma in Egypt: Who Pays the Bill?

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In Egypt, public employment has made up a substantial portion of total employment (30-40%) over the period 1980-2011. The cost of wages paid to the public sector accounted for 26% of total government expenditure during fiscal year 2010-2011. Although this cost has represented a significant portion of government spending, wage rates in the public sector have not been satisfying to public employees. While wage increases were termed "complaints or requests" before the January 25 revolution, they are now considered "rights" that citizens have patiently awaited for many years. On the grounds of social justice, setting a minimum wage rate as well as a wage increase could be justified and understandable. Yet, these "requests" or "rights" might make fiscal consolidation rather harder to achieve, given that the budget deficit exceeded more than LE 134 billion in 2010-2011 and amounts to 10% of GDP. Three main questions are addressed in this paper: First, what can explain the public-private employment pattern in Egypt over the past two decades?; second, who is paying – and will pay – the inflated public wage bill?; and third, what can be done to control it? These questions are believed to be particularly important in developing countries where the public sector usually comprises a major portion of total employment. This paper argues that all of Egyptian society will have to pay the ballooned public wage bill if no action is taken by the government.

Key Words: Public Employment, Public Wage, Budget Deficit, Public Debt, Egypt

JEL Codes: H62, H68, J21, J45

1. Introduction

A high unemployment rate has been one of the most challenging socio-economic problems in Egypt over the last two decades, where it averaged 9.7% in 1990-1999 and 9.9% in 2000-2009. With the stagnation of the Egyptian economy after the January 25 Revolution, the unemployment rate amounted to 12.1% and rose to 12.3% in 2011 and 2012 respectively and it is expected to reach 13% in 2013 (IMF, World Economic Outlook Database).

Public employment is often resorted to for reasons that have little to do with providing public goods and services efficiently. Egypt's government –like many others – has used public employment as a way to reduce unemployment and to counteract the scarcity of jobs in the private sector and/or for patronage.

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In Egypt, public employment made up a substantial portion of total employment (30-40%) over the period 1980-2011 (CAPMAS: The Central Authority for Public Mobilization and Statistics, Egypt). The bill for public wages reached LE (Egyptian Pounds) 96.3 billion and accounted for 26% of total government expenditure during fiscal year 2010-2011 (Ministry of Finance, Egypt). Although this amount is significant as a portion of government expenditure, wage rates in the public sector have not satisfied public employees. With the erosion of the currency's purchasing power and the continuous increase in prices of goods and services, complaints, requests and even strikes aimed at increasing public wages and setting a minimum wage have been more and more frequent and outspoken in Egypt since 2008. The phenomenon has become even more striking since the January 25 revolution. Moreover, while wage increases were "complaints or requests" before the January 25 revolution, they are now conceived as "rights" that people have been expecting for years.

On social justice grounds, setting a minimum wage rate and wage increase could be justified and understandable. Yet, these "requests" or "rights" create more fiscal pressures on a country with a budget deficit exceeding LE 134 billion in 2010/2011, which amounts to 10% of Egypt's GDP. If the urgent need for improvement and updating of infrastructure, health, education and other public services is added in, fiscal consolidation may be even harder to achieve. This puts decision-makers in Egypt between the hammer and the anvil. On the one hand, they are confronted by "requests" or "rights" that are socially and economically justifiable and for political reasons hard to ignore. On the other hand, there are real concerns about fiscal sustainability in light of the high public debt and the widening gap between government revenues and expenditures.

Three main questions are addressed in this paper: first, what explains public-private employment patterns in Egypt over the last two decades?; second, who is paying – and will pay in the future – the inflated public wage bill?; and third, how could a wage bill be rationalized and social justice and economic efficiency strengthened at the same time?

These questions are considered to be particularly important in developing countries where the public sector usually comprises a major portion of wage employment. In addition, previous studies on the labor market in Egypt focused on unemployment and demographic pressures. Less is known about the fiscal implications of public employment, as examined here.

This paper is organized as follows: Section II provides an overview of the related literature. Section III explains public employment patterns in Egypt (1990-2008). Section IV discusses the economic/fiscal implications of public employment and the increasing public wage bill. Concluding comments and policy recommendations appear in Section V.

2. Selective Literature Review

The literature on public employment – to a large extent – is quite focused. The two surveys of the public sector labor market in the Handbook of Labor Economics by Ehrenberg and Schwarz (1986) and Gregory and Borland (1999) show that the literature has been mainly devoted to the internal organization of the public sector and to wage differentials between the public and private sector. Blaug (1979) argues that the existence of sizeable reward differentials between the public and the private sector ensure that public sector jobs are coveted in many developing economies and particularly so by the more educated. In an empirical study, Said (2004) finds a wage gap in favor of the private sector for males, which was reversed when wages were replaced by a broader compensation measure. The study concluded that the potential wage advantage which an employed individual would enjoy in the public sector does not independently influence preference for the public sector, suggesting that fringe benefits and working conditions are more important considerations. This supports the conception that public employment is preferred mainly for its fringe benefits and work conditions.

