Towards a New Economic Model for Tunisia: Identifying Tunisia's Binding Constraints to Broad-Based Growth

Executive Summary

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Towards a New Economic Model for Tunisia: Identifying Tunisia's Binding Constraints to Broad-Based Growth

A joint study by:

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The Government of Tunisia

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1.1 Introduction

In January 2011, the people of Tunisia took to the streets to protest the existing 23-year-old regime, thus igniting the Tunisian Revolution and inspiring a wave of popular upheaval in the Arab world. To some observers, the sudden outpouring of discontent was a surprise. Tunisia had achieved a notably solid record of economic growth, which averaged nearly 5 percent per year over the previous decade. Growth had in turn helped reduce the rate of poverty to below 5 percent nationally by 2005.[1] Yet this apparent success obscured inherent weaknesses in the country's development model. Unemployment remained stubbornly high, and youth unemployment kept rising. Regional disparities in economic growth, income and wealth created what many today consider to be "two Tunisias"—one relatively affluent, along the coastal regions, and another in the lagging interior regions. Standards of living for many Tunisians stagnated, while few opportunities existed either to invest or work in private enterprises. Meanwhile, the public sector could expand its payrolls only so far to absorb the supply of unemployed graduates. Increasing economic dissatisfaction was reinforced by a lack of political freedom and by increasing high-level corruption, which had a corrosive effect on the business climate. In the end, the revolution was sparked by a conflict between a small, informal fruit vendor and the police in a region particularly lacking in business and employment opportunities. The fruit vendor's position of economic disenfranchisement and loss of dignity prompted his tragic self-immolation, with well-known and far reaching consequences. Yet the seemingly mundane precipitating events were also emblematic of both the importance of small informal activities to earn a living, and of the lack of freedom to engage in and retain the fruits of one's endeavors in pre-revolutionary Tunisia.

Today, Tunisia faces several major economic, social and political challenges as it attempts to create a more democratic, accountable political system and an economic policy regime that can foster greater prosperity for a broader segment of its population. Short-term risks have emerged since the revolution—in particular, frequent strikes and social unrest due to pent-up economic demands of the population, and elevated macroeconomic fragility. These risks must be managed so that they do not undermine the economic and social progress already achieved. Charting a successful course requires rebalancing the role of the state to ensure an acceptable measure of equity and economic security along with adequate and necessary freedom for the private sector to play its role of innovating, investing, and creating employment opportunities. [2] At the same time, an economic strategy that fails to address the specific underlying sources of the country's previous economic failures is unlikely to succeed. The revolution has relieved the country of a corrupt and autocratic leader, but many of the underlying structural issues that have inhibited more broad-based growth remain. Thus, an essential ingredient of a successful revision of Tunisia's development model is a clear understanding and resolution of the most binding impediments to the country's broad-based growth.[3]

1 Details are provided in Chapter 2: Overview of Recent Economic Trends.

2 One debate of special relevance to Tunisia and other countries of the Arab world concerns the desired level of equity (or economic equality) and what is meant by this—equity of opportunity, or equity of outcomes.

