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Djibouti's Quest for Inclusive Growth

by Alexei Kireyev

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I N T E R N A T I O N A L M O N E T A R Y F U N D

IMF Working Paper

Middle East and Central Asia

Djibouti's Quest for Inclusive Growth

Prepared by Alexei Kireyev

Authorized for distribution by Daniela Gressani

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Abstract

The paper reviews Djibouti's macroeconomic reforms aimed at achieving middle-income status as envisaged in *Vision Djibouti 2035*, the authorities' development strategy. In this context, the paper reviews policy options available to the authorities in three critical reform areas: translating the investment boom into strong and inclusive growth to reduce poverty and unemployment; fiscal policy to support growth while preserving debt sustainability; and the important role of the business climate in growth acceleration.

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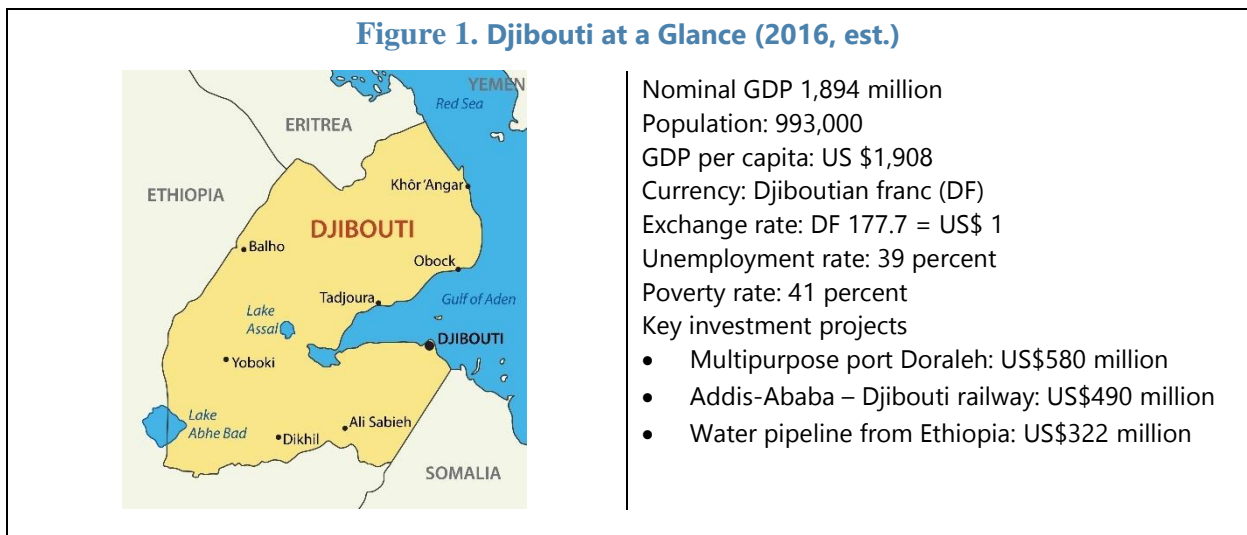
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OVERVIEW

Djibouti is a small low-income country in a strategically important geopolitical location in the Horn of Africa. Historically, Djibouti has been a gateway to East Africa, a maritime cross-road for trade, and a refueling and transshipment center. Its deep-water port has served as the transit point for neighboring landlocked Ethiopia and as a transshipment hub for other East African countries with fewer port facilities. In addition, Djibouti's strategic location close to major maritime transportation routes, conflict areas in the Middle East, and piracy activity zones, coupled with its relative political stability, has made it an important location for foreign military bases (Figure 1). As a result, its economy has long relied on port services, logistics, and rents from military bases.

However, the advantages of the strategic location have yet to be exploited in full. Growth in the past has been uneven and insufficiently high and broad-based to lift the population from poverty and provide enough jobs.



To address these challenges, the authorities have developed a strategy called “Vision Djibouti 2035” which aims to transform the country into a middle-income economy and a logistics and commercial hub for East Africa. The strategy includes large-scale public sector investments focused on infrastructure—such as new ports, airports, free-trade zones, a railroad to Ethiopia, and a water pipeline—and targets a medium-term growth of 7.5–10 percent per year, tripling per capita income, and reducing unemployment.

Early results of these efforts are encouraging. Growth is estimated to have reached 6.5 percent in 2016, driven by public sector investments. For 2017–19, growth is projected to increase further, supported by the railroad, the multipurpose port, and other public investment, which should stimulate private sector activity and foreign direct investment.

While the ambitious increase in infrastructure investment has contributed to a broadly favorable outlook for Djibouti, it has also elevated fiscal and debt vulnerabilities. Despite higher growth, Djibouti is now at a high risk of debt distress as most of its infrastructure investments have been financed externally, mainly by Chinese financial institutions and investors. In 2015–16 alone, Djibouti’s public external debt increased from 50 to 85 percent of GDP and all debt sustainability indicators are projected to remain above their vulnerability thresholds for a prolonged period. In addition, rising debt service obligations present considerable fiscal risks and could also crowd out priority social and poverty-reducing spending.

Fully aware of the opportunities as well as the risks ahead, the authorities acknowledge the need to implement critical, complementary reforms aimed at translating investment into strong, inclusive, and job-creating growth and returning debt to a sustainable trajectory. Key policy priorities include strengthened debt policy and management; tax reform to broaden tax bases; and wide-ranging structural reforms to improve the efficiency and governance of public enterprises and strengthen the business climate.

In a gamut of policy challenges facing the authorities, a few stand out: creating jobs and reducing poverty, solidifying public finances, and improving the business climate. Without addressing these challenges as a matter of priority, other reforms may not bring about their expected benefits or their positive impact would be considerable reduced.

Against this background, this paper reviews some of the policy options available to the authorities in three critical reform areas: (i) translating the investment boom into strong and inclusive growth to reduce poverty and unemployment; (ii) fiscal policy to support growth while preserving debt sustainability; and (iii) the important role of the business climate in growth acceleration.

Accordingly, section 1 examines the poverty-reducing and distributional characteristics of Djibouti’s economic growth, and discusses policies that might help make growth more inclusive. The analysis suggests that while in the past decade the overall level of poverty in Djibouti has declined, there have been no clear signs of improvements in either equality or growth inclusiveness. Growth has not been inclusive and has benefitted mainly those in the upper part of the income distribution, as most of the large investment projects are capital intensive. Progress in poverty reduction and inclusiveness would require macroeconomically sound policies to preserve sustained high growth and the creation of job opportunities for the poor in sectors with high earning potential. Better targeted social policies and more attention to the regional distribution of spending would also help.

Section 2 looks at options for fiscal policy to support growth while restoring debt sustainability. The large-scale debt-financed public investment program is seen by the authorities as key to quickly increase growth, lift the country out of poverty, and transform Djibouti into a regional logistical hub. However, this has led to a surge in public debt, which

will likely continue as project disbursements continue and new debt-financed projects are launched. The section recognizes the policy trade-offs and proposes ways to open fiscal space for growth-enhancing spending while setting debt anchors to guide fiscal policy toward medium-term debt sustainability. Such anchors have proven beneficial in comparator countries to restore debt sustainability over the longer term. Sustained high growth would improve debt dynamics and expand opportunities to create fiscal space, while permitting a more moderate pace of fiscal consolidation.

The final section argues that improving the business climate is one of the most critical factors to increase growth in Djibouti. The goal to transform the country into a middle-income economy is ambitious, yet achievable if fundamental reforms are designed and implemented steadfastly. However, large-scale investment in infrastructure and service exports, while important, may not be sufficient to reach middle-income status unless it is supported by strong improvements in the business climate. International experience of comparator countries, which in the early 1990s had a level of per capita income comparable to that of Djibouti today, suggests that doubling and even tripling per capita GDP requires persistently sound macroeconomic policies accompanied by decisive business environment reforms to unlock private investment and growth in new sectors. In this regard, a simple growth model suggests that Djibouti needs to improve its business environment, as captured by the World Bank Doing Business rank, at least twofold, in addition to recent gains. Further reforms of public enterprises would help reduce the cost of key production factors, notably energy and communication, which would also improve the business environment.

MAIN FINDINGS AND RECOMMENDATIONS

Transforming Djibouti into a middle-income economy within the next 20 years is ambitious, yet achievable. It would require a sustained annual GDP growth rate of about 7 percent—higher than in recent years. Experience of comparator countries suggests that doubling and even tripling per capita GDP requires persistently sound macroeconomic policies accompanied by strong business environment reforms to unlock new private sector activity.

Sustained high growth and well-designed public policies are key for promoting inclusiveness. Poverty declined during the past decade but remains high, and there have been no clear signs of improvements in inclusiveness—rather, all indicators point to growth benefitting mainly those in the upper part of the income distribution. In addition to sustaining high growth, policies need to pay attention to its distributional aspects, including to protect the poor and vulnerable populations from transitional costs of reforms.

Fiscal policy in Djibouti needs to walk the narrow path between supporting growth and restoring debt sustainability. To preserve growth in a high-debt environment, the authorities need to implement growth-friendly tax reforms that increase revenue, reduce the burden on the poor, and level the playing field across businesses, while also rebalancing expenditure toward items with high growth multipliers, such as capital expenditure.

Structural public finance reforms could also support growth and help restore debt sustainability. Medium-term budgeting integrated with a DSA, better fiscal transparency, the introduction of the GFSM 2001/14, could give the authorities better visibility of their resources and their uses. Also, the use of contingency mechanisms, such as the precautionary reserve envelope, could help improve the efficiency of public investment.

To preserve fiscal and debt sustainability, Djibouti could consider introducing fiscal and debt rules. The need and configuration of such rules may require a broad national consensus. The significant technical preparatory work needed for the introduction of such rules could draw on technical assistance from the Fund and on the experience of peers.

Improvement in the business environment is one of the most critical factors for growth, and could also contribute to inclusiveness. Reforms of the business climate should target those areas where Djibouti underperforms relative to its average rank, in particular, the energy sector, getting credit, taxation, investor protection, and property rights.

I. GROWTH INCLUSIVENESS IN DJIBOUTI

This section examines the poverty-reducing and distributional characteristics of Djibouti's economic growth in recent years, and discusses policies that might help make growth more inclusive. It covers the period between 2002 and 2013, for which broadly comparable household surveys are available. The main findings are that while in the past decade the overall level of poverty in Djibouti declined, there have been no clear signs of improvements in growth inclusiveness as measured by changes in inequality. While data limitations do not allow for definitive and highly statistically significant estimates of distributional changes, all indicators point to the conclusion that growth has not been inclusive and has benefitted mainly those in the upper part of the income distribution. Looking forward, greater poverty reduction and inclusiveness would require not only sustained high growth but also the creation of opportunities in sectors with high earning potential for the poor and less-qualified workers. Better targeted social policies would also help reduce poverty and improve inclusiveness. The role of fiscal policy and the business environment is discussed in Section 2 and 3.

A. Introduction

1. **This section analyzes the inclusiveness of growth in Djibouti and draws policy conclusions.** Inclusive growth is defined here as growth that helps reduce inequality across all dimensions – between rich and poor, males and females, and urban and rural areas. Correspondingly, the rate of poverty reduction is split into growth and distributional components.
2. **The analysis is based mainly on national data.** Two surveys of household budgets and consumption (EDAM-IS) conducted by the Djiboutian Directorate of Statistics and Demographic Studies (DISED) in 2002 and 2013, although not fully comparable¹, contain sufficient information for analyzing growth inclusiveness in Djibouti. The 2015 surveys on employment, informal sector and household consumption (EDESIC 2015–16), and a survey of the employment situation were used as supplementary sources on labor market outcomes.
3. **The section concludes that growth in Djibouti in the past decade has led to a reduction of poverty but not inequality.** Overall poverty fell from 47 to 41 percent but the change in extreme poverty—from 24 to 23 percent—is smaller and not statistically significant. The decomposition of the change in poverty between 2001 and 2013 shows that the richest groups of the population benefitted from growth more than the poorest, with the negative impact of the distributional component largely offsetting the benefits of economic growth for the poor. Had inequality not increased, poverty reduction in the past decade, particularly for extreme poverty, would have been faster and deeper. Public policies, in

¹ The 2013 household survey collected more detailed data on food consumption, and focused more on urban population than the 2002 survey.

particular fiscal and structural, have a significant role to play in making growth more inclusive.