The literature on public employment and the labor market in Egypt has focused on three main elements: open unemployment, the agricultural labor market, and international labor migration. Mohie El Din (1977), in an early study, shows that open unemployment rates were low and declining from the late 1950s to the early 1970s, a period of rapidly expanding public sector employment. However, more recent data show that the falling trend has reversed since the mid-1970s as the country began to gradually move away from a public-sector-led employment strategy. Estimates made by Assaad (1997a) show that unemployment rates have been increasing since the 1980s and had reached 10% by 1995. These estimates show that the period of economic liberalization which started in 1974 with the “*Infitah*” or open-door policies, has been characterized by a significant increase in unemployment rates, despite widely different economic growth rates across its sub-periods. Radwan (1997) argues that the evolution of the Egyptian labor market from the 1960s into the 1990s followed two main strands. First, the 1960s and 1970s witnessed a transition from a Lewis-type labor surplus economy, to an economy where job creation was led by the growth of the public sector and external migration. Second, in the 1980s, as these two sources of labor absorption lost steam with little to replace them, the labor market moved to a stage of high unemployment, compounded by demographic pressures from a rapidly growing working-age population. It is worth noting that although public employment grew slowly in recent years, public wage bill creates increasing significant fiscal pressures on public finance in Egypt. This raises questions about the macro-fiscal implications of public employment.

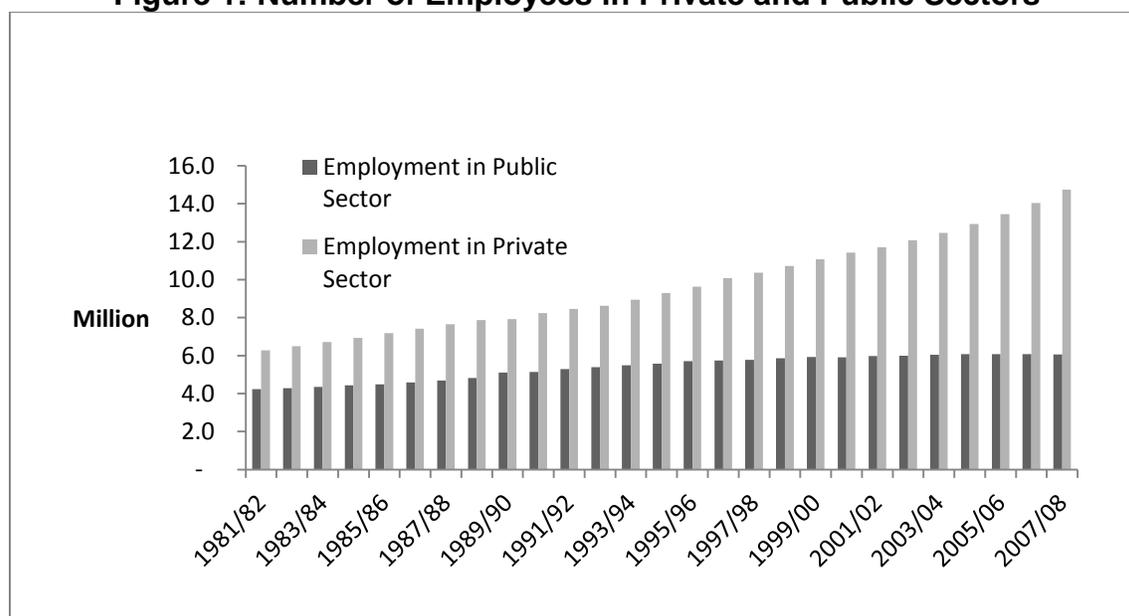
The radical change in economic philosophy since the mid-1970s might partially explain the limited interest on the part of economists and analysts in studying public employment. Yet, with the rise of social justice considerations and the significant increase in public wage bills after the January revolution, a thorough analysis of the fiscal implications of public employment may be needed, which this paper attempts to undertake.

