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The State as Employer of Last Resort in Postrevolution Tunisia

In the wake of the Arab Spring, hiring in Tunisia's public sector more than doubled while performance incentives weakened

Better job opportunities were an important demand during the Arab Spring protests. In the wake of the uprisings, however, private sector growth slowed and unemployment rose. In Tunisia, where at least 30 percent of university graduates were unemployed in 2012, the public sector stepped in to avoid further social unrest.

In 2011 and 2012 the government of Tunisia hired 90,000 new recruits, increasing the number of public sector employees by 17 percent, to 616,000 (excluding state-owned enterprises). While public sector employment in Tunisia had been growing steadily over the past decade, the January 2011 revolution accelerated this trend, with annual recruitment more than doubling (figure 1). Low GDP growth and falling government revenues made the public hiring spree fiscally costly, pushing the deficit up to 5.7 percent in 2012.

How was such a drastic increase in recruitment possible? And are the new recruits likely to become top performers? A recent paper by Brockmeyer, Khatrouch, and Raballand addresses these questions by drawing on both qualitative interviews with civil servants and legal analysis of the public sector's performance management system. The public sector code requires the use of performance incentives along the entire career path of civil servants—in recruitment, evaluation, promotion, and compensation—but the authors find large gaps between the legal framework and its application.

Recruitment into the public sector has traditionally been based on competitive entry exams (*concours*) designed to select the best candidates. But ad hoc decrees issued after the revolution led to deviations from this system. These included decrees providing for a general amnesty for civil servants who had lost their job for political reasons under President Zine al-Abidine Ben Ali; the direct recruitment of people injured in the revolution and family members of those killed in the uprising; and the regularization of contract and temporary workers. These ad hoc changes allowed the state to act as employer of last resort, sharply increasing direct recruitment and bypassing competitive exams.

Performance evaluation is mandatory for all civil servants, with the public sector code requiring systematic evaluation on specific criteria. In practice, however, the grading system lacks transparency and objectivity. Grades are based mostly on a subjective ad hoc assessment by the employee's immediate supervisor and are so inflated that they provide almost no differentiation between employees.

Promotions are supposed to be merit based, with candidates ranked on the basis of written exams, supervisors' recommendations, and annual performance evaluations. In reality, however, most are based on seniority, and this has been especially true in

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What Drives Weak Job Creation in Tunisia?

Distortions that prevent the most productive firms from expanding are the biggest constraint to job creation in Tunisia

Which firms create the most jobs in developing countries? The jury is still out on this question. This is unfortunate because the answer has important policy implications for how to tackle unemployment.

Examining which firms create jobs in an economy can shed light on the constraints to job creation. Where job creation is weak, this could reflect distortions inhibiting the growth of productive firms or be due to demand constraints, with productivity a potentially even more important determinant of growth and survival. Moreover, limited job creation may be driven by stagnation among incumbent firms, insufficient entry, or excessive exit. An understanding of which of these matters most and who creates jobs can guide the design of policies that promote private sector development. Programs supporting small and medium-size enterprises, for example, are predicated on the notion that small firms create the most jobs.

A recent article by Rijkers, Arouri, Freund, and Nucifora dissects patterns in private sector job creation in Tunisia. The authors use a unique data set containing information on all registered firms, including the self-employed. They focus especially on the contributions of small and medium-size enterprises, which account for the bulk of all employment, as is typical in developing countries. Based on their findings, they argue that weak aggregate job creation was due not to excessive job destruction and exit but to insufficient dynamism, manifested in a lack of upward mobility and stagnation among incumbents, and to market imperfections preventing the best firms from growing. While entry of small firms was an important engine of job creation, the performance of such firms in creating jobs after entry was inferior to that of larger firms.

Between 1996 and 2010 the Tunisian firm-size distribution remained severely skewed toward small firms. Net job creation was driven predominantly by jump-start self-employment (one-year-old firms employing one worker). Indeed, the start-up of one-person firms was an important contributor to aggregate job creation. And young firms accounted for most new jobs.