B. Factors of Growth Inclusiveness

Growth and Employment

4. **Djibouti's economic growth in the past decade has averaged 4 percent**, but fluctuated sharply from 1.6 percent during the crisis of 2009 to over 6 percent in recent years with the start of a massive investment program largely financed by borrowing from China (Figure 1). With an average population growth of about 2.8 percent, real growth in per capita terms has been positive for most of the period except for 2009. Under current forecasts of moderate but improving global economic conditions and with strong policy performance in Djibouti, growth is projected to remain robust, including in per capita terms. Both growth and population data rely on estimates, as national accounts and demographic statistics are not sufficiently developed.²

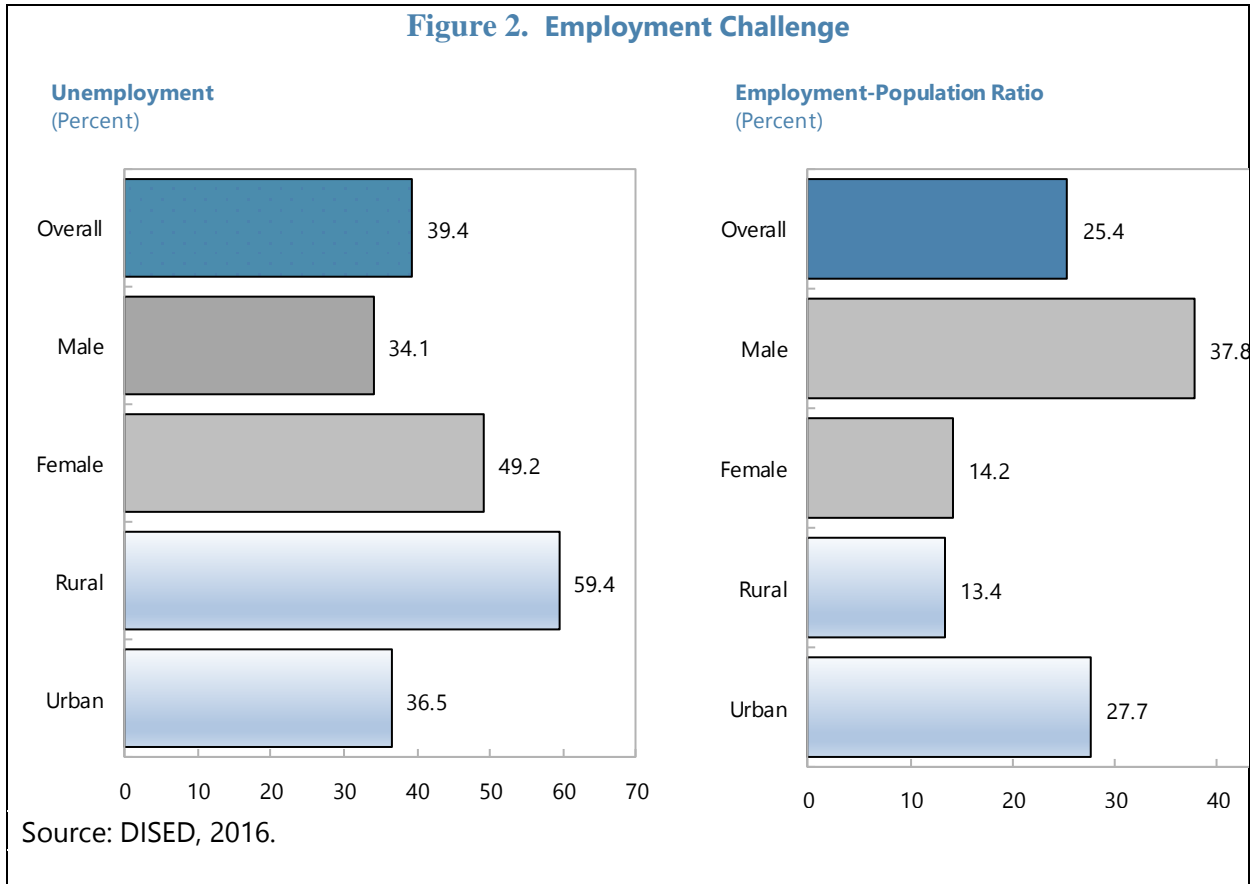
5. **Djibouti's demographics and labor market are challenging.** Despite a young population—75 percent are younger than 35—the economic participation rate is only 62 percent. The majority of the economically inactive population is young, urban and has little education. Gender inequality in the labor market remains substantial, with only 29 percent of women aged 15 to 64 active in the labor market and only 54 percent of women with at least three years of university studies in the labor market (compared to 76 percent of men). Migration is putting additional pressure on the already tight labor market, and is likely to be higher than the reported 13 percent, exacerbated by the inflow of refugees from the Yemen conflict (DISED, 2016).

6. **Unemployment is one of the highest in the world.** The unemployment rate³ was estimated by the authorities' survey of employment, the informal sector, and household consumption at 39 percent in 2015 (Figure 2). It is higher among women (49 percent) than men (34 percent), and in rural areas (59 percent) than in urban areas (37 percent). Youth unemployment (15-35 years old) is much higher than the overall unemployment rate (76 percent). The employment-to-population ratio is low, about 25 percent. Again, disparities are very large between male and female participation rates and between rural and urban areas,

² Djibouti: 2016 Article IV Consultation (IMF Country Report No. 17/87) found that the data provided to the Fund were broadly adequate for surveillance but shortcomings remained. While progress is being made on revising the national accounts, inadequate data sources hamper their quality. Fiscal data are reported with delays and there are no aggregated data on the accounts and contingent liabilities of public enterprises. Staff recommended strengthening national accounts and fiscal statistics based on the recommendations of IMF technical assistance.

³ In the national definition, an unemployed is a person of 15 to 54 years of age, who has not worked for 7 days, is available to work, and has been looking for a job during for at least 30 days (DISED 2016).

with women and people living in rural areas characterized by substantially lower participation rates (DISED, 2016).



7. **Much of the dire employment situation results from the underdeveloped private sector.** The public sector—which is already oversized—cannot generate enough jobs for new entrants and the unemployed. The public sector provides 60 percent of jobs, of which 46 percent in the central government and 14 percent in public enterprises. The private sector employs 30 percent (10 in the formal and 20 percent in the informal sector) and the remaining 10 percent are self-employed (DISED, 2016). Moreover, economic growth in the past few years has been driven by capital-intensive investment in the ports and related activities, with limited trickle-down effects. Many of the jobs created have been taken by expatriates, because of a low domestic skills base. Other activities remain underdeveloped. Agriculture, the primary source of livelihood in most low-income countries, is miniscule because of the unfavorable climate. Services—the main driver of growth in recent years—and construction activities account for only about 13 percent of formal employment. The business environment remains difficult because of high costs of starting a business, weak contract enforcement, red tape, and low access to finance.

Consumption and incidence of poverty

8. The poverty rate is calculated in relation to the Djibouti-specific poverty line.

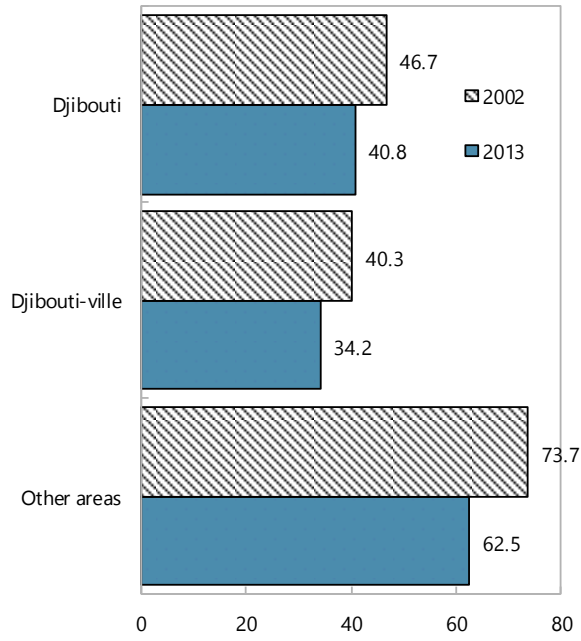
The line—which was revised between 2002 and in 2013—is calculated based on the price of a basket of food that would provide an adult consumer with 2115 kilocalorie daily (the food poverty line) augmented for a regression-estimated nonfood income needed to get the minimum necessities of life, such as basic clothing and shelter. The extreme poverty line is set equal to the food poverty line, based on the assumption that extremely poor household would substitute food consumption with nonfood needs. The 2013 overall poverty line in Djibouti was calculated at DJF 147,936 and the extreme poverty line at DJF 98,709 on a per capita annualized basis (DISED, 2013a).

9. The overall and extreme poverty rates in Djibouti in 2013 were high, at 41 percent and 23 percent, respectively. With moderate economic growth over the last decade (Figure 3), the overall poverty rate fell during 2002–13 from 47 percent to 41 percent, while the decline in extreme poverty was only from 24 to 23 percent (DISED 2013a) and may not be statistically significant at the 0.05 level.

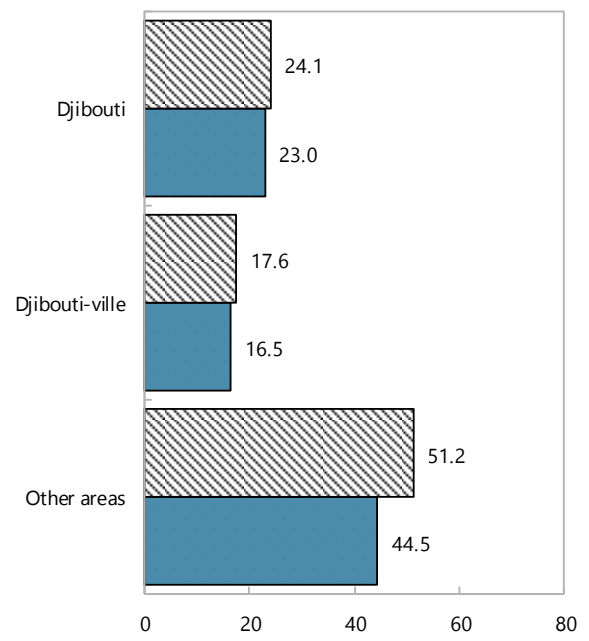
10. Regional poverty incidence varies widely, with poverty rates higher in rural areas than in urban centers. In 2013, in Djibouti-ville, the capital of the country, and other cities, where 82 percent of the population reside, overall poverty stood at 34 percent and extreme poverty at 17 percent, whereas in the rest of the country, mainly in rural regions, about 63 percent of the population lived in poverty and 45 percent in extreme poverty (DISED, 2013a). The Ali Sabieh and Obock regions have the highest levels of poverty.

Figure 3. Poverty Rates and Gaps, 2002–13
(Percent)