3. Patterns of Public Employment in Egypt (1990-2010)

The story of public employment in Egypt started in the late 1950s and early 1960s with the import-substitution strategy and large-scale investment programs led by the state. These investments generated enough employment opportunities supported by the government's guaranteed employment policy so that through late in the 1970s, the average unemployment rate was as low as 2.6%. (ILO: International Labor Organization Database)

In the mid-1970s, liberal economic policies (*Infitah policies*) and a significant increase in investment, combined with two rounds of oil price increases in 1973-74 and 1979-80, and the increase in foreign demand for Egyptian labor, were able to provide employment opportunities for the bulk of labor force entrants. However, because of the weak job contents of investments and the concentration of foreign demand on the extreme ends of the skill spectrum, unemployment among educated young people began to rise. Thus, as the government began to curtail its guaranteed employment policy, the unemployment rate reached 6% on average during the 1980s. (ILO Database)

Figure 1: Number of Employees in Private and Public Sectors



Source: CAPMAS (The Central Authority for Public Mobilization and Statistics)

Although the government ended the guaranteed employment policy in the early 1980s, the number of employees in the public sector increased from 4.2 million in fiscal year 1981-82 to 5.1 million in 1990-91, to 5.9 million in 2000-01, and then to 6.1 million in 2007-08 (Figure 1). Considering the data from a different point of view, the share of public employment as a fraction of total employment decreased over the period 1981-2008 - when it fell from 40% in 1981-82, to 30% in 1990-91 -then increased to 34% and fell again to 29% in 2000-01 and 2007-08, respectively. As a result, the share of private sector employment increased, yet the increasing unemployment rate over the period

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under consideration indicates that the private sector was not able to absorb many new entrants into the labor market.

This raises two interrelated questions: one concerning the demand for labor, and the other concerning the supply. First, why was the private sector not able and/or not willing to absorb a sufficient number of new entrants to the labor market? Second, why were job seekers not able and/or not willing to work in the private sector? A third question could be added to these two: could public-private employment patterns in Egypt over the last three decades be explained by rigidities or inefficiencies in the labor market?

On the demand side, it might be puzzling that even during periods of high economic growth; the increase in employment in Egypt has been relatively subdued. Hassan and Sassanpour (2008) argue that this could be explained by two main factors. First, economic growth has been unbalanced across sectors and many of the growing sectors of the economy manifest low job content because of the type of technology employed. Second, many firms react to growing activity by increasing labor utilization rather than increasing employment. El Ehwany (2004) argues that in periods when growth picked up, high inflation and an overvalued exchange rate, as well as a loose monetary policy, lowered the cost of capital and encouraged capital-intensive activities. Another aspect of the weak demand for labor which is also relevant to the supply is highlighted by results from enterprise surveys in Egypt (ICA, 2008), which indicate that 50% of all firms interviewed identified worker skills mismatches among their top five constraints to business development. Education and training systems are often unrelated to the demands of the job market, resulting in inadequate curricula which are not aligned with competencies required by employers (Semlali and Angel-Urdinola, 2011). To cope with the situation, job seekers – especially young ones – redirect their attention either to the informal sector or the public sector.

On the supply side, the inability and/or unwillingness of job seekers to work in the private sector may be an outcome of the interaction of economic and social factors. Although critical, skill mismatch is not the only factor active on the supply side. A great majority of young educated women seeking employment prefer government jobs and are willing to accept long job searches. Women account for 30% of government sector employees compared to about 20% in total employment (Hassan and Sassanpour, 2008). This could be explained in part by the poor employment prospects faced by females in the private sector, a situation which can be attributed to several factors, including the limited success in Egypt of labor-intensive export industries that have traditionally absorbed young female workers in other countries. There is also the perception on the part of private employers that females lack commitment to their jobs. Moreover, labor laws impose a number of female-specific mandates on employers, such as generous paid and unpaid maternity leaves, child care provisions, and restrictions on working hours which increase the cost of hiring women. Last but not least, one must mention social norms that make it difficult for educated young women to engage in casual wage labor or in self-employment (Assaad et al, 2000).

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What makes the previous arguments more plausible in explaining the relatively low share of private sector jobs in total employment is that Egypt's labor market is not characterized by rigidities and inefficiencies that exist in many developing countries such as an inflexible wage structure, high minimum wages, high non-wage costs, and significant labor union activity. There are no minimum wages in the private sector. The unionized sector is small, and unionized activities – although they have been noticeably increasing over the past 3 to 4 years – are still fairly limited. However, non-wage labor costs (e.g. employers' contributions to social security, sickness and survivor benefits) are high in Egypt; nevertheless, they do not appear to be a major constraint to employment. Non-wage costs in the large and growing informal sectors are minimal. Even in the formal sector, many employers refuse binding contracts due to the high cost of the social security system (El-Megharbel, 2007). Moreover, even in the case of formal contracts, high social security costs have encouraged both employers and employees to under-report wages (Hassan and Sassanpour, 2008). Some estimates show that about 80% of new jobs created in the non-agricultural sector are not covered by contracts. The share of non-contract employment may increase as firms try to maintain their flexibility (Assaad, 2002).