Job creation in Tunisia functions more like a nursery shielded from the sun than like a proper garden—no matter how many seeds are planted, there will be few blossoms unless barriers are removed

Small firms' post-entry performance in generating jobs is feeble, however, and job creation is impeded by a lack of upward mobility. While small firms on average tend to create more jobs than larger ones, the reason is that small firms tend to be younger; once firm age is controlled for, small firms create *fewer* jobs than large firms. In other words, small firms create more jobs because they are young, not because they are small. While similar patterns have been documented for developed economies, the process of market selection in Tunisia is markedly different. Developed economies exhibit an up-or-out dynamic where the most productive entrants expand and the weakest ones are driven out of business. In Tunisia, by contrast, even entrants that stay in business don't manage to grow; small firms are more likely to die but, conditional on survival, are not more likely to grow.

These patterns are driven by deficiencies in the (re)allocative process; while both profitability and productivity are positively associated with net job creation, this correlation is very weak. The best firms have difficulties expanding and gaining market share, and firm productivity does not rise rapidly with firm age. This suggests that markets don't select the best firms, but instead impede them from creating the jobs that deserving Tunisians so desperately desire. At the same time, inefficient producers are able to continue operating as somehow they manage to protect their market share.

The results suggest that the binding constraint to job creation in Tunisia is the lack of a business climate that fosters the expansion of the most productive firms. A defunct financial sector, cumbersome bankruptcy procedures, and policies such as regulatory barriers to firm entry and expansion and to the hiring and firing of workers all undermine competitive pressures and hamper the efficient allocation of resources. As a result, programs to finance new and existing small or medium-size enterprises are ill equipped to address unemployment because these firms rarely grow. Job creation in Tunisia functions more like a nursery shielded from the sun than like a proper garden—no matter how many seeds are planted, there will be few blossoms unless barriers are removed.

Bob Rijkers, Hassen Arouri, Caroline Freund, and Antonio Nucifora. 2014. "Which Firms Create the Most Jobs in Developing Countries? Evidence from Tunisia." Labour Economics 31 (*December*): 84–102.

Macroinsurance for Microenterprises

Does political and macroeconomic uncertainty inhibit investments by microenterprises—and would insurance make a difference?

Firms in developing countries rank policy uncertainty and macroeconomic instability as the two biggest constraints to their growth in the World Bank's Investment Climate Surveys—ahead of taxes, regulation, corruption, and access to finance. Faced with such uncertainty, firms may be reluctant to make new investments or hire new workers, choosing instead to wait and see how the economy evolves. This concern may be particularly important in much of the Middle East and North Africa, where firms have faced dramatic increases in political and macroeconomic instability in the context of the Arab Spring.

Insurance is a natural financial instrument to help protect against risk. But while much attention has been given to developing insurance products for farmers, hardly any has been devoted to developing them for other enterprises. A recent paper by Groh and McKenzie describes an effort to do so in the Arab Republic of Egypt. The authors worked with the Alexandria Business Association (ABA), Egypt's largest microfinance organization, to develop and pilot an innovative insurance product to help protect its clients against uncertainty in the aftermath of the January 2011 revolution, which ended almost 30 years of rule by President Hosni Mubarak.

The insurance product was designed for microfinance clients deciding whether or not to take a new 12-month loan from ABA. The insurance, which could be purchased only along with a new loan, cost 0.5 percent of the value of this loan. If a shock covered by the insurance occurred during the loan period, the payout would be two months of loan principal installments—one to ABA to cover the current month's loan installment and one to the client to compensate for potential loss in business from the shock. If a second covered shock occurred in a subsequent month, the insurance would pay out an additional month's loan installment.

The insurance was designed to cover certain macroeconomic shocks, including a suspension of the stock exchange, the imposition of extended curfews, a rise in monthly inflation to its highest level in five years, or the removal of subsidies on gasoline or liquefied petroleum gas (LPG). These shocks were identified through market testing as salient in the wake of the revolution and likely to harm business owners either directly or because of what they would likely signal about economic and political chaos in the country.