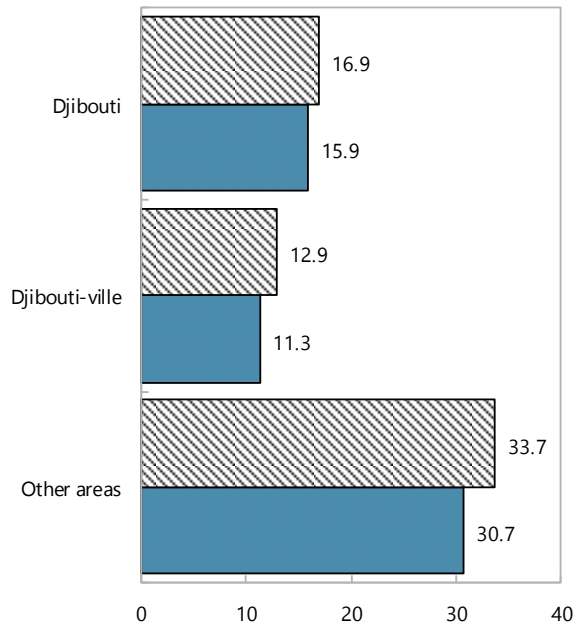
Overall Poverty



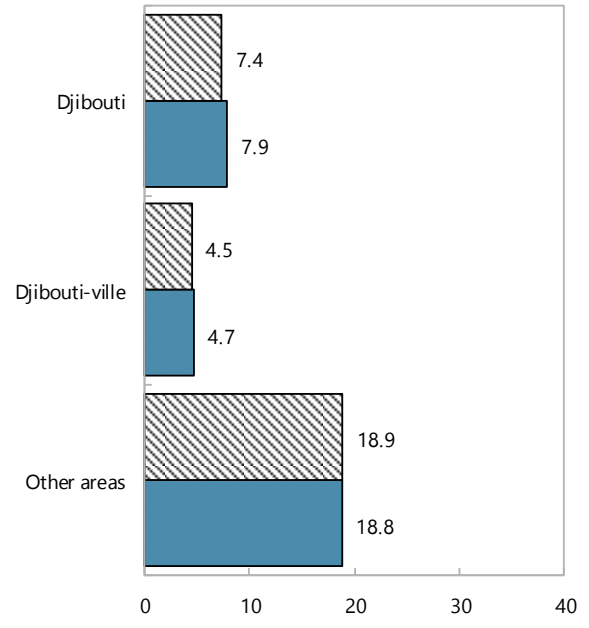
Extreme Poverty



Overall Poverty Gap

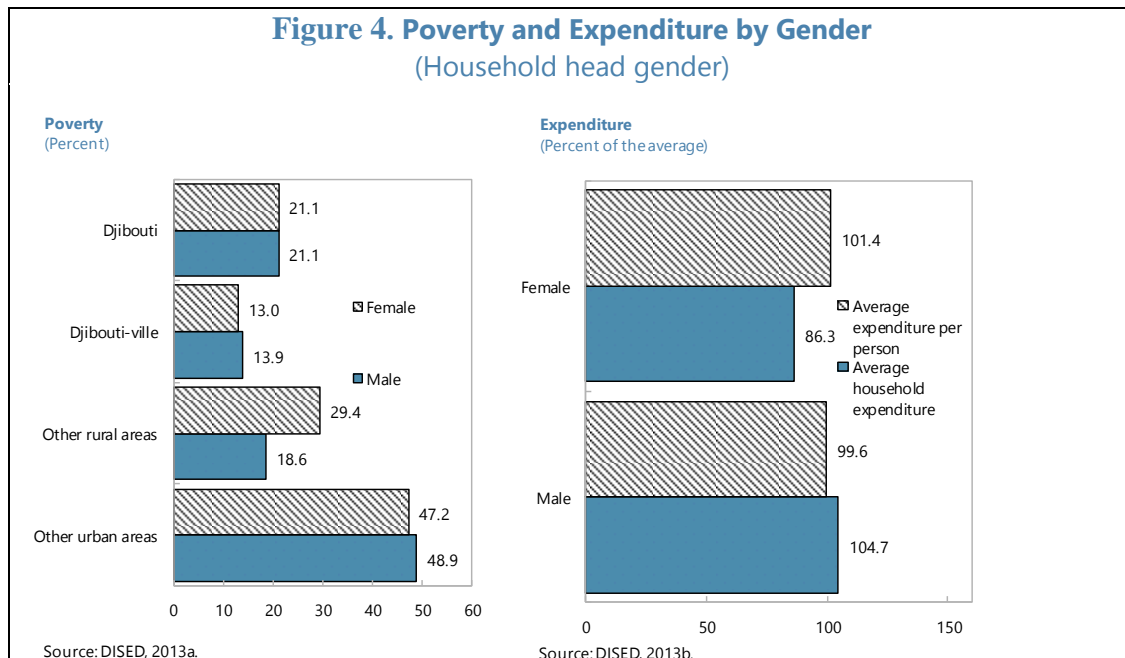


Extreme Poverty Gap



Source: DISED, 2013a.

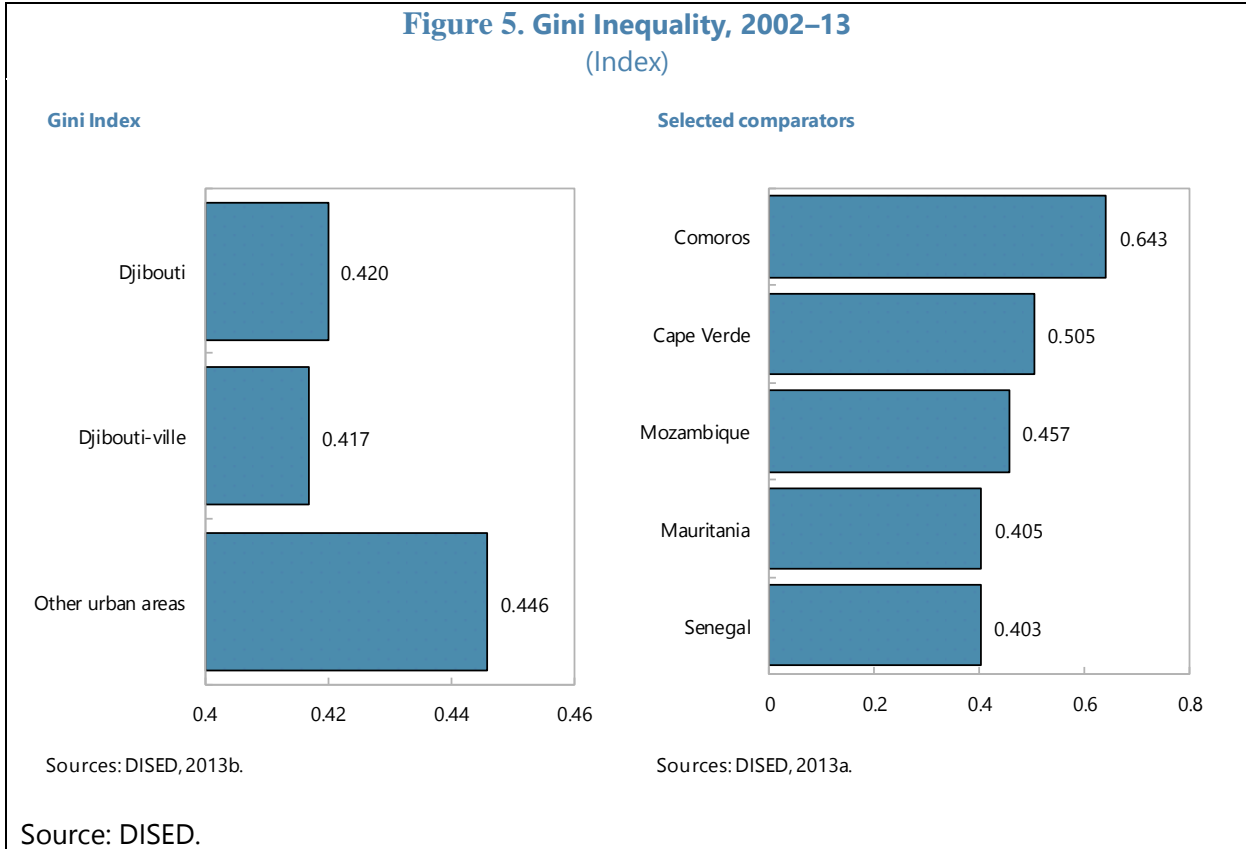
11. **Gender is not a major factor in the incidence of poverty.** The overall poverty rate for female-headed households (which are about 19 percent of total households) is 21 percent, same as for male-headed households (Figure 4). There are no significant differences in poverty between female and male-headed households in the capital and in other cities. At the same time, the difference is large in rural areas, where the poverty rate of female-headed households is 29 percent compared to 17 percent for male-headed households. In terms of expenditure, the average expenditure per person is broadly equal in both types of households. However, averages of household expenditures in male-headed households are significantly higher than in female-headed households, 105 percent relative to 86 percent of the average suggesting that an average male-headed household includes more persons.



12. **There was no statistically significant change in the overall and extreme poverty gaps.** The poverty gap measures the depth of poverty and is calculated as the mean distance between the consumption of the average (overall or extreme) poor household and the (overall or extreme) poverty line, expressed in percent of the poverty line.

Inequality and Distribution

13. **Inequality in household consumption remains high and is increasing.** The 2013 government household survey estimated the Gini index at 0.44, an increase from 0.39 in 2002 (Figure 5). Based on the Gini index, inequality is more pronounced in rural areas than in the capital, although the differences are not large. Compared with other African economies, inequality in Djibouti is higher than in Mauritania, Senegal, or lower-middle-income countries more broadly (0.414 on average for 2005–12), but lower than in Comoros, Cape Verde, Mozambique, and some other comparator countries (DISED, 2013a).



C. Inclusive Growth Diagnostics

Measures of Growth Inclusiveness

14. **Growth is usually considered inclusive if its benefits are widely shared across the population.** Although there is no commonly accepted definition, inclusive growth usually refers to growth that provides equal opportunities while social policies redress inequalities in outcomes, so that all segments of society can share in the benefits of growth (see IMF, 2013, for an overview). For analytical purposes, growth is inclusive if it is high, sustained over time, and broad based across sectors; creates productive employment opportunities; and benefits a large part of a country's population. Additional dimensions of inclusive growth regard gender equality, regional differences, and empowerment of the poor. Inclusive growth requires also inclusive institutions. In this section growth is considered inclusive if it helps improve equality.

15. **Data availability and quality limit the analysis of growth inclusiveness.** Such analysis requires at least two household surveys based on a comparable methodology, as well as data on income and consumption by households, which is difficult to collect in Djibouti because a substantial share of the population is employed in the informal sector (Foster and

others, 2013).⁴ The statistical treatment of outliers at both tails of the distribution—which have been routinely corrected in Djibouti’s household surveys—may lead to negative growth rates of the incidence curve for both tails of the distribution in some years. These and other methodological limitations are being addressed, as the World Bank has provided support to the Directorate of Statistics and Demographic Studies (DISED) for the 2017 household income and expenditure survey (EDAM). The strategy for this survey aims to apply best practices to understand better household consumption patterns and capture their ability to meet basic needs. The target is to produce reliable indicators, at the national level and disaggregated by region, gender, vulnerability status, etc. The overarching objective is to enhance Djibouti’s welfare monitoring systems and its ability to inform policymaking. Future analyses of growth inclusiveness will benefit from this work.

16. The analysis of growth inclusiveness in Djibouti should be treated with caution.

As noted earlier, comparisons over time are affected by the different approach to collecting food consumption data between the two household surveys used in the calculations (Lara Ibarra and Contreras, 2016). Both food and nonfood components of consumption were estimated based on more detailed questionnaires in the 2013 survey compared to the 2002 survey. Different methods were also used to estimate housing expenditure, whose importance grows with the level of development. Lastly, some coefficients estimated by econometric models are not statistically significant and are outside the conventional confidence intervals.

Change in Poverty: Growth and Distribution Effects

17. As a first step toward growth inclusiveness diagnostics, the change of the poverty rates can be decomposed into the growth and distributional effects. Following Datt and Ravallion (1992), the poverty rate P_t can be expressed as:

$$P_t = f(z/\mu_t, L_t) \quad (1.1)$$

where z is the country poverty line, μ is the mean income and L_t is the Lorenz curve⁵ at time t , representing relative inequalities. From (1.1) it is seen that the poverty rate may change either because the change in the mean income or relative inequality. Intuitively, a generalized salary increase raises the mean income and improves the poverty rate relative to the fixed poverty line for any fixed distribution; a transfer from the richest household to the poorest household reduces poverty by improving distribution with no change in the mean income.

⁴ The 2016 survey estimates that the informal sector employs about 20 percent of the economically active population, compared with 46 percent employed by the public administration and 14 percent by public enterprises (DISED, 2016).

⁵ A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household.

18. **Therefore, the change of the poverty rate over time $P_{t+n} - P_t$ can be decomposed into a growth effect and a distribution effect.** The growth effect G is defined as the change in poverty because of a change in the mean income of the distribution, while assuming that the Lorenz curve that reflects relative income inequalities does not change L_r . The distribution effect D is defined as a change in poverty because of the change in relative income inequality, while assuming the mean income does not change. R is a residual.

$$P_{t+n} - P_t = G(t, t+n; r) + D(t, t+n; r) + R(t, t+n; r) \quad (1.2)$$

From (1.1 and 1.2), the growth effect is defined:

$$G(t, t+n; r) \equiv P(z / \mu_{t+n}, L_r) - P(z / \mu_t, L_r) \quad (1.3)$$

and the distribution effect is defined as:

$$D(t, t+n; r) \equiv P(z / \mu_r, L_{t+n}) - P(z / \mu_r, L_t) \quad (1.4)$$

In both cases, there are residuals.