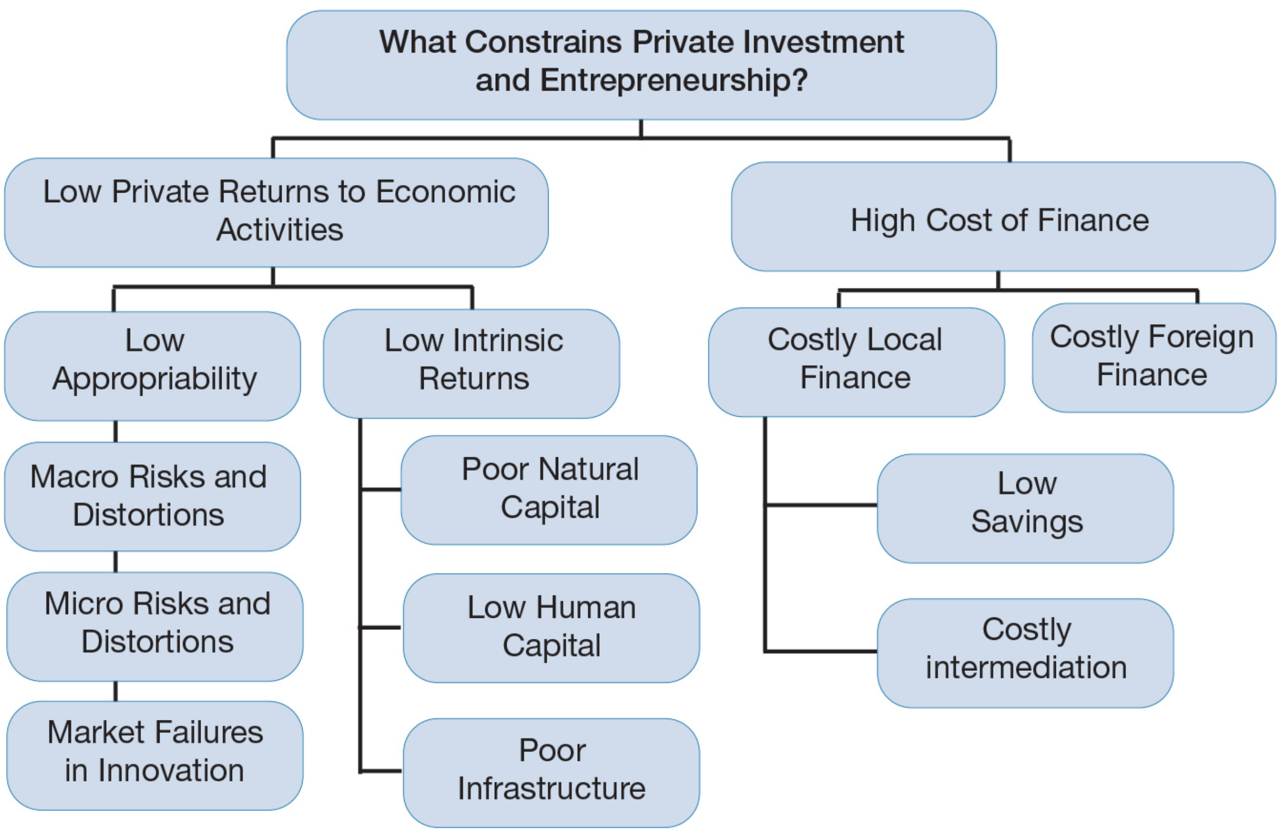
3 There is no commonly agreed definition of "broad-based growth." For the purposes of this study, we define this generally as growth that benefits a substantial share of the population through increased access to employment and investment opportunities, rather than through pure redistributive effects. Such growth is not limited to growth of narrowly defined productive sectors, but occurs across sectors in which the country has a comparative advantage.

1.2 Methodology of Growth Diagnostics

The growth diagnostic approach was proposed in a 2005 working paper by Ricardo Hausmann, Dani Rodrik and Andrès Velasco (HRV).[4] They present the framework for the growth diagnostic analysis in the form of a "tree," as shown in Figure 1.1.

The method starts from two simple and uncontroversial propositions. First is the recognition that private investment and entrepreneurship—the process of identifying profitable business opportunities, productivity improvements and innovations and applying resources to the creation of value are the primary drivers of sustained economic growth, and that these results mainly depend on the prospect of an adequate rate of return to the investor, given the risks as well as the costs of financing. Thus, understanding the reasons for inadequate growth and private investment requires analyzing the factors that affect the returns and constraints that private entrepreneurs face.