The authors worked with a sample of 2,961 microfinance clients, all of which were finishing one loan and about to decide whether to take out a new loan between April and September 2012. The clients were randomly sorted into two groups of equal size: a treatment group that was offered the insurance product and a control group that was not. These firms were microenterprises, with most having no paid workers. Half were in retail, the rest in manufacturing or services. Median monthly profits were around \$200, and the average loan was around \$800.

Demand for the insurance product was relatively high: the insurance was purchased by 36.7 percent of all firms in the treatment group and by 55 percent of those taking a new loan. The insurance had no impact on firms' investment behavior, however. Firms in the treatment group were no more likely to take a loan, did not take larger loans, and were no more likely to use a loan to make new capital investments. (The sample was relatively large and confidence intervals are small around zero, so this lack of effect is not a result of low statistical power.) As a result, profits and sales did not increase. Indeed, there is some evidence that revenues fell.

What is the reason for the lack of effect? It appears to be that these microenterprises seldom make fixed capital investments anyway. Their loans went largely to working capital—investments that are short term and easily adjusted and thus less affected by uncertainty. The results suggest that despite complaints about uncertainty as a constraint to business growth, this uncertainty does not appear to be preventing microenterprises from making profitable investments in machinery and equipment.

While the insurance product did not change the investment behavior of firms, the demand for the product suggests that firms might still value the protection it could provide when shocks do occur. The product could also be more valuable for small and medium-size enterprises, which may be more likely to be considering lumpy capital investments that they defer because of uncertainty.

Insurance penetration is very low in Egypt, with regulations inhibiting the development of the sector. As a result, many firms have little understanding of the concept of insurance. This unfamiliarity with insurance does not appear to explain the results of the study, but does make it hard to launch new products and build an understanding of how they work. Given the enormous volatility in incomes for microenterprise owners in developing countries, further policy and research efforts are warranted to develop better ways to help insure against some of this risk.

Matthew Groh and David McKenzie. 2014. "*Macroinsurance for Microenterprises: A Randomized Experiment in Post-Revolution Egypt.*" Policy Research Working Paper 7048, World Bank, Washington, DC.

Testing the Effectiveness of Job Matching in Jordan

Matching job seekers to vacancies had little impact on employment outcomes among educated youth in Jordan. What could explain this?

Unemployment is pervasive among educated young people in many countries of the Middle East and North Africa. In Jordan in 2010, the unemployment rate was 19 percent for men ages 22–26 with a postsecondary degree, and 47 percent for their female counterparts. Why doesn't the labor market clear for educated youth?

Much of the discussion of this question has focused on such issues as shrinking government sectors combined with a range of regulatory and market failures that inhibit the growth of private sector firms, resulting in low demand for labor. But this doesn't explain why labor markets don't clear through movements along the labor demand curve, with wages falling to a point where labor demand equals labor supply.

One potential explanation is offered by search and matching theory, which suggests that persistent unemployment occurs because of costly search frictions that make it difficult for jobless workers to match with firms with vacancies. These search frictions can be greater for youth, who lack previous job experience to signal their quality as employees. Are there interventions that could overcome these frictions? A recent paper by Groh, McKenzie, Shammout, and Vishwanath describes a pilot program that tested an intervention designed to do so in Jordan.

The program worked with a sample of 1,354 recent tertiary graduates seeking jobs: 1,011 individuals (three-quarters of the sample) were randomly assigned to a treatment group, whose members the program would attempt to match to jobs, and 343 were assigned to the control group. It also worked with a sample of 2,279 small and medium-size firms and a booster sample of larger firms that were potentially interested in hiring graduates through the program.

The pilot intervention involved three main steps:

- *Testing the job seekers*. The job seekers in the treatment group underwent two hours of computerized tests to measure personality type, proficiency in English and Excel, and quantitative, verbal, and spatial reasoning as well as two hours of live, interactive sessions to measure soft skills.
- *Matching job candidates to firms*. Firms were asked detailed questions about the positions they were considering filling, and the psychometric testing results were used to identify three to five candidates who would be considered a good fit for each position. These candidates were asked whether they would be interested in the position; if not, they were replaced by another match. The firm was sent résumés for the matched candidates along with a description of why they would be a good fit. The firm would then choose whether to interview a candidate and then whether to offer the candidate a job.
- *Following up*. The firms and job candidates were contacted to learn the outcome of the matching process, and attempts were made to arrange alternative matches if an initial match fell through.