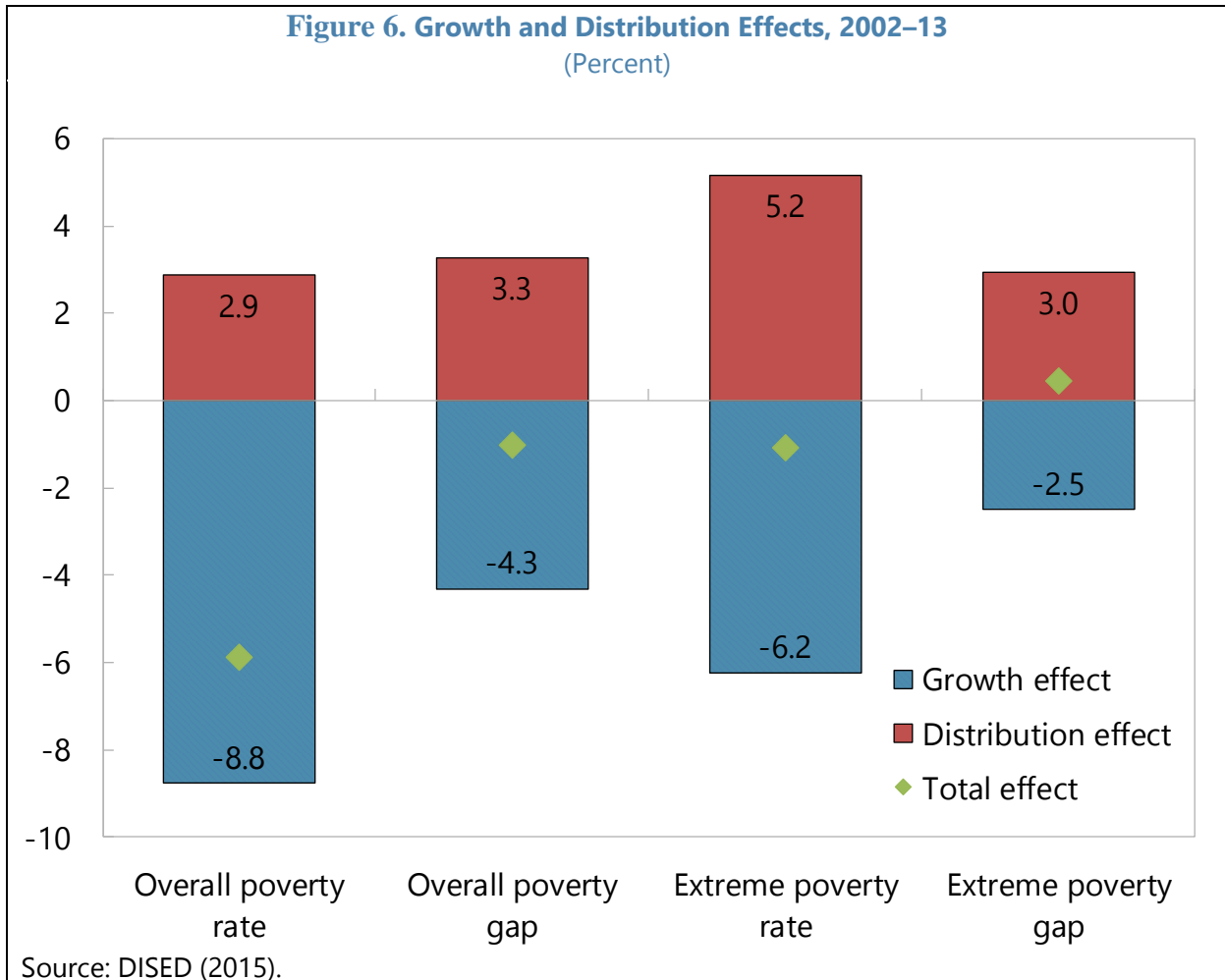
19. **For Djibouti, the composition of the change in the poverty rate into two effects can be derived using the 2002 and 2013 household surveys.** Generically (Datt and Ravallion, 1992), the poverty rate can be calculated as:

$$P_\alpha = \sum_{y_i < z} [(z - y_i) / z]^\alpha / n \quad (1.5)$$

where y_i is income of household i , z is the poverty line, n is the population size, and α is a positive switch parameter. If $\alpha = 0$, the headcount poverty index is calculated, i.e., the proportion of the population that is poor; If $\alpha = 1$, the poverty gap index is calculated, i.e., the aggregate income shortfall of the poor as a proportion of the poverty line and normalized by the population size. After this normalization, the growth and distribution effects can be calculated directly from 1.3 and 1.4.

20. **This decomposition confirms that in the past decade in Djibouti the poverty-reducing effect of growth has been countered by an adverse distribution effect.** Therefore, the two effects impacted the poverty rate in opposite directions during 2002-2013. The overall poverty rate dropped by 5.9 percentage points (ppts), of which the growth effect contributed 8.8 ppts, while the distribution effect worked in the opposite direction and subtracted 2.9 ppts (Figure 6). The improvement in extreme poverty—which is also not

statistically significant—was marginal, only 1 ppts, as most of the gains for poverty reduction from growth were offset by losses from the distribution effect.



21. **The impact of the growth and distribution effects on the poverty gap was again of similar size and opposite direction.** The improvement in the overall poverty gap was marginal, not statistically significant, at about one percentage point. In this case, again the positive contribution of the growth effect was almost entirely offset by a negative impact of the distribution effect. For the extreme poverty, the gap actually increased by about 0.5 percentage points as the contribution of the statistically significant distribution effect was strongly negative and could not be offset by the growth effect.

22. **At a more granular level, different approaches to the calculations of both growth and distribution effects give broadly similar results.** Period 1 refers to 2002, period 2 refers to 2013, the reference years when mean income is held constant to get the redistribution effects and when the distribution is held constant to calculate the growth effect (Figure 7). The Shapley method takes both years as reference and divides them by two to get the average level of effects (for details, see DASP Manual, 2013).

Figure 7. Growth and Distribution Effects by Poverty Measure and Approach, 2002–13

a. Overall Poverty Headcount					b. Overall Poverty Gap									
Parameter alpha : 0		Threshold:		2002	2013	Parameter alpha : 1		Threshold:		2002	2013			
Poverty line :				94,636	147,936	Poverty line :				94,636	147,936			
	Estimate	St. error	Lower bound	Upper bound		Estimate	St. error	Lower bound	Upper bound		Estimate	St. error	Lower bound	Upper bound
Distribution_1	0.4670	0.0213	0.4251	0.5089	Distribution_1	0.1689	0.0105	0.1482	0.1896	Distribution_1	0.1689	0.0105	0.1482	0.1896
Distribution_2	0.4081	0.0223	0.3641	0.4520	Distribution_2	0.1586	0.0104	0.1383	0.1790	Distribution_2	0.1586	0.0104	0.1383	0.1790
Difference: (d2-d1)	-0.0589	0.0454	-0.1483	0.0304	Difference: (d2-d1)	-0.0103	0.0210	-0.0517	0.0311	Difference: (d2-d1)	-0.0103	0.0210	-0.0517	0.0311
Datt & Ravallion approach: reference period t1					Datt & Ravallion approach: reference period t1					Datt & Ravallion approach: reference period t1				
Growth	-0.0908	0.0542	-0.1976	0.0159	Growth	-0.0434	0.0240	-0.0907	0.0038	Growth	-0.0434	0.0240	-0.0907	0.0038
Distribution	0.0256	0.0550	-0.0825	0.1338	Distribution	0.0326	0.0150	0.0031	0.0620	Distribution	0.0326	0.0150	0.0031	0.0620
Residual	0.0063	---	---	---	Residual	0.0006	---	---	---	Residual	0.0006	---	---	---
Datt & Ravallion approach: reference period t2					Datt & Ravallion approach: reference period t2					Datt & Ravallion approach: reference period t2				
Growth	-0.0845	0.0342	-0.1518	-0.0173	Growth	-0.0428	0.0143	-0.0709	-0.0148	Growth	-0.0428	0.0143	-0.0709	-0.0148
Distribution	0.0319	0.0440	-0.0546	0.1184	Distribution	0.0331	0.0206	-0.0073	0.0736	Distribution	0.0331	0.0206	-0.0073	0.0736
Residual	-0.0063	---	---	---	Residual	-0.0006	---	---	---	Residual	-0.0006	---	---	---
Shapley approach					Shapley approach					Shapley approach				
Growth	-0.0877	0.0283	-0.1434	-0.0319	Growth	-0.0431	0.0419	-0.1255	0.0392	Growth	-0.0431	0.0419	-0.1255	0.0392
Distribution	0.0288	0.0236	-0.0176	0.0751	Distribution	0.0329	0.0173	-0.0011	0.0668	Distribution	0.0329	0.0173	-0.0011	0.0668
c. Extreme Poverty Headcount					d. Extreme Poverty Gap									
Parameter alpha : 0		Threshold:		2002	2013	Parameter alpha : 1		Threshold:		2002	2013			
Poverty line :				63,145	98,709	Poverty line :				63,145	98,709			
	Estimate	St. error	Lower bound	Upper bound		Estimate	St. error	Lower bound	Upper bound		Estimate	St. error	Lower bound	Upper bound
Distribution_1	0.2411	0.0172	0.2073	0.2750	Distribution_1	0.0741	0.0061	0.0621	0.0860	Distribution_1	0.0741	0.0061	0.0621	0.0860
Distribution_2	0.2304	0.0179	0.1951	0.2657	Distribution_2	0.0785	0.0065	0.0658	0.0913	Distribution_2	0.0785	0.0065	0.0658	0.0913
Difference: (d2-d1)	-0.0107	0.0363	-0.0821	0.0606	Difference: (d2-d1)	0.0045	0.0128	-0.0208	0.0297	Difference: (d2-d1)	0.0045	0.0128	-0.0208	0.0297
Datt & Ravallion approach: reference period t1					Datt & Ravallion approach: reference period t1					Datt & Ravallion approach: reference period t1				
Growth	-0.0635	0.0360	-0.1344	0.0073	Growth	-0.0234	0.0123	-0.0477	0.0009	Growth	-0.0234	0.0123	-0.0477	0.0009
Distribution	0.0506	0.0443	-0.0365	0.1378	Distribution	0.0311	0.0107	0.0101	0.0522	Distribution	0.0311	0.0107	0.0101	0.0522
Residual	0.0021	---	---	---	Residual	-0.0033	---	---	---	Residual	-0.0033	---	---	---
Datt & Ravallion approach: reference period t2					Datt & Ravallion approach: reference period t2					Datt & Ravallion approach: reference period t2				
Growth	-0.0614	0.0285	-0.1174	-0.0053	Growth	-0.0267	0.0091	-0.0446	-0.0088	Growth	-0.0267	0.0091	-0.0446	-0.0088
Distribution	0.0528	0.0317	-0.0096	0.1152	Distribution	0.0279	0.0116	0.0051	0.0506	Distribution	0.0279	0.0116	0.0051	0.0506
Residual	-0.0021	---	---	---	Residual	0.0033	---	---	---	Residual	0.0033	---	---	---
Shapley approach					Shapley approach					Shapley approach				
Growth	-0.0625	0.0344	-0.1301	0.0051	Growth	-0.0250	0.0414	-0.1066	0.0565	Growth	-0.0250	0.0414	-0.1066	0.0565
Distribution	0.0517	0.0217	0.0089	0.0945	Distribution	0.0295	0.0110	0.0079	0.0511	Distribution	0.0295	0.0110	0.0079	0.0511

Source: DISED (2016) EDAM and EBC databases.

23. **All measures and approaches, other than the extreme poverty gap index, suggest that poverty declined.** The extreme poverty gap shows an increase of about 0.4 percent, as the distribution effect that increases poverty dominates over the growth effect that reduces poverty. All other cases show a reduction of poverty, although small, at about 5.9 ppt for the overall poverty headcount, 1 ppt for the overall poverty gap, and 1.1 ppt for the extreme poverty headcount. Absent the distribution effect, which in all cases affected negatively poverty measures, poverty reduction would have been substantially higher. Finally, the confidence intervals suggest that statistical significance of these findings is relatively low at the 0.05 significance level.

24. **The finding that the distribution effect has worked in the opposite direction from the growth effect in terms of its impact on poverty points to the importance of promoting greater equality in addition to strong and sustained growth.** In other words,

poverty reduction could have been substantially higher if the distribution effect had been at least neutral or possibly positive. Policies that promote fair taxation, remove regressive expenditures such as energy subsidies, level the playing field for business and support the development of human capital would ensure that both effects work in the direction of poverty reduction and do not conflict with each other. Section 2 elaborates on these issues.

Growth Incidence Curves

25. **A dynamic measure of growth inclusiveness can be derived from growth incidence curves.** Growth incidence curves (GIC) help identify the extent to which each decile of households benefits from growth (Ravallion and Chen, 2003). In plotting GICs, the vertical axis reports the growth rate of consumption expenditure, and the horizontal axis reports consumption expenditure percentiles (Foster and others, 2013). Inclusive growth should simultaneously reduce poverty and inequality. Growth reduces poverty if the mean income of the poor rises. Growth reduces inequality if it helps shifting the Lorenz curve, which plots the percentage of total income earned by various portions of the population when the population is ordered by the size of their incomes, closer to the diagonal. More formally, starting from Ravallion and Chen (2003), the growth incidence curve, which traces out consumption or expenditure growth by the percentile of the population, can be defined as:

$$g_t(p) = \frac{L'_t(p)}{L'_{t-1}(p)} (\gamma_t + 1) - 1 \quad (1.6)$$

where $L'_t(p)$ is the rate of change (slope) of the Lorenz curve,⁶ p is the deciles of the population, and γ_t is the growth rate of its mean.