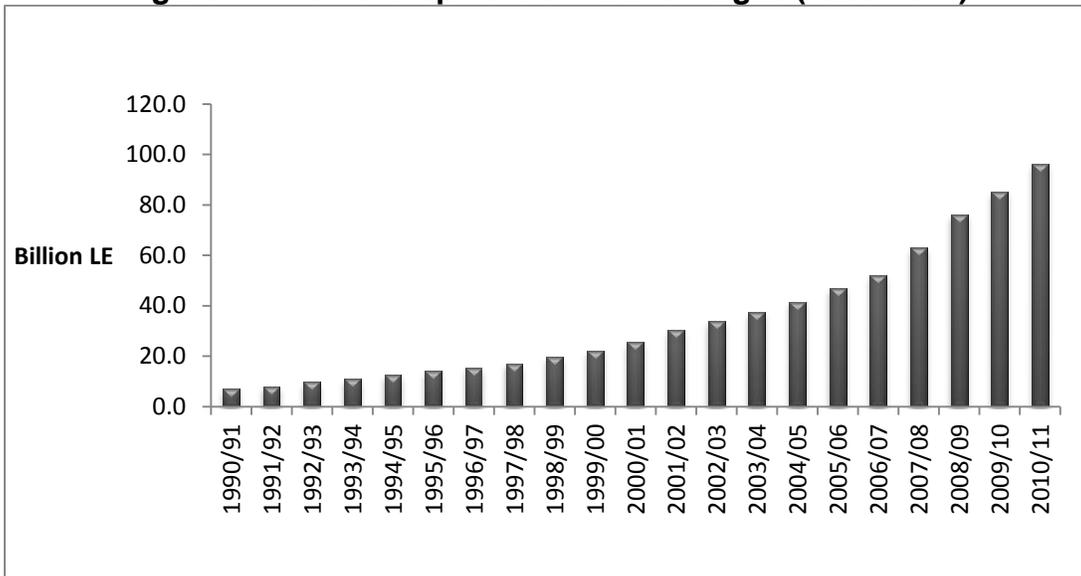
Last but not least, it is hardly necessary to mention that the ability of the private sector to create jobs is strongly linked to investments, which have not been substantial enough over the period under consideration to absorb new entrants into labor markets.

4. Who Pays the Public Employment Bill?

Excessive levels of public employment is one of the most frequent and serious problems faced by governments in developing countries. *“Civil services are larger than countries need, more costly than they can afford, and less effective and productive than they should be,”* concluded the World Bank's African adjustment report (World Bank, 1994). *“The civil services of many developing economies today are too large, too expensive, and too unproductive”* (Lindauer and Nunberg, 1996). Do these citations apply to Egypt?

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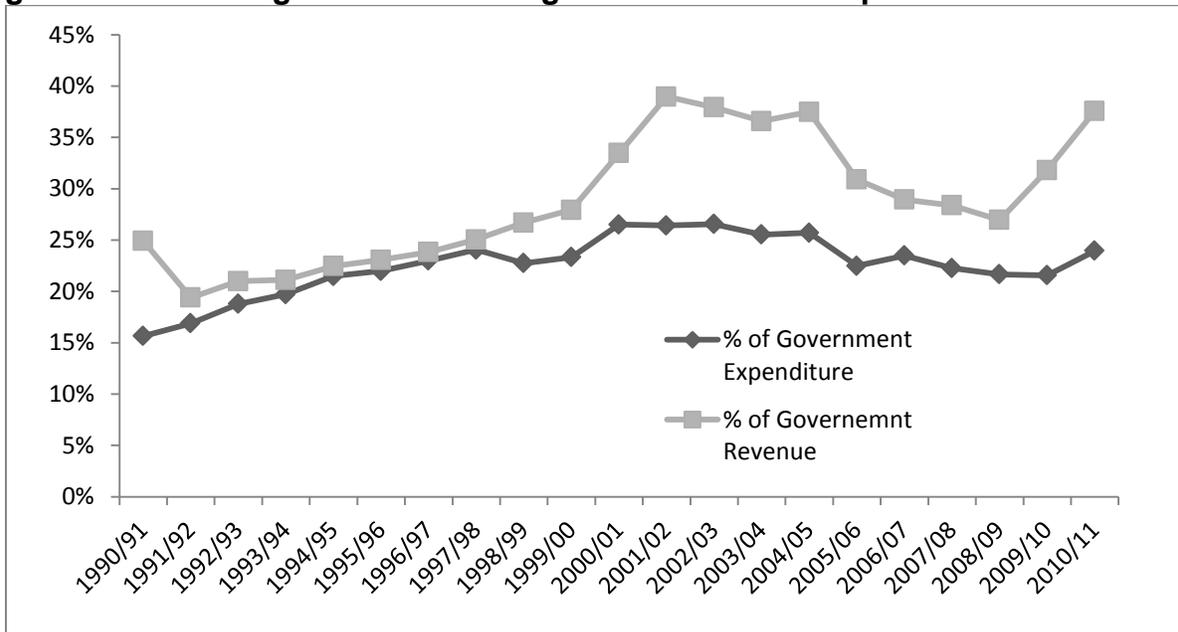
Figure 2: The Development of Public Wages (1990-2011)