Figure 1.1: The HRV Growth Diagnostic Tree



Source: HRV (2005)

The second key insight of economics that pervades the empirical method, simple and uncontroversial as it is, is that poor economic outcomes—such as low levels of investment, consumption, employment, or credit—must either be the result of constrained supply or of limited demand. The most binding

4 As HRV point out, all countries face an array of economic and development challenges, but not all such challenges are equally restrictive to growth. Because reform and investment efforts are limited by implementation capacity, political space and financial resources, focusing on alleviating those constraints that limit growth the most will have the greatest impact. Moreover, because it is not possible to quantify all of the dynamic or indirect effects of loosening a given constraint, addressing those constraints that are the most directly binding provides greater assurance of a positive impact on growth.

constraints are those for which the supply of a productive factor or condition of the business climate is severely constrained, while at the same time being highly demanded by businesses. Hausmann, Klinger and Bailey (2008) suggest four tests to determine whether this situation holds for a given factor, as follows:

1. The shadow price[5] of the constraining factor is high;

2. Changes in the availability of a constraining factor are correlated with changes in investment or growth;

3. Economic agents are incurring costs or risks to circumvent the constraint; and

4. The economy includes few firms that rely heavily on the constraining factor. This has come to be known as the "camels and hippos" test, by analogy to the fact that one does not expect to see hippos in an environment lacking water. Rather, one expects to see firms that have adapted to the existing constrained conditions, like camels that have adapted to the desert.

The HRV framework calls for a sequential approach, starting at the top of the tree. As such, the first question addressed is whether private investment and entrepreneurship are primarily limited by a high cost of finance, arising from financial market constraints in the presence of high investment demand, or weak investment demand by potential entrepreneurs because they see few opportunities to earn an adequate return. Given the response to this initial question, the diagnosis then proceeds to identify the source of the problem—either the high costs of finance or the low private returns to investment.

To assess whether a factor of production or environmental condition is relatively scarce or inadequate often requires comparing the economy with those of other countries. To be informative, the comparison countries should be somewhat similar in geography and income levels. In the case of Tunisia, the countries of Jordan, Malaysia, Morocco, Romania, and Turkey were chosen for this purpose. In some cases, aggregate data from lower middle income and upper middle income countries were also sometimes used, in addition to a broader set of faster growing economies.

Preliminary Considerations

The strength of the growth diagnostic approach is that it seeks to answer an ambitious yet important question that other methods, however rigorous, cannot answer. It does so by examining and testing all potential major constraints to a national economy, without making strong assumptions on the underlying growth process. [6]

Some might question the relevance of the HRV diagnostic approach to a country like Tunisia after a game-changing event like the 2011 revolution. After all, the conclusions drawn from the HRV approach, like any empirical method, can only be as valid as the data used to derive those conclusions. Nevertheless, the method retains its relevance to Tunisia today. The 2011 revolution has certainly altered Tunisia's development trajectory, transforming some of the issues the country faces: certain issues have disappeared since the revolution, while others have abated or evolved; some remain as they were, and some new issues have emerged. This fluid situation adds a layer of complexity to the exercise and requires one to distinguish among these possibilities. To overcome this challenge, the report interprets recent trends in light of current realities if there is reason to believe that the revolution erased or reversed pre-revolutionary facts or

5 A shadow price is the marginal value to the economy of an additional unit of the factor.

6 General equilibrium models focused on growth dynamics can also be used but are typically unable to incorporate as many potential constraints and depend upon a variety of crucial assumptions, whereas the HRV method is relatively agnostic regarding the underlying growth process.

trends. However, as demonstrated in the subsequent chapters, many key underlying structural issues have persisted or evolved rather than disappeared since the revolution.

Finally, data on economic outcomes, however imperfect, can capture important economic phenomena more reliably than general perceptions of local observers can and thus reveal important symptoms of the underlying constraints. Individual perceptions of a constraint often fail to take account of its aggregate economic effects. Nonetheless, qualitative factors can be important, and wherever possible data from enterprise surveys are used to assess these. Additional qualitative factors—attitudes, culture, and social constraints—are more difficult to quantify and could influence economic behavior as well. Such factors were raised in discussions of this study, but in fact many perceptions expressed are common in developing countries.[7] Unfortunately, it is difficult to benchmark cultural or sociological factors among countries without credible attitude surveys. At the same time, the strength of a data-driven approach is that it elevates objectivity over prejudgment and aggregate evidence over the diversity of opinions held by various actors and observers.