26. **The GIC assesses how consumption at each percentile changes over time.** The part of the curve above the X-axes shows the deciles that experienced positive consumption growth over the time period, and the part below the X-axis those that lost out. If the GIC is above the X-axes, aggregate growth clearly leads to the reduction of poverty. However, if the GIC crosses the X-axes, the impact of growth on poverty is ambiguous. The part of the curve that is above its own mean points at the deciles of the population that benefit from growth relatively more than an average household. The part of the GIC below the mean, but still above zero, points at the deciles that also benefit from growth, but less than an average household.

27. **The slope of the GIC points at the distributional characteristics of growth.** A completely horizontal GIC suggests that growth has been neutral from the distributive perspective. A negatively sloping GIC points at inclusive growth because income or

⁶ $L'_t(p)$ is the fraction at time t of total income that the holders of the lowest p th fraction of incomes possess. This varies from zero to one, $0 \leq p \leq 1$, and is presented as the inverse of the cumulative distribution function.

spending of the poorer deciles of the population grows faster than income or spending of the richer deciles. The slope of the incidence curve is negative if:

$$g'_t(p) = \frac{L'_t L'_{t-1} - L'_t L''_{t-1}}{(L'_{t-1})^2} < 1 \quad (1.7)$$

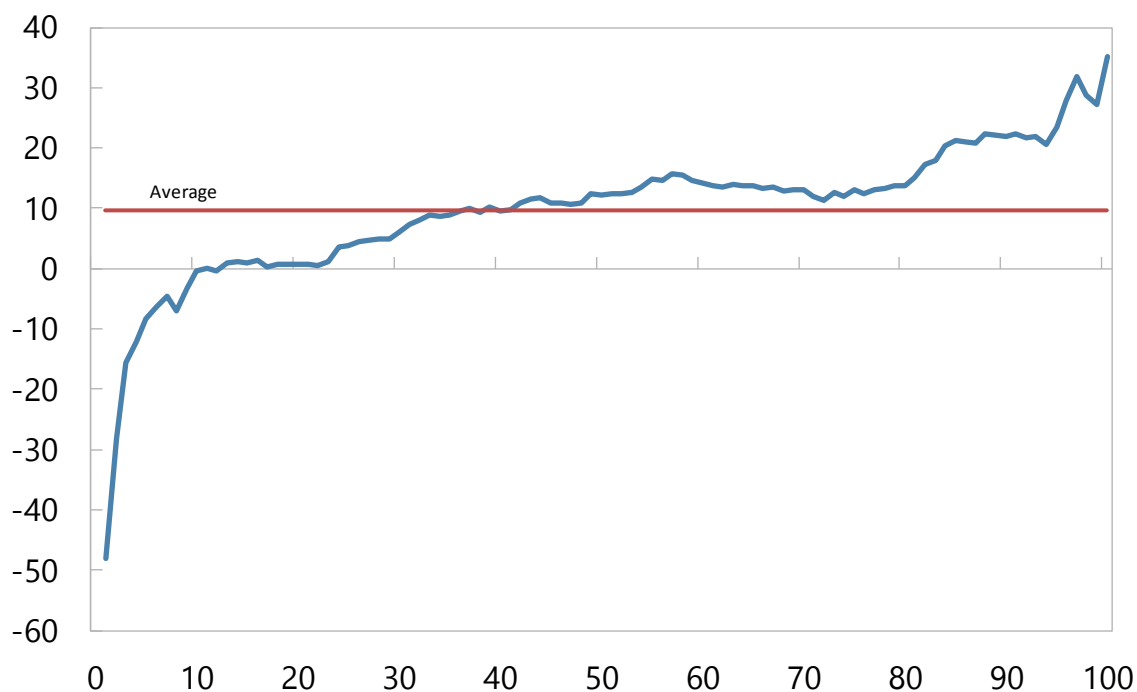
because, in this case, the poorer groups are catching up with the richer. A positively sloped GIC clearly indicated that growth has not been inclusive. Improvements in the degree of inclusiveness of growth would be signaled by the GIC changing the slope from positive to negative, and progress in poverty reduction would lead to the mean of the GIC and the curve itself moving up (for further theoretical considerations of GICs, see A. Kireyev, 2013).

28. **In Djibouti, growth has benefitted most people in the middle and high end of the income distribution.** In 2002–13, household consumption increased on average as the mean of the GIC is above zero, driven by the middle of the distribution (from the 2nd to the 10th deciles) (Figure 8). The GIC is positively sloped, suggesting an increase in inequality during this period. This trend is visible, but may not be statistically significant for the bottom five deciles. These overall results, however, may mask significant differences in growth inclusiveness between urban and rural areas, and men and women. Lower deciles clearly experienced lower growth of consumption even relative to an average Djiboutian, as the 95 percent confidence interval is squarely below the horizontal axis, while the mean growth rate is about 0.2 percent a year. Finally, for the middle of the distribution, roughly from the 2nd to the 8th decile, the trend still points at a worsening of growth inclusiveness.

Figure 8. Growth Inclusiveness, 2002–13

Djibouti: Growth Incidence Curve, 2002-13

(Growth of consumption in percent by decile of population)



Source: DISED, staff calculations.

Source: DISED database, 2016.

29. **The GIC suggests that consumption of the poorest parts of the population declined not only in relative but also in absolute terms.** In 2002–13, the GIC is located below the horizontal axis for the lowest percentile, indicating that the poorest groups of the population experienced a negative growth rate of their living standards. As a result, the depth of poverty among the poorest of the Djiboutian population increased further. Also, the 95 percent confidence interval around the GIC touches the X-axis several times, in particular the 5th to the 8th percentiles, indicating that the results are marginally statistically significant. As a result, the change of consumption of middle-income groups could have been also negative. Consumption of the high-income deciles at above the 8th decile clearly increased.

30. **The analysis of the distributional characteristics of growth in Djibouti leads to the following conclusions:** (i) the overall poverty incidence in Djibouti has declined in 2002–13, although there has been no significant changes in extreme poverty; (ii) inequality in Djibouti remains high, in particular between different income groups, urban and rural areas, and men and women, and there are indications that inequality worsened; (iii) in 2002–13, growth has not been inclusive, as it benefitted mainly people in the upper side of the income distribution, while the poorest groups became even poorer in relative terms and the very poorest may have become poorer in absolute terms; and (iv) the underlying data is marginally

sufficient for the growth inclusiveness analysis and is not entirely comparable between surveys, and the statistical significance of most estimates is low.

D. Policy Options to Increase Growth Inclusiveness

31. **Sustained overall economic growth is a precondition for poverty reduction.** Several studies confirm that sustained growth is a key factor in enhancing inclusiveness. Kraay (2004) showed that in developing countries growth of average income explains 70 percent of the variation in poverty reduction across countries in the short run. Berg and Ostry (2011) argue that longer growth spells are robustly associated with more equality in the income distribution. Lopez and Servén (2006) suggest that for a given inequality level, the poorer the country, the more important is the growth component in explaining poverty reduction. Affandi and Peiris (2012) showed that growth is in general pro-poor, with growth leading to significant declines in poverty across economies and time periods. Specifically, a 1 percent increase in real per capita income leads to about a 2 percent decline in the poverty headcount ratio. Therefore, any successful pro-poor growth strategy should have at its core measures to achieve sustained and rapid economic growth. For Djibouti, it also means supplementing its debt-financed capital-intensive growth with job creating growth.

32. **Special attention should also be given to the distributional dimensions of growth.** An increase in inequality may offset and even exceed the beneficial impact on poverty reduction of the same increase in income (Affandi and Peiris, 2012). According to recent estimates, about two-thirds of poverty reduction within a country comes from growth, and greater equality contributes the other third. A 1 percent increase in incomes in the most unequal countries produces a mere 0.6 percent reduction in poverty, while in the most equal countries, it yields a 4.3 percent cut (Ravallion, 2013). In addition, increased inequality may dampen growth. At the same time, poorly designed measures to increase inclusiveness could also undermine growth while in the long run, attention to inclusiveness can bring significant benefits for growth. Different economic policies are relevant depending on the country context. For example, in a country like Djibouti where the majority of the population is under 35 years old and services are the driving sector of the economy, investment in education is likely to be very important for inequality as it could improve youth employment opportunities. The emphasis should be on ensuring that the labor force is trained for the needs of the job market, and that Djibouti nationals—rather than expatriates—are prepared to take the jobs created during the investment boom.

33. **Economic diversification can help improve inclusiveness.** Diversification is essential for Djibouti to develop opportunities in sectors with high growth and employment potential, such as tourism and fishing, and reduce the risks associated with relying on a single sector (services) catering mainly to one client (Ethiopia). To this end, improving the business climate is indispensable. Section 3 elaborates on these issues.

34. **Well-designed social policies are also important for promoting inclusiveness.**⁷

- First, social policies could be used to protect the poor and vulnerable populations from high costs of living. Although there have been some efforts to build a social safety net, the government should expand the coverage to the poorest population, extend the compulsory health insurance available to government employees to the poorest population, and improve health insurance and social housing.
- Second, poor households could be protected in the short term by redirecting resources from generalized subsidies to better-targeted measures. Poor groups can be targeted through measures such as school lunches and public works programs. In the medium term, a well-targeted cash transfer system is the best option for assistance for the poorest.
- Third, the government could ensure broad-based and competitive provision of basic utilities. Better electricity and water supply are the main priorities as these are major constraints for the poor population and important obstacles to investing in Djibouti. Lower, subsidized tariffs could be charged for basic consumption levels of water and electricity, to benefit the poor.

35. **Gender inclusion is an important element of inclusive growth.** A growing body of empirical evidence suggests that gender inequality can impede economic growth. For example, Hakura et al. (2016) found that gender inequalities, including from legal gender-based restrictions, is negatively associated with per capita GDP growth. This effect prevails mainly in low-income countries. In particular, per capita income growth in sub-Saharan Africa could be higher by as much as 0.9 percentage points on average if gender inequality could be reduced to the levels observed in the fast-growing emerging Asian countries. Policies that influence the opportunities of women to participate in economic activities matter, and, therefore, if well designed and targeted, could play a major role in alleviating inequalities.

36. **Inclusive institutions have also been found important for growth inclusiveness.** Acemoglu and Robinson (2012) show that economic and political institutions that ensure the rule of law, provide adequate access to public services, and protect property and freedom to contract for the whole population without discrimination have been found to accelerate growth.

37. **Coherent labor market policies are also needed for increasing inclusiveness.** The challenges of growth, job creation, and inclusion are closely linked, because creating productive employment opportunities throughout the economy is an important way to generate inclusive growth (IMF, 2013). In Djibouti, creation of employment opportunities and increasing productivity in rural areas would prompt higher consumption growth among poorer households. While in some countries strong per capita consumption growth at the

⁷ Additional recommendations are included in IMF Staff Discussion Note 17/01, Ostry J., A. Berg, and C. Tsangarides, 2014 and Loungani P. (2017).

poorest levels seems to relate to high agricultural employment growth (IMF, 2011), this avenue is unlikely to bring major results in Djibouti, given its predominantly desert environment. Policies focused on upgrading in-demand skills, especially for young adults, and improving conditions for small and medium enterprises to enter the formal economy are likely to make an important contribution to job creation.

38. Deepening the financial sector through policies that give better access to the poor for financial services could increase inclusiveness. A number of studies found that financial development generally increases incomes of the poorest households (Claessens, 2005), whereas unequal access to financial markets can reduce incomes by impeding investments in human and physical capital. These barriers are widespread in Djibouti, where most people lack access to the formal financial system. At the same time, microfinance and other rural finance initiatives and expanding credit information sharing could significantly expand credit availability. Specifically, for Djibouti, the authorities could operationalize the Partial Credit Guarantee Fund; accelerate the implementation of the national strategy for modernization of payments and credit reporting systems; set up a framework for mobile payments to make financial services accessible to low-income groups; simplify the taxation system to encourage small enterprises to migrate to the formal sector; and simplify access to land and improve mortgage procedures.

II. FISCAL POLICY IN DJIBOUTI: SUPPORTING GROWTH WHILE RESTORING DEBT SUSTAINABILITY

Following the recent expansion of debt-financed public infrastructure, fiscal policy in Djibouti faces a difficult trade-off between supporting growth and restoring debt sustainability. On one hand, additional public sector spending, if efficient and well-targeted, would support growth, crowd in private investment and promote much needed job creation and human capital development. On the other hand, own resources remain limited and the rising public sector debt trajectory puts the country at high risk of debt distress. This section argues that to preserve positive growth dynamics in a high debt environment, the authorities should undertake fiscal consolidation while pursuing policies that enhance growth and inclusiveness, and set debt anchors to guide debt sustainability over the longer term. On the revenue side, reforms should broaden the tax base and rebalance the tax system from income to consumption taxes. On the expenditure side, fiscal policies could seek to focus investment spending on projects with high growth multipliers while rebalancing current spending toward areas that support long-term growth potential, such as education and health, and that maintain the productivity of public infrastructure assets, such as maintenance expenditures. Priority structural reforms in the fiscal domain include enhancing the effectiveness and transparency of public institutions especially for domestic resource mobilization and debt management. To preserve long-term sustainability, the authorities should consider adopting fiscal and debt rules, which were found to be effective in comparator countries. Complementary business climate reforms needed to ensure that public investment results in strong, private sector driven growth and job creation are discussed in Section 3.