Source: Ministry of Finance/Egypt and author calculations

Before the January 25 revolution, the excessive level of government employment had already been a serious problem, yet after the revolution it became even more challenging as a significant number of temporarily employed have accepted permanent jobs and salaries have been increasing. Still, requests to increase salaries continue to be voiced. In a society in which more than one third of the population falls below the poverty line, this might be justifiable both from an economic and a social point of view. However, these developments have significant fiscal, economic and social costs which directly affect the economy. The question is who is to pay the public employment bill?

Figure 3: Public Wages as a Percentage of Government Expenditure and Revenue



Source: Ministry of Finance/Egypt and author calculations

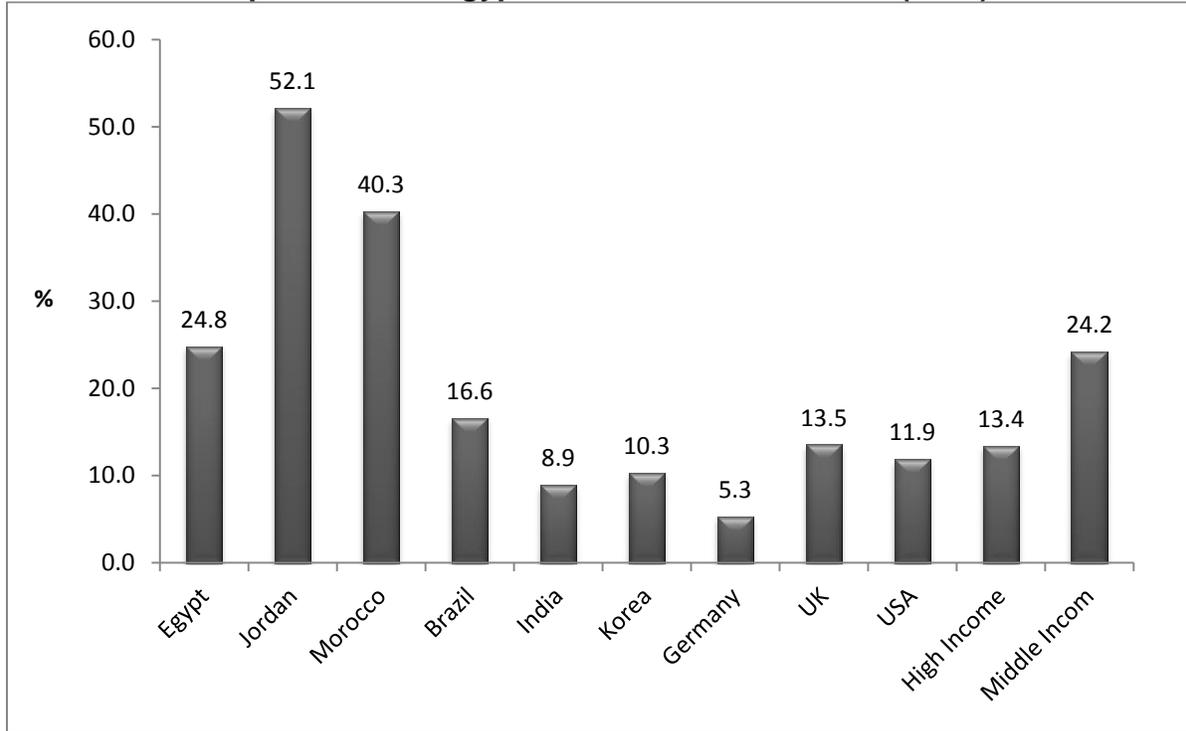
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In fiscal year 1990-91, public employees' compensation amounted to LE 7.1 billion. It took seven years for this number to double as it rose to LE 15.4 billion in fiscal year 1996-97 and took another six years to double again as it reached LE 33.8 in 2002-03. Subsequently, it increased to LE 52.2 billion in 2006-2007 and by 2010-11 it had risen to LE 96.3 billion, a fourteen-fold rise over a 20-year period (Figure 2). This rise was driven mainly by the growth of salaries since the increase in the number of employees actually amounted to less than 20% over the period from fiscal year 1990-91 through 2007-08. The share of employees' compensation as a fraction of total government expenditure increased from 16% in 1990-91 to 24% in 1997-98. The period 1998-99 to 2011-12 has been characterized by stability in the share of employees' compensation as a fraction of total government expenditure, and it has fluctuated around 25% (Figure 3). From an international perspective, it is comparable to and even lower than that of some other Arab countries. For comparison purposes, compensation of public employees reached 40.3% in Morocco and 52.1% in Jordan. It is nevertheless noticeably higher than that of other developing and emerging economies where rates of 16.6%, 8.9% and 10.3% were recorded in Brazil, India and Korea respectively in 2010 (Figure 4).