Of the 1,011 people in the treatment group, 56 percent (564) were matched to at least one job opening—with 55 percent of these candidates being matched to more than one—for a total of 1,143 initial matches. But only 10 percent of these matches (115) led to a job interview, with the result that 58 job candidates were interviewed. In 28 percent of matches job candidates said that they were not interested, and in 55 percent of matches firms did not invite candidates for an interview.

In the 115 matches leading to a job interview, job offers were extended in almost half the cases (54). But job candidates refused 30 of the 54 job offers extended, resulting in only 24 people being hired. These represent only 4.3 percent of the job candidates who were matched at least once, and only 2.1 percent of the matches made. Furthermore, among the 24 candidates who were hired, 15 quit within the first month. Thus only 9 jobs were directly generated through this matching. Not surprisingly, treatment regressions show no significant impact of the job matching on employment outcomes for graduates.

The paper explores several potential explanations for the lack of impact. Job candidates turned down 28 percent of the match opportunities they were given and turned down or quickly quit 83 percent of the job offers. This leads to the conclusion that much of the unemployment among educated youth is voluntary, reflecting an unwillingness to work in many jobs.

This conclusion suggests that the necessary policy response is more difficult and complicated than if the problem were simply high minimum wages or high search costs. The results suggest two directions for future policy actions: interventions on the firm side to spur the development of a vibrant private sector that provides a larger number of skilled jobs, and efforts to encourage educated youth to consider a broader range of occupations, including those now considered less prestigious.

Matthew Groh, David McKenzie, Nour Shammout, and Tara Vishwanath. 2014. "Testing the Importance of Search Frictions, Matching, and Reservation Prestige through Randomized Experiments in Jordan." Policy Research Working Paper 7030, World Bank, Washington, DC.

Predicting Bank Insolvency in the Middle East and North Africa

An off-site monitoring system based on bank fundamentals could strengthen banking supervision in the Middle East and North Africa

The global financial crisis revealed substantial differences in the resilience of individual banks in the Middle East and North Africa, highlighting the importance in banking supervision of differentiating between financial institutions. In many cases knowledge about the specific features underpinning the health of individual financial institutions has been crucial in identifying problems and informing policy action. This suggests that an early warning system built on bank-specific fundamentals can provide a useful monitoring tool, helping banking supervisors to identify vulnerable financial institutions and take preemptive steps to aid those that are ailing.

Earlier financial crises prompted efforts to develop early warning systems, and the most recent global financial crisis has led academics and policy makers to intensify these efforts, increasingly focused on developing indicators and methodologies that can aid in the timely identification of signs of distress. A recent paper by Calice attempts to provide a fundamentals-based surveillance tool that can serve as an early warning device in the Middle East and North Africa by identifying the factors that affect the risk of bank insolvency in the region.

The paper builds on and adds to the literature on bank default. This literature focuses mostly on testing the effect of accounting-based variables on the probability of bank default in discriminant analyses and logistic regression frameworks. The assumption is that insolvent banks present ex ante weaker fundamentals than solvent banks. The literature on individual bank default draws heavily on the CAMEL rating system, a tool widely used by banking supervisors to monitor the performance and soundness of financial institutions based on indicators in five categories: Capital adequacy, Asset quality, Management capacity, Earnings power, and Liquidity position. Most studies focus on the United States, where the data are most readily available. Others take a cross-country perspective, analyzing bank fragility in the European Union or Eastern Europe. But none of the relevant studies has focused on the Middle East and North Africa, and the author attempts to fill this gap.

> *A systematic off-site risk analysis based on an early warning system is useful to the extent that it can help banking supervisors prioritize financial institutions for on-site inspections and identify those needing supervisory interventions*

To derive an early warning system for monitoring the risk of bank insolvency in the region, the author estimates a pooled logistic regression on a sample of 198 banks in 19 countries for the period 2001–12. Not surprisingly, the findings show that traditional CAMEL indicators are significant predictors of bank insolvency in the region, in line with previous research in different geographic areas. In particular, the findings indicate that small banks with low capitalization, low asset quality, and high cost-to-income ratios are more likely to become insolvent over the next two years. Results are robust to the inclusion of additional control variables and to different estimation methodologies. The predictive power of the early warning system as measured by both in-sample and out-of-sample performance is also reasonably good.