1.3 The Binding Constraints to Growth in Tunisia

The application of the methodological framework discussed above reveals two broad categories of binding constraints to economic growth in Tunisia:

- ★ First, a lack of effective institutions to ensure public sector accountability, the rule of law and checks and balances on power, resulting in weak protection of property rights, barriers to entry and corruption. Property rights and investment freedoms are fundamental to the development of entrepreneurship and to investment, innovation and risk-taking, and therefore to achieving growth in productivity and the higher wages and living standards that accompany it. Whereas the worst abuses of the former regime that undermined those rights ended with its departure, establishing a sound framework of economic governance including institutions that provide investors with a clear and transparent set of rules and assurance that they will be able to reap the fruits of their investments will require a sustained effort and has not yet come to fruition.[8] Lack of public sector accountability remains a significant cost for many businesses, which have limited recourse to the rule of law or corrective measures. In the aftermath of the revolution, moreover, labor and social unrest have contributed to weakening property rights. Constitutional and administrative reforms are needed to address these failures, along with a clear and consistent approach to the private sector on the part of the transitional government to signal its commitment to private sector-led growth and fair and objective adherence to existing laws.
- ★ Second, the high fiscal and regulatory costs of employing workers. Although social security programs and labor protections are intended to enhance the pay, benefits and economic security of workers, many measures currently in place in Tunisia have been counterproductive in achieving these aims for all but the most fortunate Tunisian workers. Rather than enhancing the provision of acceptable jobs, they result in reduced investment, greater informality, lower worker pay, higher unemployment, and increased economic insecurity. Tunisian firms face among the highest payroll tax burdens in the world and among the highest risks associated with stringent worker dismissal requirements. These factors combine to reduce investment and the demand for labor across skill levels. Firms remain small and use a variety of means to circumvent the formal requirements of employing workers, including

7 Although culture is undoubtedly a factor, there is no strong indication that the Tunisian economy is intrinsically limited by the attitudes and culture of its population or that these attitudes cannot change if the context changes. On the contrary, there are many positive signs of entrepreneurial behavior, motivation, and cultural richness, which are likely to prove advantages to the economy and society.

8 These institutions can be strongly related to democratic institutions and transparency, a free press and an independent judiciary, which are also important objectives for social and political development, but here our focus is on the impacts on economic performance.

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informality or under-declaration of employees. Their inability to adjust employment according to market conditions discourages them from growing to attain economies of scale and from investing in worker training. These responses in turn reduce innovation and productivity growth and make Tunisian firms less competitive internationally. Tunisia's slow growth in labor productivity relative to other middle income countries reinforces the pressure to reduce private sector wages. Through a variety of channels, therefore, reduced demand for labor puts significant downward pressure on market-determined wages, increases unemployment (especially of young workers), reduces standards of living, and relegates the majority of workers either to unemployment or to low pay through informal engagement in small, low-return enterprises. A national dialogue to achieve a new social contract is needed—to include previously excluded civil society representatives—which is informed by the economic impacts of the current policy regime and which recognizes the importance of the private sector in driving growth and employment. Moreover, alternatives for designing social security systems and labor market protections should be considered with the aim of protecting people rather than specific jobs (see, e.g., forthcoming *World Development Report (2013)*).

These binding constraints operate on a national level and therefore have negative consequences both in faster growing and lagging regions. While a lack of investment in infrastructure and poor school quality are widely believed to reduce investment and employment opportunities in lagging regions, the lack of demand for the products and workers emanating from those regions is primarily driven by national and international markets. [9] Indeed, the constraints identified in this diagnostic may be even more binding on the growth of lagging regions. Whatever modest level of investment does take place in Tunisia is likely to flow first into regions with greater natural capital and infrastructure.