From a broader perspective, it is worth relating public wages to other items in the public budget. In 2010-11, public wages absorbed 38% of total government revenues and amounted to 2.4 times Egypt's capital expenditure and accounted for 72% of the overall budget deficit (Figure 5). In an economy with a local public debt as high as LE 1,089 billion (68.1% of GDP), and a foreign debt of \$US 33.4 billion (15.2% of GDP)¹ and whose budget deficit has been high over the past several years – reaching 10% in 2011-12 – an increasing wage bill places serious pressures on public finances.

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Figure 4: Compensation of Public Employees as a Percentage of Government Expenditure in Egypt and Selected Countries (2010)

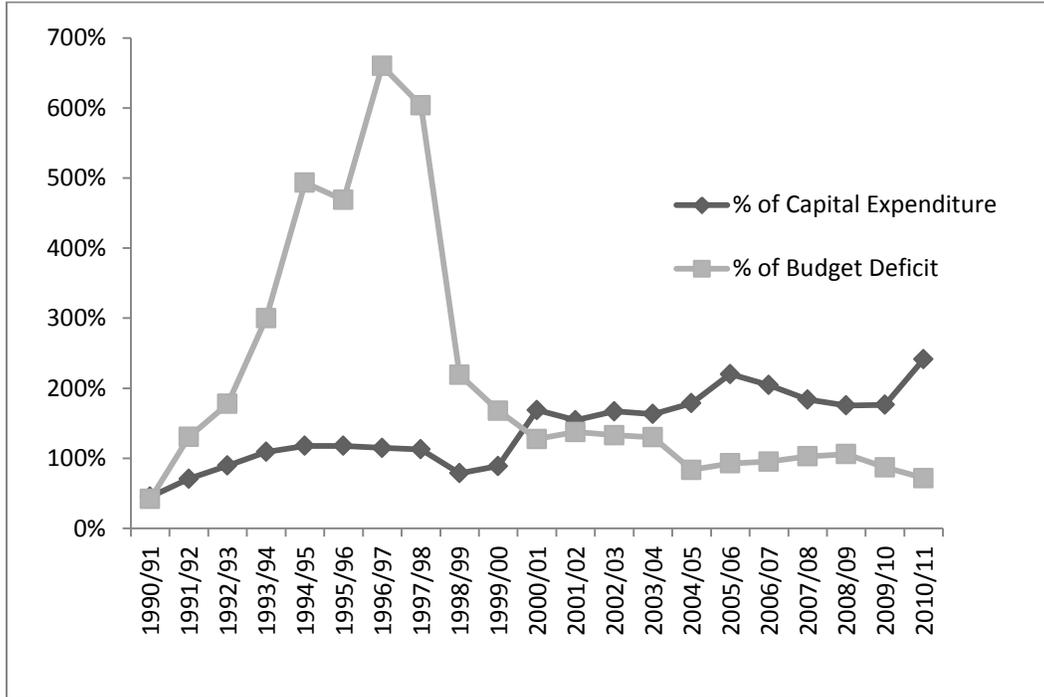


Source: World Development Indicators, World Bank

In textbook terminology, the opportunity cost of the ballooning wage bill in Egypt is relatively high. Developing and modernizing Egypt's infrastructure is urgently needed to encourage both domestic and foreign investment and to create more jobs. The quality of health services and education needs to be improved and there is little need to recall that the deterioration in quality and/or nonexistence of public services were among the reasons that led to the revolts in early 2011.

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Figure (5): Public Wages as a Percentage of Capital Expenditure and Budget Deficit



Source: Ministry of Finance/Egypt and author calculations

Moreover, inefficiencies in the public sector in Egypt have been a serious issue since the early 1970s. As indicated in the literature, corruption indices are widely used as a comparative indicator for public sector efficiency among countries (Van Dooren et al, 2008). According to Transparency International, Egypt's corruption perception index stood at 3.1² in 2011. From an international perspective, Egypt is ranked 98th, whereas Jordan, Kuwait and Tunisia, for instance, ranked 50th, 54th and 59th, respectively, in 2011³. This might reflect the inefficiencies which characterize the public sector in Egypt in general.

Thus, one might argue that having a "slim" and "efficient" public sector in Egypt with a prudent level of employment would create significant gains in productivity, on the macro level.