Given the definition of technical insolvency used in the analysis, the early warning system developed is generally able to predict the occurrence of an insolvency event only when the event originates from widespread losses on the asset side of a bank's balance sheet—losses that lead to a progressive deterioration in the bank's fundamentals. But insolvency events can also originate from the liability side of a bank's balance sheet, such as a traditional bank run or a wholesale bank run, as the recent crisis showed on a large scale. For these cases it would be useful to investigate the determinants of bank fragility in the region within a structural credit risk model using market-based measures of bank vulnerability, such as credit default swaps or default risk measures implied by stock prices. Also interesting would be research that takes a systemic risk perspective in analyzing the sources of bank vulnerability in the region. Such an approach can shed light on the risk of contagion by capturing the codependence of individual banks' risk.

The findings of the paper have important policy implications at a time when implementing effective risk-based supervision remains a challenge in the Middle East and North Africa. In particular, the results highlight the usefulness of a simple off-site monitoring system based on traditional financial metrics associated with the CAMEL rating system. But the findings should not be construed as detracting from the importance of the on-site examination process to a successful banking supervision program. A systematic off-site risk analysis based on an early warning system is useful to the extent that it can help banking supervisors prioritize financial institutions for on-site inspections and identify problematic institutions needing supervisory interventions.

Pietro Calice. 2014. "Predicting Bank Insolvency in the Middle East and North Africa." Policy Research Working Paper 6969, World Bank, Washington, DC.

Economic Inequality in the Arab Region

Development policies in many Arab economies may have led to greater inequality between different areas and socioeconomic groups

The state-led economic development model adopted by Arab countries following their independence led to remarkable improvements in human development indicators and to moderate levels of poverty and income inequality. Indeed, despite the modest economic growth in the Arab region, its levels of poverty and inequality compared favorably with those in all other developing regions.

In the early 2000s, however, the postindependence development model began to feel the burden of its weight and these gains started to unravel, ushering in rising inequality of different forms. Disparities between different areas and socioeconomic groups within economies have widened. Inequality of opportunity has also emerged as a serious concern in the region. Whether these inequalities helped lead to the Arab Spring is difficult to ascertain, but the demand for greater equity and inclusion has brought the issue of economic inequality to the forefront for Arab governments.

A recent paper by Belhaj Hassine attempts to contribute to the understanding of consumption expenditure inequality in the region. The analysis draws on harmonized data from 28 household surveys in 12 Arab economies to assess inequality over time and to examine its sources and structure. Given the importance of regional disparities and imbalances in many Arab economies and their contribution to social unrest, the paper devotes special attention to the analysis of rural-urban and metropolitan-nonmetropolitan inequality across the entire welfare distribution and attempts to draw policy implications for the design of strategies to address inequality and promote equity.

The analysis finds moderate levels of inequality, with the Gini coefficient for the distribution of per capita household expenditure ranging from less than 32 in Libya and the Arab Republic of Egypt to more than 40 in Mauritania, Tunisia, and the Republic of Yemen. Arab Spring countries exhibit varying patterns of income and inequality, with low income and low inequality in Egypt, low income and high inequality in the Republic of Yemen, medium income and low inequality in Libya, medium income and medium inequality in the Syrian Arab Republic, and relatively high income and high inequality in Tunisia.

The most important determinant of economic inequality in Arab economies appears to be the demographic composition of households, followed by their geographic location. The persistence and widening of urban-rural and regional inequalities are of serious concern for the prospects for social cohesion and inclusive growth. These inequalities may exacerbate the social and economic instability that pervades the Arab world and could undermine popular support for market economy reforms.

To help improve the understanding of the sources of spatial inequality, the paper uses the unconditional quantile regression method and decomposes the interregional welfare gap across the entire distribution into the differences in household endowment characteristics such as age, education, and employment and the differences in the returns to these characteristics.