The identified constraints affect exporting firms and foreign-owned firms to a somewhat lesser extent than firms primarily serving domestic markets. Exporters enjoy exoneration of social charges and other taxes for several years and, given their larger scale and higher productivity, are better able to adhere to formal labor requirements. They also appear to have been less subject to infringement of property rights under the prior regime. However, the identified constraints are still likely to dampen investment and employment creation by exporting firms as well. Meanwhile, the constraints present a tremendous barrier for Tunisian firms serving the domestic market—some of which would otherwise supply exporting firms or export directly but under current circumstances cannot expand or innovate to the degree needed to compete internationally. Although Tunisia has relied upon an industrial policy and various tax breaks to promote innovation and competitiveness, without removing these fundamental obstacles further government efforts to directly subsidize or promote innovation are not likely to succeed in transforming the economy.

Emerging Risks and Potential Constraints

In addition to the two binding constraints identified above, risks have emerged since the revolution that could become binding constraints if not effectively addressed. First is the risk that social unrest becomes persistent and pervasive, in which case it would deter investment in the coming years. Related to this is the risk of macroeconomic instability that could emerge if internal social and economic pressures override the government's commitment to fiscal sustainability.

9 There is much discussion and some planning within Tunisia to undertake regional growth diagnostics as well. The method used here can be used to diagnose regional constraints as long as regionally disaggregated data are available. At the same time, conducting a solid regional growth diagnostic requires starting with a clear understanding of the larger forces at work. Economic history suggests that in a small country like Tunisia, where labor and financial resources are mobile and where most markets are national (or international) in scope, part of the solution to regional economic disparities will involve workers moving to faster-growing regions (World Bank 2009). For this reason, a lack of investment and job creation at the national level reduces opportunities for workers in lagging regions to increase their incomes.

In addition to this risk, the analysis highlights the problematic nature of the financial sector; the low quality of primary and secondary education, particularly in lagging regions; the need for improved water resource management; and the limits of Tunisia's current seaport capacity and management. Although not currently binding constraints, these problems could become more important constraints in the future.

1.4 Summary of Evidence

The evidence clearly points to the branch of the HRV tree on the left (low private returns to investment) rather than the high cost of finance, despite issues within finance. Tunisia's financial system is relatively underdeveloped and weak. Its ability to innovate and expand is constrained by capital account restrictions, an overhang of nonperforming loans, dominant state ownership and interest rate regulations, which can inhibit risk-taking. As in any developing economy, it is likely that some viable investments are stalled or limited by a lack of financing. At the same time, there are a variety of private financial institutions, including 16 commercial banks, private equity firms and microfinance institutions, which are competing to some extent to fill gaps left by poor intermediation by state-owned institutions. In fact, access to finance does not pass the empirical tests of a binding constraint to growth. Real lending interest rates follow a pattern that is not explained by interest rate regulations but rather by demand and supply in the market. Moreover, correlation tests suggest that investment levels in the economy are dominated by demand side issues rather than by shifts in the supply of financing. Tunisian firms rely on external financing to a higher degree than most benchmark countries. While collateral levels are high, they are on par with benchmark countries. Firms cite high interest rates as an obstacle, but in fact real interest rates have been falling and are low by international standards. This suggests that financing costs are only "high" in view of the low returns investors anticipate. Thus, although there is considerable room for improvement in the efficiency and reach of the financial sector, at present the evidence clearly shows that low demand by investors dominates supply-side financial constraints in determining investment levels in the economy. In short, costly finance is not a binding constraint to growth in Tunisia.