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Table (1): Main Public Finance Indicators (1990-2012)

	Total Government Expenditure LE billion	Total Government Revenue LE billion	Budget Deficit LE billion	Budget Deficit (%of GDP)	Public Wages LE billion	Local Public Debt LE billion	Foreign Public Debt US\$ billion
1990/91	45.5	28.6	17.0	17%	7.1	....	....
1991/92	47.6	41.4	6.2	5%	8.0	....	....
1992/93	52.2	46.7	5.5	4%	9.8	....	....
1993/94	56.3	52.6	3.7	2%	11.1	96.0	30.9
1994/95	58.3	55.7	2.5	1%	12.5	105.0	33
1995/96	63.9	60.9	3.0	1%	14.0	114.0	31
1996/97	66.8	64.5	2.3	1%	15.4	125.0	28.8
1997/98	70.8	68.0	2.8	1%	17.0	137.0	28.1
1998/99	86.0	73.3	8.9	3%	19.6	147.0	28.2
1999/00	95.1	79.4	13.2	4%	22.2	164.4	27.8
2000/01	96.1	76.1	20.0	6%	25.5	194.8	26.6
2001/02	115.5	78.3	22.2	6%	30.5	221.2	28.7
2002/03	127.3	89.1	25.4	6%	33.8	252.2	29.4
2003/04	146.0	101.9	28.7	6%	37.3	297.7	29.9
2004/05	161.6	110.9	49.8	9%	41.5	349.2	28.9
2005/06	207.8	151.3	50.4	8%	46.7	387.7	29.6
2006/07	222.0	180.2	54.7	7%	52.2	493.9	29.9
2007/08	282.3	221.4	61.1	7%	62.8	537.5	33.9
2008/09	351.5	282.5	71.8	7%	76.1	643.6	31.5
2009/10	395.5	268.1	98.0	8%	85.3	769.8	33.7
2010/11	401.9	256.3	134.5	10%	96.3	932.5	34.9
2011/12	....	....	....	....	....	1,052.7	33.4

Source: Ministry of Finance/Egypt

Costs for inflated public employment and the wage increase bill are not limited to fiscal pressures and lost productivity gains. Costs may also be social with economic implications. Reliance on public employment as a redistributive channel – as is the case in Egypt – implies noticeable sociological effects, and can engender what has been labeled a “culture of dependency”. Put differently, when public employment is much more attractive and available than private sector employment, educational and attitudinal choices are tilted toward the public sector. Also, individuals do not want to exit the public sector unless they are forced to, and this creates both dependence and rigidity. Moreover, as youthful job seekers demand more public employment in order to take advantage of a large income premium and greater job security, a significant portion of the labor force might be caught up in an equilibrium of dependency in which public jobs are the critical source of disposable income and in which private opportunities do not materialize. This creates a culture that discourages private activity and entrepreneurship, and the cycle becomes self-fulfilling: the less individuals are prepared to face the market, the more they prefer public jobs (Alesina et al, 1999).

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To sum up, the cost of excessive levels of public employment and the ballooning public wage bill is in fact much greater than the figure that appears in public budget documents. That is, other economic and social costs both over the short and the long term should not be underestimated. The entire society – as well as the country's economy – is paying and will pay the “wage” bill of excessive and inefficient levels of public employment.

5. Discussion and Policy Recommendations

The current public-private employment patterns in Egypt - which are an outcome of the complex interaction of past and present policies, economic and sectoral trends with the education system and social norms - make it difficult to list a set of simple policy recommendations. However, it is still possible to point to some shocking facts that should be well-recognized and some critical issues that should be urgently addressed.

The first fact is that “excessive levels of public employment should be seen in a wider context.” Recalling that Egypt's high unemployment was one of the catalysts for January 25 and the ensuing regime change, economic reality dictates that job creation should be the number one priority in Egypt for years to come.

Second, Egypt's labor supply grew 11.5% from 2005 to 2010, and is projected to grow by 7.0% from 2025 to 2030 (UNPOPIN and Peeters, 2011) *“The Egyptian economy needs to grow by at least 5% for many years in a row for the labor market to absorb new entrants, otherwise unemployment will increase further with all its political, social and economic effects”*. While many developed economies are struggling with a shrinking and aging labor force, Egypt's is youthful and growing. Based on demographic developments as projected by the United Nations for the working age population (people aged between 15 and 65) half a million young people will enter the labor market each year during the period 2011-2030.

Thirdly, one of the major factors impeding employment in the private sector in Egypt, particularly of its young educated people, is the skill mismatch between job requirements and qualifications of job seekers. The problem of skill mismatch is not unique to Egypt; many developing and developed economies with a labor surplus are facing the same problem. Yet the problem is more striking and serious in Egypt. It is mainly the outcome of an outdated, rigid, and inefficient education system. A comprehensive reform program touching on all elements of Egypt's educational system is now a must and is urgently needed. A more practical and labor market-oriented syllabus, upgrading of competencies and skills of teachers, construction of modern facilities - along with many other improvements - should be undertaken. Moreover, training and requalification are critical issues that should be addressed both in the public and private sector.