A. Introduction

39. **Djibouti is facing the challenge of supporting growth while undertaking fiscal consolidation and restoring debt sustainability.** To achieve the long-term development goals set out in Vision Djibouti 2035, the authorities have launched a large-scale debt-financed public investment program. They see infrastructure investment, mainly externally financed, as a unique opportunity to increase growth, lift the population out of poverty, build a modern logistical hub in East Africa, and ultimately turn the country into a middle-income economy. However, external borrowing has raised public debt to 85 percent of GDP in 2016 and is expected to continue as the public sector engages in new debt-financed projects.

40. **This section examines fiscal policy options⁸ in support of growth in an environment where debt is high and fiscal space limited.** High debt levels pose a constraint on growth, and have often been associated with growth below potential. High debt service payments risk crowding out public investment and limit the ability to meet social needs. High public debt can raise interest rates and credit costs, which in turn hampers

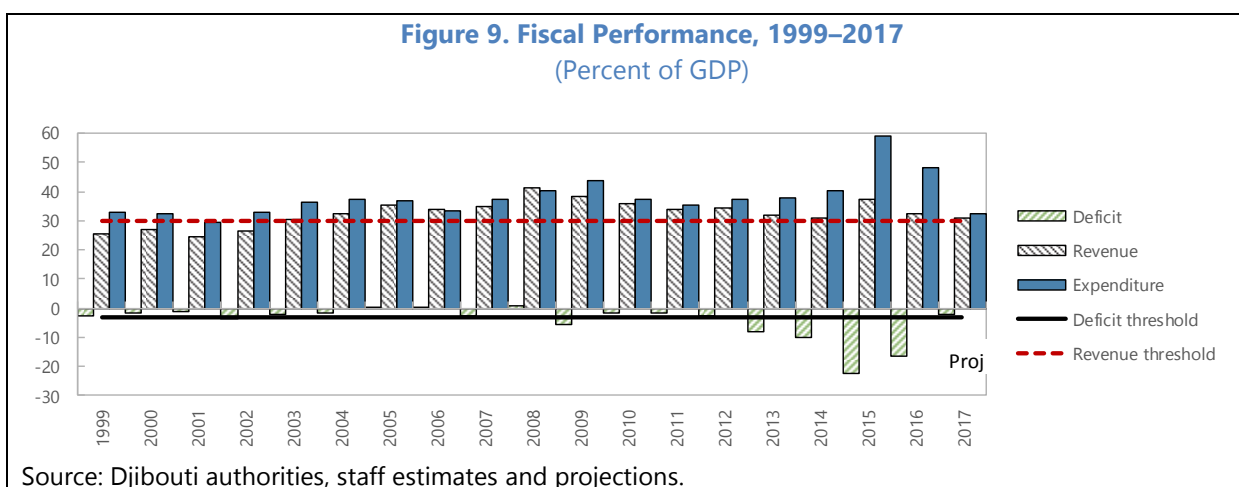
⁸ Djibouti has a currency board exchange rate arrangement, with the Djiboutian franc pegged to the U.S. dollar. The currency board arrangement limits monetary policy options.

private sector investment and growth. There are essentially two options to reduce debt and thus the risk of debt distress and its adverse effects of growth: fiscal consolidation to generate primary surpluses; and policies targeted at accelerating growth so that debt can decline relative to GDP. This section proposes a policy approach to help create fiscal space for short-term growth-enhancing spending while setting debt anchors to ensure medium-term debt sustainability.

B. Fiscal Performance and Fiscal Space

Recent Fiscal Performance

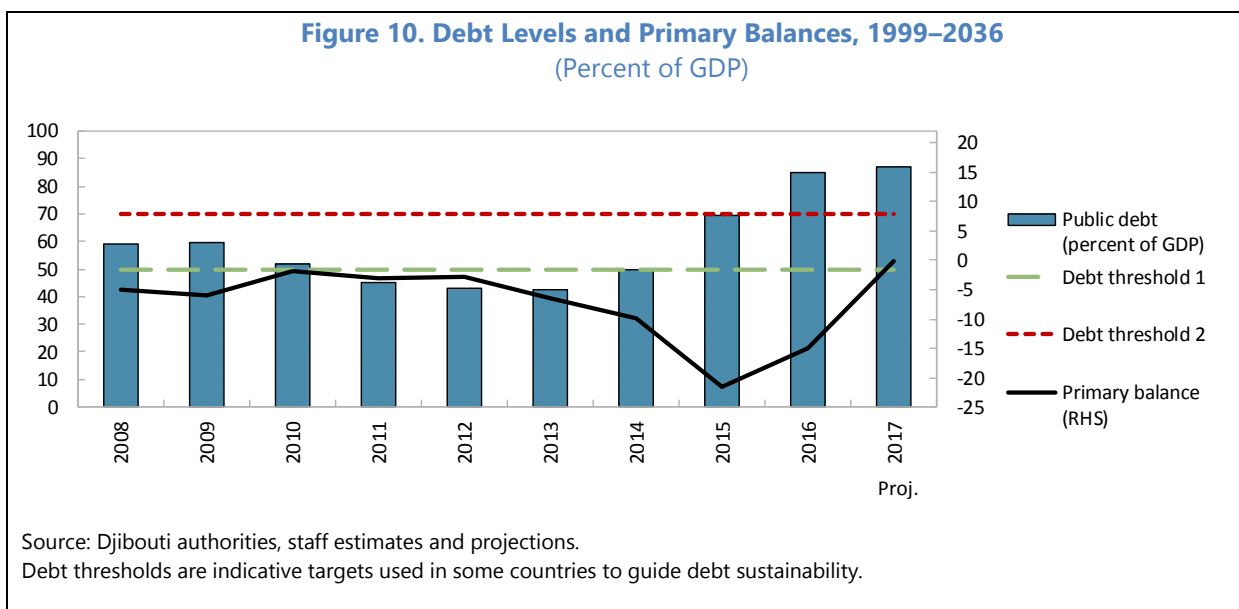
41. **Djibouti’s recent fiscal performance has been broadly prudent, albeit with some slippages.** Fiscal deficits in the past two decades have averaged below 3 percent of GDP, mainly reflecting the authorities’ commitment to fiscal consolidation under ECF-supported programs with the Fund during 1991–2003 and 2008–12 (Figure 9). Under both programs, fiscal performance was initially on track with the fiscal deficit not exceeding 1–2 percent of GDP. However, substantial fiscal slippages were recorded in 2002 and 2009, respectively. After the 2009 fiscal slippage, partly driven by extra-budgetary spending, the completion of program reviews required building a track record of corrective policy adjustment. In addition to the fiscal slippage, external debt service arrears were accumulated toward several creditors, and structural reforms advanced less than expected, which undermined the effectiveness of fiscal policy and held back improvements in competitiveness. In 2012, the budget recorded a deficit of 2.7 percent of GDP due to weak tax collection efforts and higher expenditures linked to the legislative elections. Subsequently the fiscal deficit increased rapidly. In 2013, the fiscal deficit jumped to 7 percent of GDP, as proceeds from earlier domestic privatization were spent. Starting from 2014, the authorities have embarked on a major debt-financed investment program, which widened fiscal deficits to 10–25 percent of GDP.



42. **Revenue mobilization has been relatively strong until recently.** With a steady inflow of external official grants, and domestic tax receipts of 20–21 percent of GDP, overall revenue exceeded 30 percent of GDP in 2003–16—a level that can be viewed as a historical

threshold for Djibouti under current economic conditions. However, with the recent proliferation of tax exemptions under the new investment code, in particular since 2015, and the tax-free zones, domestic revenue collection started to decline. Along with lower official grants, notably from Gulf countries hit by low oil prices, overall revenues have dropped and are projected to stay below 30 percent of GDP on current policies. With little flexibility on the expenditure side, the authorities have had to cut domestically financed capital expenditure and restrain the wage bill to keep the fiscal deficit in the national definition, excluding large investment projects, at a financeable level. At the same time, external debt financed investment continued to expand at their own pace and largely outside the central budget, without substituting the losses in domestically financed investment.

43. **At the same time, Djibouti's record of debt sustainability has been mixed** (Figure 10). It managed to bring down its debt-to-GDP ratio from over 57 percent of GDP in 2003 to 46 percent of GDP in 2013. However, thereafter fiscal primary balances turned sharply negative and the rate of debt accumulation accelerated and exceeded the thresholds of 50 percent and even 70 percent of GDP used in some countries to guide debt sustainability (see Box 6 for country examples). Total public and publicly guaranteed (PPG) debt increased from 50 percent of GDP at end-2014 to 85 percent of GDP at end-2016, mainly due to loans related to three large-scale projects. Government-guaranteed public enterprise debt accounted for about 70 percent of external debt in 2015. Only if strong growth materializes and most of Djibouti's future borrowing is on concessional terms, would the debt-to-GDP ratio eventually decline. But this projection is highly uncertain and depends critically both on global trade growth and domestic policies.



Fiscal Space Assessment⁹

44. **Fiscal space—the room for discretionary, yet sustainable, fiscal policy—has become central to the policy trade-offs facing Djibouti.** In a high debt environment, the scope for fiscal policy to support the economy has become of utmost importance, especially against the background of the debt-financed investment boom, uncertain external demand for port and logistics services, pressing social needs, and substantial vulnerabilities of the economy to exogenous shocks. Moreover, monetary policy in Djibouti is constrained by the fixed exchange rate/currency board regime, and structural reforms are taking time to be implemented.

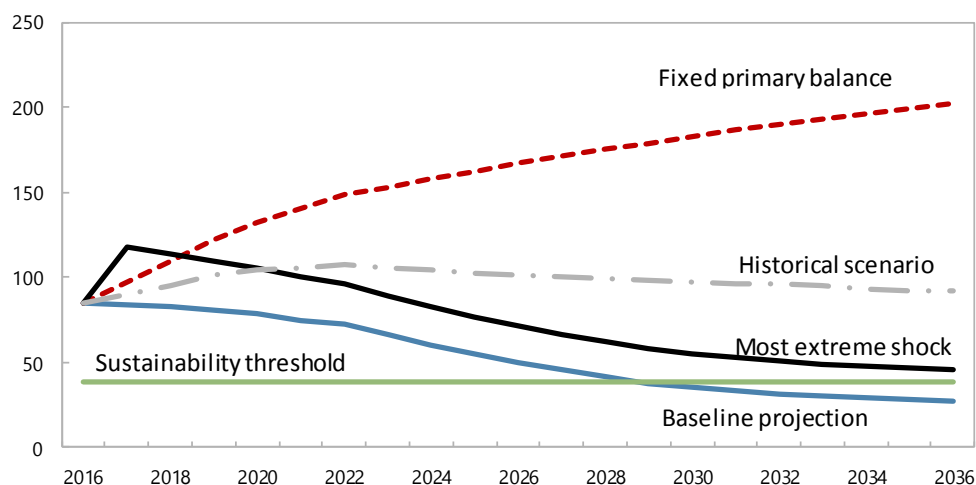
45. **A standard debt sustainability analysis (DSA) can be used to evaluate fiscal space.** The DSA provides a view on fiscal space in the context of a sustainable level of debt and identifies the drivers of debt over time: the primary fiscal balance (a policy variable), automatic debt dynamics which are primarily a function of the difference between the interest rate and the growth rate, and other flows that could potentially affect debt, such as debt relief or the costs of bank recapitalization.

46. **The DSA suggests that Djibouti has no fiscal space for the next decade.** A 20-year forward-looking DSA based on end-2016 debt stocks of public and publicly guaranteed external debt (effectively central government plus public enterprise debt) found that Djibouti currently faces a high risk of external debt distress (Figure 11).¹⁰ High near/medium-term solvency and liquidity risks stem from recently contracted and expected external borrowing to fund public investment projects. The baseline projections, assuming that the authorities' current macroeconomic policies continue in the medium term and planned reforms will be successfully implemented, all the solvency indicators are significantly higher than the policy-dependent thresholds, above which the probability of debt distress becomes increasingly likely, for most of the projection period. Liquidity ratios also breach their thresholds in the medium term, as debt service rises as repayments of loans to finance the recent investment boom come due. Based on this DSA, Djibouti does not have any fiscal space for additional spending over the next decade. Instead, the policy imperative is to contain public sector borrowing, with a view to lowering debt-to-GDP ratios and avoiding crowding out of expenditures by rising debt service payments. By about 2027, the macroeconomic framework and policy assumptions underlying the DSA suggest that the debt-to-GDP ratio would reach a level consistent with sustainability (50–70 percent of GDP, i.e. below the policy-dependent threshold) and would be set on a firmly declining trajectory. Fiscal space would therefore open at that time.