The next set of possible binding constraints relates to the availability of complementary factors of production—natural capital, human capital or skill and infrastructure. Although there are some important disparities by region (discussed further in the relevant chapters) which are important for social equity, if not for growth, none of the issues associated with these complementary factors constitutes a binding constraint to growth at the national level.[10]

Despite mixed reviews by some businesses about the quality and relevance of the education and training of Tunisian workers, the evidence shows that a lack of human capital or skill does not pose a binding constraint to growth at present. Although unequal access to health services is an issue, indicators of health status show that Tunisians are healthier than the citizens of other countries with similar or higher levels of income. Similarly, Tunisia has increased overall educational attainment rapidly, particularly among youth and women. Yet the low quality and cost-effectiveness of primary and secondary education is an issue to be addressed in order to improve social mobility and equality of opportunity, as well as to prepare highly skilled workers for the future. There is some indication of a skills mismatch, in that excess supply of some skills is greater than for others. However, given high rates of unemployment across disciplines, there is no evidence that a lack of skill or knowledge in any particular area poses a binding constraint to investment and entrepreneurship at the national level. Outmigration of educated workers is high, and firms operating in Tunisia rate both the availability of engineers and the overall quality of the education and training

10 Without more disaggregated data on demand it was not possible to test for growth impacts at the regional level.

system highly. This indicates that demand for skill is broadly being met, and a lack of demand for labor is the primary cause of high unemployment in virtually all broad skill categories. To the extent that the country's more binding constraints to growth are alleviated over the medium term, the demand for skill will increase. In such a scenario, the relatively modest competencies produced in Tunisia's schools, particularly in less-served regions, could eventually constrain Tunisia's future growth. However, investing appreciably more resources in skills and education today will not by itself spur an acceleration of growth.

In spite of some marked regional disparities in basic infrastructure—most notably sanitation—on the national level, Tunisia's infrastructure appears to be an area of relative strength. Indicators of the quality of roads, costs of transport and provision of electricity are all relatively favorable. In addition, information and communication technology infrastructure, airports and ports meet current demand. At the same time, some specific infrastructure investments would likely to improve Tunisia's growth prospects in the future—in particular, greater port capacity and efficiency to support future growth in international trade. In addition, other transport infrastructure linking productive regions and urban centers and better connecting suburban and urban areas may be economic viable, but without further feasibility studies, it is not possible to say.[11] Based on relatively adequate supply of infrastructure to support investment, there is no indication than a lack of infrastructure at the national level poses a binding constraint to Tunisia's growth.

Finally, Tunisia has some clear advantages in the area of natural capital. It enjoys relatively abundant arable land per capita, valuable phosphate resources and a favorable geographic position on the Mediterranean Sea, which allows it to trade easily with Europe and other Mediterranean countries. At present, Tunisia also possesses adequate water resources. However, more sustainable water resource management will become increasingly important as global warming and water scarcity intensify. Nonetheless, at present a lack of natural capital does not represent a binding constraint to Tunisia's national economic growth.

Rather than a high cost of financing or lack of complementary factors, Tunisia's economy is mainly constrained by the risks and distortions which potential investors face in appropriating the returns to their investment and entrepreneurial endeavors. Under the former regime, the lack of effective institutions to ensure public sector accountability, the rule of law and checks and balances on power has resulted in weak protection of property rights, barriers to entry and competition and high costs and risks of corruption. Prior to the revolution, Tunisia scored relatively poorly on third-party indicators of public sector accountability and the rule of law; for example, 48 out of 100 on Global Integrity's score on "Corruption and the Rule of Law" and 17 out of 100 on their Government Accountability score. Corruption has been an issue in Tunisia for years, but as high-level corruption grew under the previous regime, businesses had increasing reason to believe that a large share of their profits could be effectively expropriated if they were seen to be too successful. Although the regime is gone, additional institutional and political reforms to provide accountability and strong rule of law are still needed. Business groups and enterprise surveys continue to emphasize the costs of corruption and importance of reducing it. At the same time, barriers to entry without a clear policy rationale have not yet been removed, and have impeded healthy competition and dynamic productivity growth in both domestic and export sectors, and enterprises continue to rate the abuse of dominant market positions among the top obstacles to doing business.