Fourth, by international standards, the private sector in Egypt is still too small in comparison with the public sector for the economy to start functioning as a market economy. Yet, in light of current economic conditions, jobs should be created in the

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private sector. This could push productivity to a far higher level, which would help spur new growth in small, medium-sized and large businesses. Further, creating jobs in the private sector will benefit public finances in two main ways: 1) *the numerator effect*, through higher tax revenues and lower government expenditures on the public sector and public sector remuneration, and 2) *the denominator effect* via the boost in GDP, due to higher labor productivity in the private rather than in the public sector (Peeters, 2011). For this to happen, more investment – both domestic and foreign – is needed. Mobilizing domestic savings should be activated, facilitating and attracting FDI, with scrutiny of both the quality and quantity of FDI. In this regard, an economic policy environment that is favorable to export-oriented industries would help to absorb a significant share of female job seekers and would reduce the demand for public employment.

Fifth, small and microenterprise finance programs that were quite popular in Egypt before the January 25 revolution need to be updated and re-oriented. Assaad et al (2000) show that educated workers shun self-employment as it is either pursued as an entrepreneurial strategy by people who have access to productive assets or considerable prior experience through a family enterprise or an apprenticeship, or as a survival strategy for people whose personal situations prevent them from engaging in wage employment. Consequently, such programs cannot be considered an important source of employment for educated workers seeking employment for the first time. Thus, making credit available to existing established entrepreneurs with a commitment or hope of creating employment opportunities for new entrants could be a better strategy.

Finally, in comparison with not only developed but also developing economies - as noted before – Egypt's public sector appears both large and inefficient. A comprehensive public financial management program to increase public sector efficiency in general and to increase the effectiveness and efficiency of public expenditure in particular should be urgently initiated. This program might include i) a comprehensive review of government spending to trace and analyze the growth drivers behind public expenditures ii) reform of tax policy and administration to broaden the tax base and increase the administrative efficiency of collecting taxes due and reduce the potential/actual gap which seems huge, according to some reports; iii) more stringent appraisal of public investment; iv) reform of public finance regulations and laws requiring more transparency and accountability; v) reform of the procurement system, a prime arena for corrupt practices; vi) improving the public debt management framework; and vii) an urgent requirement at this time is a comprehensive review of the public wage structure, rendering it both more efficient and more equitable.

Policy Recommendations

In light of the above discussion, a set of specific recommendations are set forth:

- Rationalization of employment size in the public sector and initiating a national-wide retraining/requalifying program in the public sector so that expanding

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government activities and retirement of existing employees do not require employing more people in the public sector.

- Revising wage structure/schedules in the public sector with a purpose of making them fairer and more efficient. Compensation differentials between government entities and even within the same entity are extremely high, and unjustifiably so. Consequently, wage increase requests or rights by public employees could be attained without significant or even with no fiscal pressures on public finance.
- Activating labor market policies- government interventions used to correct for failures in the labor market- and improving administrative capacity and modernizing the monitoring and evaluation tools considered crucial for their implementation.
- Improving policy design and enhancing coordination between macroeconomic, labor market policies and regulations. Increasing employment requires- among other things- a national employment strategy with the objective of creating more jobs, especially in those sectors with the highest employment elasticity: this strategy should be an integral part of Egypt's national development plan.
- A well-functioning financial sector combined with a favorable, stable, and predictable macroeconomic environment and a regulatory system that respects private property and promotes the enforcement of contracts are crucial for increasing investment and consequently for generating more employment.
- Supporting small business is another requisite. This might be achieved through the establishment of a national program to support linkage channels between small and medium-sized businesses and large ones by subcontracting and franchising agreements.
- Reforming and updating labor market regulations and laws to establish a balanced and relatively fair employer-employee relationship would also help in making private enterprises and job seekers more willing to cooperate with each other. Also, female-specific employer mandates that raise the costs involved in hiring females should be reconsidered.
- Initiating a nationwide training and qualifying program under the sponsorship of the principal Egyptian labor market institutions (*Ministry of Manpower and Migration, The Supreme Council for Human Resources Development, The Information and Decision Support Centre* which is attached to the Cabinet of Ministers, and *The Social Fund for Development*) which need more coordination and need to adopt a proactive approach to achieving their principal objective, which is to facilitate the match between labor supply and demand.

Endnotes

¹ As of March,2012 (Ministry of Finance, Egypt)

² A country's score indicates the perceived level of public sector corruption on a scale of 0 - 10, where 0 means that a country is perceived as highly corrupt and 10 means that a country is perceived as relatively free of corruption. A country's rank indicates its position relative to the other countries/territories included in the index.

³ In 2011, 183 countries and territories were assessed

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