⁹ With contributions from Louis Dicks-Mireaux (SPR).

¹⁰ See IMF Country Report 17/87, 2016 Debt Sustainability Analysis.

Figure 11. NPV of Public Debt-to-GDP Ratio, 2016–36
(Percent of GDP)



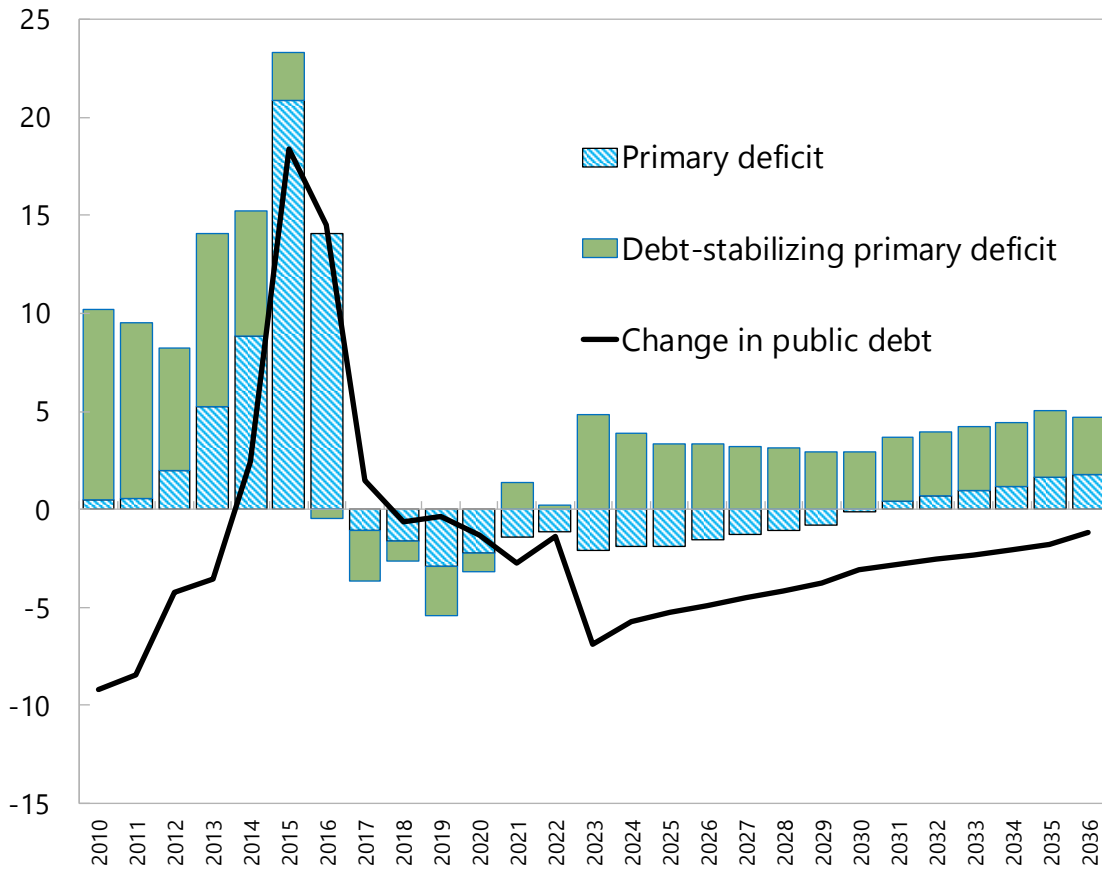
Source: DSA, staff estimates.

The sustainability threshold refers to a trajectory, not a level. The threshold is an indicator of the risk of debt distress.

47. **The DSA indicates that Djibouti may have some fiscal space after 2027—assuming implementation of the authorities’ reform program—when the debt trajectory drops below the sustainability threshold¹¹ (Figure 11).** When the primary surplus is greater than the debt-stabilizing primary balance (Figure 12), a country can increase spending without increasing its debt-to-GDP ratio; the difference between the primary balance and its debt-stabilizing level provides an indicator of fiscal space. This is the case in the DSA beginning in 2023, which means that Djibouti starts having potential fiscal space in those years. However, as the debt-to-GDP ratio remains above its high-risk threshold, this fiscal space should initially be used to reduce the rate of debt accumulation in such a way that the debt-to-GDP ratio also drops. Only after 2027, when debt-to-GDP reaches a more moderate level, should this indicator of fiscal space be viewed as a measure of possible additional spending.

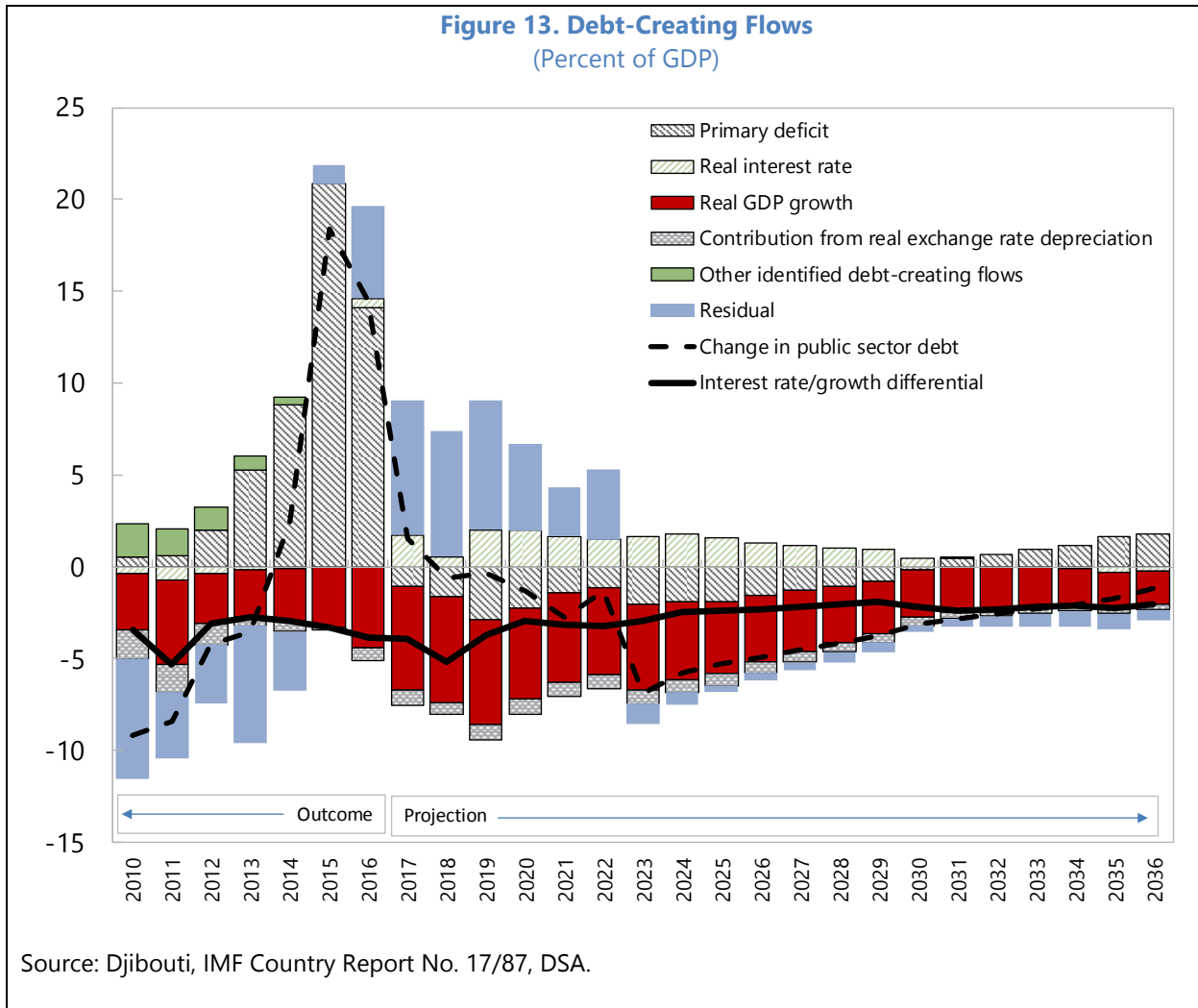
¹¹ The DSA uses policy-dependent external debt-burden thresholds because the debt levels that LICs can sustain are influenced by the quality of their policies and institutions. Policy performance is measured by the Country Policy and Institutional Assessment (CPIA) index, compiled annually by the World Bank.

Figure 12. Debt-Stabilizing Primary Balance, 2015–36
(Percent of GDP)



Source: DSA, staff estimates.

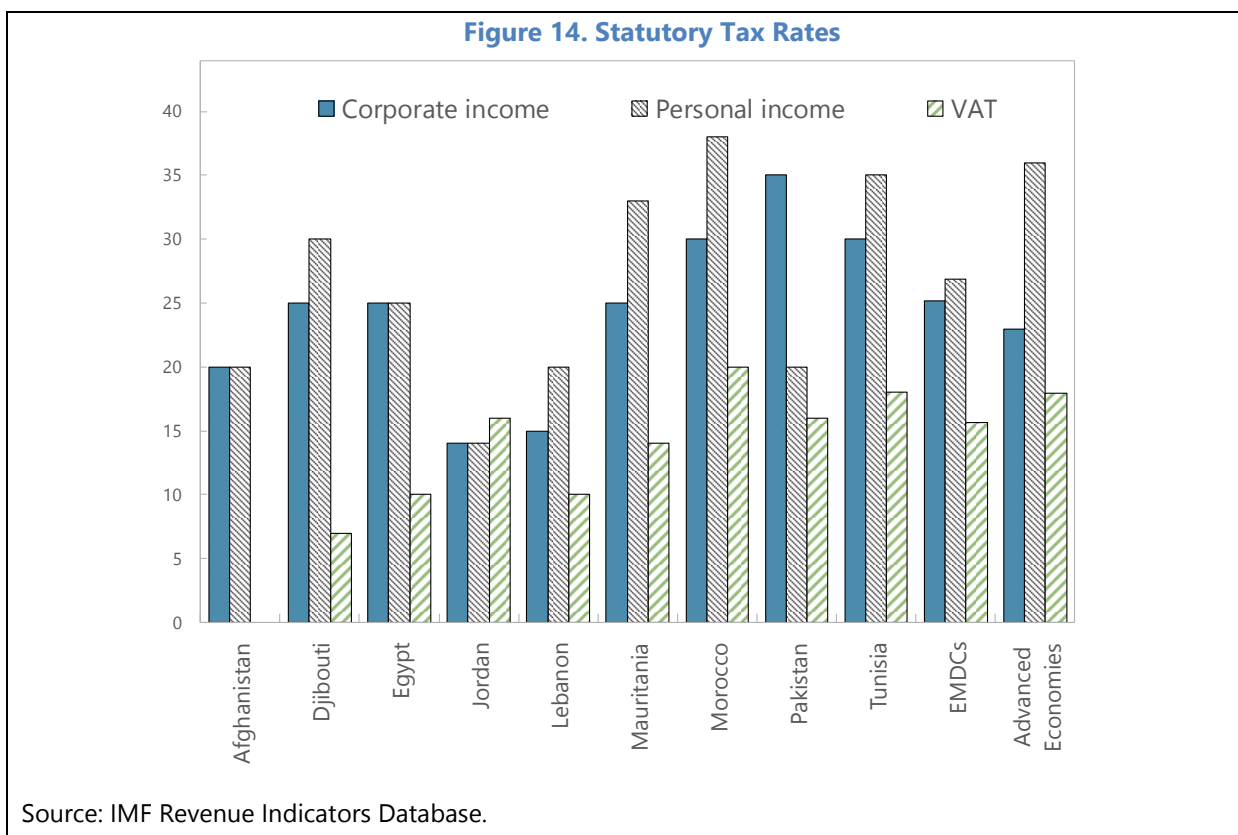
48. **If the projections of growth higher than the real interest rate on public debt materialize, Djibouti would benefit from a favorable debt dynamics.** This highlights the importance of seeking continued concessional financing with low interest rates. Given robust real growth rates and debt contracted primarily on concessional terms, the positive impact of the real growth rate exceeds the impact of the real interest rate (Figure 13).



C. Growth-Friendly Fiscal Policies

Tax policies

49. **Fiscal space could be generated by additional efforts to raise domestic revenue.** One key feature of Djibouti is that statutory tax rates appear broadly in line with international practices, suggesting that the economic costs of tax rate hikes are likely to be high (Figure 14). On the other hand, Djibouti's tax-to-GDP ratio—which is the third highest among comparator countries—is becoming narrower as a result of widespread tax exemptions and special regimes, such as tax-free zones.