There is clear evidence based on the available tests that the high fiscal and regulatory costs of employing workers represent a binding constraint to growth as well. Despite the important intent behind Tunisia's labor market requirements, in fact the current system results in reduced employment economy-wide; reduced labor productivity and wage growth; increased prevalence of small, low-return, informal activities; reduced growth; and created a more

11 There were not sufficient data available to test for high excess demand in any of the nation's roads outside the main urban areas, but urban congestion appears to be a growing issue.

unequal sharing of growth. Many workers are employed informally, and Tunisian firms utilize other measures to an unusual degree in order to avoid some formal requirements of employing workers, including subcontracting and part-time work, to circumvent various requirements. In addition, firm size in Tunisia is out of line with international comparators, especially for Tunisia's level of income: The high fraction of firms which have fewer than six workers indicates that larger firms tend not to thrive in the Tunisian economy. The formal requirements of employing workers make it unprofitable for firms to employ more of them or in many cases to invest at all. Small, less productive Tunisian firms are ultimately much less likely to grow to a scale or level of sophistication which allows them to compete internationally.

There are three key policy areas creating this situation. First, payroll taxes do not encourage employment. Payroll tax rates for firms serving the domestic market approach 30 percent of payroll, without including the 9.18 percent contributed by workers, and as a share of profits are considerably higher than in comparator countries. Secondly, the lack of flexibility in the labor market, particularly regarding open-ended contracts, raises the costs and risks of employing workers in the first place and, like other restrictive labor market policies, reduces the demand for labor. Doing Business places Tunisia 110th in the world in overall labor market flexibility (in 2010) and 181st out of 183 countries in the flexibility of dismissing workers (in 2012). Thirdly, the current wage determination system adversely impacts employment levels and in combination with the other two policy areas reduces wages in the private sector: Many who are successful in finding employment are paid less than the applicable minimum wage. Centrally negotiated wages may protect certain workers, but where they are higher than labor productivity in a given firm, they decrease demand for employees. Firms surveyed in the most recent world competitiveness survey report a low correspondence between pay and productivity (with a rank of 81st out of 143 countries) and a relatively low degree of flexibility in wage determination (119th in the world), relative to all comparator countries. All these facts highlight the need for the renegotiation of the social contract to allow formal employment to expand in a manner which benefits both firms and workers.

Finally, there is an additional potential constraint to consider—market failures surrounding technological and product innovation. Tunisia's performance in innovating and diversifying has been solid, if disappointing in some dimensions. Tunisia's economy has undergone significant structural changes, shifting from large shares in agriculture and mining and towards growing shares by the manufacturing and services sectors and has successfully diversified its export product mix and increased the technological content of its exports, including in the mechanical and electrical sectors. By some measures of export sophistication or product uniqueness, Tunisia has fallen short of its potential to export products which contain higher value added. However, this is despite the leading position Tunisia held in export sophistication in 1980 (and 1960), which should have boosted growth in value-added exports if market failures were the crucial driver of sub-par innovation. At the same time, Tunisia has pursued an active industrial policy to promote innovation and export growth, in part by providing direct subsidies and tax breaks for new businesses, which should address market failures in innovation to a great extent. Rather, based on the evidence available, other factors which limit appropriability— namely, weak protection of investor returns, barriers to entry and competition and impediments to employing workers at a sufficient scale—are likely to present the most severe obstacles to an investor attempting to innovate.

Organization of the Report

The rest of the report provides the factual and contextual underpinnings to the diagnostic, as well as a more detailed presentation of the evidence. To frame the diagnosis, Chapter 2 first provides context on recent economic trends and the main weaknesses in Tunisia's recent economic performance. Chapters 3 through 9 present the results under each topic shown on the analytical tree, with more detailed conclusions and general policy recommendations on many of the major issues identified.

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