The analysis finds that urban-rural inequality is due primarily to differences in the distribution of household characteristics. Despite the rural development efforts that have been pursued by Arab governments, urban households continue to have much better endowments of demographic and human capital attributes than their rural counterparts and this difference explains most of the welfare gap between the urban and rural sectors. The relative effect on inequality of differences in household endowments is particularly strong for poor and middle-class households.

The analysis of the sources of inequality between metropolitan and nonmetropolitan areas shows different patterns across Arab economies. In Egypt, the United Arab Emirates, and the Republic of Yemen differences in the returns to household endowments have a greater effect on inequality than do differences in those endowments, particularly for middle-class and better-off households; this suggests that although metropolitan households enjoy better endowments, the inequality in these countries is explained mainly by the higher returns to these endowments in metropolitan areas. In the Syrian Arab Republic and Tunisia, by contrast, the differences in household endowments are more important in explaining why metropolitan households are better off than their counterparts.

The findings suggest an urban and metropolitan bias in the development policies of many Arab governments, which led to growing welfare inequalities along rural-urban and regional lines. Furthermore, the lack of employment opportunities and agglomeration economies in nonmetropolitan areas may have led to lower returns to human capital investments in these areas than in metropolitan areas.

The market economy reforms implemented in some Arab economies during the past decade appear to have been more beneficial for households that had better human capital endowments at the time of the reforms. This would have contributed to faster growth in the returns to urban and metropolitan households, particularly in the returns to their education and experience. Further reforms may exacerbate inequality if the obstacles to balanced regional development are not adequately identified and addressed.

Nadia Belhaj Hassine. 2014. "*Economic Inequality in the Arab Region*." *Policy Research Working Paper* 6911, *World Bank*, *Washington*, DC.

Open Skies over the Middle East

Substantial liberalization of air travel could more than double the passenger traffic between Turkey and the Arab states

Turkey, long a fulcrum between the West and the East, has deepened its economic links with the European Union and is now turning to the Middle East. In this sometimes turbulent neighborhood it is beginning to create dynamic trade links that echo past relationships, though in a new international context. Even in the age of the Internet physical connectivity matters. Goods must be delivered, businesspeople must meet, and individuals must travel to forge bonds and catalyze trade. Air transport is critical in facilitating each of these links, especially in a region where travel by land is fraught with difficulty.

Air travel between countries has typically been governed by policies negotiated on a bilateral basis, and travel between Turkey and the Arab states is no exception. Data from the World Trade Organization indicate that Turkey's bilateral air services agreements with many of its Arab neighbors remain quite restrictive by international standards. By contrast, air travel between most Arab states is governed by a plurilateral air services agreement, the Intra-Arab Freedom of the Air Programme of the Arab Civil Aviation Commission (ACAC). While the ACAC agreement is fairly open, there is scope for further liberalization.

A recent paper by Cristea, Hillberry, and Mattoo seeks to improve the understanding of the links between air travel policy and passenger traffic in the Middle East. The main aim is to provide quantitative estimates that can inform policy choices. Econometric models link the existence of flights between city pairs and the number of passengers traveling, respectively, to quantitative measures of policy embedded in the air services agreements and to other variables. Estimates from the models are used in two policy simulations: a deepening of the ACAC agreement and the inclusion of Turkey in this deeper ACAC agreement.

The paper exploits data from the International Civil Aviation Organization that document passenger flows between city pairs around the globe. These data allow the models to link city and country characteristics to the existence of a flight and to levels of traffic on existing flights. A model that predicts flows between cities can provide more textured information in support of policy analysis than can a model that only predicts flows between countries. For example, in Lebanon liberalization would mean more traffic through Beirut, but in Turkey liberalization would generate new flights and more traffic through secondary airports such as those serving Adana, Antalya, and Konya.

Even in the age of the Internet physical connectivity matters. Goods must be delivered, businesspeople must meet, and individuals must travel to forge bonds and catalyze trade. Air transport is critical in facilitating each of these links

The scenario for evaluating the consequences of a deeper ACAC agreement considers policy changes that would make this agreement as liberal as the most liberal air services agreement in the world—such as the bilateral agreement between the United Kingdom and Singapore. Model estimates suggest that policy changes of that magnitude would increase traffic among the Arab states by around 30 percent. Moreover, the probability that two ACAC cities would be connected by a direct international flight would rise by a factor of 1.3.

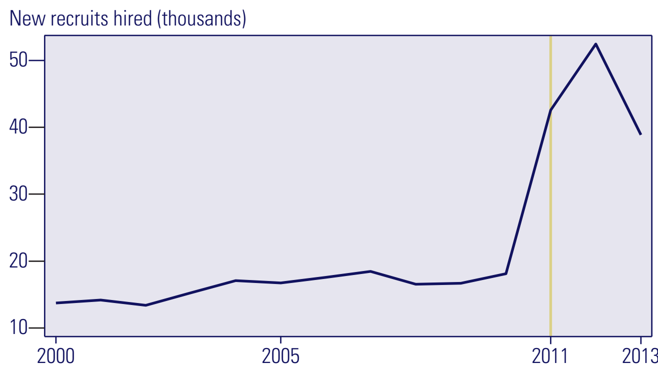
Turkey's bilateral agreements with countries in the region tend to have much more restrictive policies than those in the present ACAC agreement. Thus if Turkey were to join the liberalized ACAC agreement as a full member, the policies governing flights between Turkey and the Arab states would become much less restrictive. The paper estimates that such policy changes would generate very large changes in passenger traffic and in the number of flights between Turkish and ACAC cities. Indeed, the estimates suggest that liberalization to the level of the U.K.-Singapore agreement would more than double the traffic between Turkey and the Arab states. The odds of a direct flight between a given Turkish city and a city in an Arab state would rise by a factor of 1.7–3.0. Put another way, the model suggests that Turkey's accession to a more liberal ACAC agreement would lead to 25–29 new city pairs sharing a direct international flight. Many of these new city pairs would include a secondary city in Turkey.

While these results may seem optimistic, there are three reasons to suggest that they are not unrealistic. First, current levels of air passenger traffic in the region are low, and rapid growth is plausible from a small base. Second, some regional markets have seen even faster growth rates in recent years. Finally, the changes in policy considered are large, especially those in the policies governing air traffic between Turkey and the ACAC countries. The results should nonetheless be understood as the product of preliminary work to assess the possibilities associated with further reform in the region.

Anca Cristea, Russell Hillberry, and Aaditya Mattoo. 2015. "Open Skies over the Middle East." Policy Research Working Paper 6937, World Bank, Washington, DC.

(continued from page 1)

Figure 1. Public Sector Recruitment in Tunisia, 2000–13



Source: Data from the General Committee for the Civil Service.

the past few years. In the aftermath of the revolution the government sought to avoid discontent in the public sector by speeding up promotions—and the simplest way to do so was to base them on seniority. Indeed, some agencies resorted to across-the-board automatic promotions, in which all those at a certain level were upgraded to the next one.

Compensation schemes also suffer from weaknesses that limit performance incentives. Public sector compensation is uncompetitive compared with private sector pay—salaries for engineers, for example, are about twice as high in the private sector. In addition, the compensation has virtually no merit-based component. Most civil servants receive a performance bonus, but this bonus is essentially fixed because it is linked to the performance evaluation in which almost all employees attain the highest mark. Moreover, the bonus is dwarfed by the base salary and other group-specific allowances. These allowances as well as premiums for particular professional groups have proliferated since the revolution, increasing the complexity and opacity of the compensation system.

Although the weaknesses of performance management in Tunisia's public sector have been known for decades, past reform attempts failed to bring about change. An analysis of the reform strategies of 1989 and 2007 shows that the present challenges were already identified in 1989. Relevant reforms were proposed, but few have been implemented. Understanding the political economy of reform in Tunisia's public sector thus remains an important task for future research.

Anne Brockmeyer, Maha Khatrouch, and Gaël Raballand. 2015. "Public Sector Size and Performance Management: A Case Study of Post-Revolution Tunisia." Policy Research Working Paper 7159, World Bank, Washington, DC.

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