50. **The authorities have started reforming their tax regime.** A government-sponsored Tax Conference in 2015 launched a broad debate on the main pillars of tax reform. The guiding principles included simplifying the fiscal regime, enhancing fiscal equity, improving tax efficiency, and securing fiscal revenues. The 2016 budget included measures to streamline and simplify the tax structure, and further tax policy and tax administration measures are planned in 2017.

51. **Removing tax exemptions and improving taxpayer compliance are two potential sources of revenue growth which would help create fiscal space.** Broadening the tax base could be achieved by streamlining tax expenditure, exemptions and the tax regimes for the free zones. Also, making tax incentives part of the common law and converting the investment code into an investor charter would help to level the playing field for investors. Strengthened tax and customs administration could bring additional fiscal revenue without changing existing regulations. Online tax payment, better control systems, risk analysis and transparent tax dispute resolutions would be useful steps in this direction.

52. **Rebalancing taxes from income toward consumption could be considered, in line with international experience.** Growth-friendly tax reforms typically consist of reforms to reduce and simplify personal income taxation—to increase incentives for labor force participation—and corporate income taxes, which generally create distortions, such as discouraging investment and productivity improvements and introducing a bias toward the

use of debt finance. Consumption taxes are generally less distortive for saving and investment decisions¹². Therefore, a shift from direct income tax to indirect consumption tax is usually considered supportive of growth. In addition, increasing tax incentives for private research and development spending is often recommended to support innovation and boost productivity growth (Box 1). Recent research also suggests that improving the design of tax policies with the view to minimizing differentiated tax treatment across assets, reduce tax compliance costs, and target tax relief to new rather than small firms, could also help remove the distortions that are holding more productive firms back, generating a positive impact on aggregate productivity and growth (IMF, Fiscal Monitor, April 2017).

Box 1. Growth-Supporting Tax Policies: Recent Experience

Portugal. Recent reforms have been focused on eliminating capital tax-induced distortions to growth, and reducing informality and tax avoidance (IMF, 2015, 2016).

- *Tax rebalancing from income to consumption.* Starting in 2014, the authorities have gradually lowered the standard corporate income tax rate from 25 to 21 percent with a reduced rate of 17 percent for small and medium-size enterprises. To partially finance these cuts, the authorities removed some tax incentives for investment and increased the VAT rate to 23 percent, which helped shift the tax burden from income to consumption. Revenue administration reforms supported growth by further lowering compliance costs and reducing tax avoidance.
- *Reduction of incentives for debt financing.* Portugal's tax system favored corporate debt over equity, as interest payments on debt were deductible for corporate tax purposes and dividend payments were not. In response, the deductibility of interest for companies was progressively limited to reduce the debt bias and prevent multinational debt-shifting practices.

Belgium. The authorities are in the process of rebalancing the tax system toward taxes that are friendlier for growth and employment (IMF, 2015, 2016).

- *Reduction of personal income tax.* To offset this revenue loss, the government has announced several measures, in particular an increase in environmental taxes and the elimination of deductions and exemptions, including on VAT and for company cars.
- *Reduction of capital income taxation.* This is part of a much broader and revenue-neutral reform of business and investment income taxation. The aim is to create a more level playing field across business and investment activities, through a review of profit tax deductions, rules against tax avoidance, capital gains taxation, and interest and dividend withholding taxes.
- *Reallocation of saving towards long-term instruments.* The preferential tax treatment of retail bank savings has led to a massive shift of household savings toward callable savings accounts. To encourage the reallocation of short-term saving toward longer-term instruments, the tax benefits have been extended to all financial instruments.
- *Rebalancing of property taxes from transaction to recurrent taxes.* This shift is considered growth-friendly as it would shift private investment out of tax-subsidized housing and into more productive business activities, thus increasing growth.

53. **Increasing tax revenue is a long-term endeavor.** The tax reforms will likely take time to implement and require strong political and social support. Thus, raising domestic revenue is generally best accompanied by public expenditure reforms focused on social and

¹² Consumption taxes need to be carefully designed and implemented to avoid their bias against lower income groups, who tend to consume a larger share of their income.

development spending that can help build support for a balanced package of revenue and expenditure reforms.

Expenditure Policies

54. **Fiscal space could be created by rebalancing public expenditures.** Within current expenditure, the rebalancing could target items that enhance long-term growth and human capital formation, such as education and healthcare. Within capital expenditure, spending should be directed to projects with the highest positive impacts on growth. However, the positive impact of pro-growth current expenditure and public investment strongly depends on their efficiency. Overall, expenditure consolidation should ring-fence growth-enhancing spending and focus mainly on growth-neutral spending (Box 2).

Box 2. Growth-Friendly Expenditure Consolidation: Recent Experience

Belgium (2015, 2016). To achieve its medium-term fiscal objective, Belgium is undertaking an expenditure-based fiscal adjustment. To be growth-friendly and sustainable, expenditure consolidation focuses on three main areas:

- *Containing the public wage bill.* Wage moderation includes the temporary suspension of indexation, targeted labor tax cuts, and the linkage of wage growth to broader labor market and economic conditions.
- *Reducing business subsidies.* Business subsidies are significantly larger in Belgium than in other euro area countries notably because of measures to reduce labor cost. A reduction in wage and employment subsidies would be made possible by competitive gains through structural reforms and tax cuts.

Portugal (2015, 2016):

- *Policy-oriented expenditure budgeting.* A medium-term approach to budgeting was developed, focused on improving the efficiency of service delivery, assessing the impact of policies, and managing and mitigating risks.
- *Improving expenditure management.* Regular spending reviews were embedded in the annual budget process. A performance-based budget framework was established to evaluate and improve the efficiency of spending. A committee was established to carry out public policy evaluations, such as an expenditure review.

55. **Djibouti has realized, or is in the process of completing, important public infrastructure investments that are expected to have a positive impact on output growth.** In the short term, this impact should be driven by demand effects and the crowding in of private investment, and in the long term by raising productive capacity. Moreover, efficient debt-financed projects, if they unlock higher growth than the increase in debt, can be implemented without increasing the debt-to-GDP ratio. However, administrative capacity constraints in Djibouti call into question the feasibility of launching new high-impact projects, given the large number of complex public investments already under way. In addition, the high public debt limits the scope to increase borrowing for further investment without a potentially large adverse impact on debt sustainability.

56. **Priority should be given to maintaining the quality of the capital stock.** Public investment in Djibouti has recently been significantly higher than in comparator countries and has already led to the creation of high-quality public capital stock, in particular in ports,

railways, and water pipeline facilities. Moreover, the level of the public capital stock is likely underestimated because public enterprises are not included in the fiscal accounts. However, in the absence of increased spending on maintenance, the public capital stock may significantly depreciate. The near-term priority, therefore, should be to ensure that maintenance spending, financed mainly from domestic resources, is sufficient to maintain the productivity of recently created infrastructure and prevent its deterioration.

57. Rebalancing expenditure in favor of those areas with high multipliers can help create additional fiscal space. In Djibouti, investment expenditures are expected to be growth enhancing through their short-term impact on demand and long-lasting supply effects. The five-year ahead dynamic profile of the investment multiplier suggests that the impact of a unitary increase in capital expenditure will help raise growth after two to three years, with the impact felt through the medium term (Box 3).

Box 3. Djibouti: Fiscal Multipliers

The average fiscal multipliers calculated by Cerisola and others (2015) for low-income MENAP countries can be applied to Djibouti. Although these multipliers are not specific to Djibouti, they correspond to its characteristics of a low-income, highly open to trade MENAP country with a fixed exchange rate regime. The cumulative levels of the multipliers are around 1.1 for capital expenditure, 0.8 for government consumption, 0.5 for current expenditure, and -0.4 for tax revenue (Figure A).

Figure A. Maximum Five-Year Cumulative Multipliers

Government Consumption	0.84
Subsidies and Transfers	0.52
Capital Expenditure	1.11
Tax Revenue	-0.43

The highest fiscal multiplier is for public investment, which stimulates domestic output directly through public procurement of investment goods and indirectly through additional demand for goods and services such purchases generate in the rest of the economy. Government consumption multipliers are also relatively high in the short run, suggesting that spending on wages, salaries, goods, and services can also support domestic demand. The multipliers on subsidy and transfers are relatively low, and support the empirical finding that the output effects of increases in subsidies and transfers tend to be modest. Finally, the tax multiplier is low and negative, suggesting that further raising taxes would depress growth in the short term, and that tax cuts are less effective than spending increases in stimulating the economy, since households may save a portion of their additional after-tax income (Figure B).

Figure B. Dynamic Multipliers

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Government Consumption	0.7	0.8	0.4	0.0	0.0
Subsidies and Transfers	0.4	0.5	0.3	0.0	0.0
Capital Expenditure	0.9	1.1	0.7	0.3	0.0
Tax Revenue	-0.3	-0.4	-0.2	0.0	0.0

Source: Staff estimates based on the MENAP fiscal multiplier template (Cerisola and others (2015)). Persistency assumptions: long-term (five-years) persistency of capital expenditure and short-term (three-years) persistency of other expenditure items.

Structural Reforms of Public Finances

58. **Medium-term fiscal frameworks (MTFs) could provide an important tool for improved decision making, and could reduce fiscal risks by increasing visibility about policy intentions.** A MTF in Djibouti could be used as the primary tool to articulate fiscal policies into a consistent and sustainable framework. This would in turn bring multi-year considerations explicitly into the authorities' decision-making framework. In addition, the credibility of any fiscal plan could be considerably enhanced with explicit commitments on medium-term fiscal objectives and contingency planning. A MTF should be at the core of a communication strategy, and could provide credibility and transparency on fiscal objectives and the use of fiscal space to support growth.

59. **Fiscal transparency – comprehensiveness, clarity, reliability, timeliness, and relevance of reporting on public finances – is important to enhance fiscal space.** In Djibouti, public accounts, for example, cover only the central government and do not include public enterprises, even those which pose significant risks (Box 4). Public accounts aggregate only the operations of the central government, while public enterprises that are the main conduit for external financing are not included. There are currently over 40 public enterprises. With the start of the investment boom, the authorities created several new PEs, such as the railroad management company, the oil pipeline company, and the multipurpose port. They have embarked on large investment programs financed with government guaranteed external debt. Thus, the government is accumulating substantial contingent external debt liabilities with PEs. Some PEs already have difficulties in servicing their debt, and, on occasion, the government has made payments on their behalf.

Box 4. Fiscal Transparency: International Standards

Implementing the IMF’s Fiscal Transparency Code—the international standard for the disclosure of information on public finances—would help increase fiscal space. Each of the Fiscal Transparency Code’s four pillars could potentially contribute:

- *Fiscal reporting*: improving fiscal statistics and accounts, which would include implementing the comprehensive Government Financial Statistics Manual 2001/14 for the public sector, would allow the identification of potential inefficiencies otherwise obscured by outdated fiscal accounting, and the use of fiscal savings to enhance the fiscal space.
- *Fiscal forecasting and budgeting*: factoring the fiscal space needed to achieve policy objectives in budget forecasting would allow the development of comprehensive and timely fiscal plans consistent with their medium-term macroeconomic frameworks, and avoidance of potential fiscal and debt sustainability problems.
- *Risk analysis and management*: proper fiscal risk management would help ensure that the fiscal space created to achieve policy objectives is not drained by emergency spending; a contingency reserve is needed to cover any calls on government guarantees to public enterprises.
- *Resource revenue management*: with significant potential revenue streams from the transit of natural gas, applying best international practices in the fiscal regime for natural resources could help optimize their taxation and secure additional fiscal space.
- *Fiscal transparency evaluation*: to assess the possible impact of increased fiscal transparency on fiscal space; the evaluation would provide the authorities with a comprehensive assessment of their fiscal transparency, a rigorous analysis of fiscal vulnerabilities based on a set of fiscal transparency indicators, an account of fiscal transparency reform priorities, and a sequenced fiscal transparency action plan.

Source: IMF (2014).

60. **An independent fiscal council to monitor the authorities’ fiscal policies could also play a role in creating the space for growth-enhancing expenditure.** In countries where fiscal councils are independent and credible¹³, they can effectively contribute to fiscal stability and growth. They are increasingly used and typically in charge of independently assessing public finances, and providing public information about this assessment. Modalities range from fiscal councils that simply report to the public and parliament about compliance of budgets and their executions with rules, to more elaborate bodies that prepare alternative fiscal projections.

61. **Finally, a precautionary reserve envelope (PRE) could be introduced to both improve the quality of public investment and control expenditure.** A PRE generally sets aside part of the investment budget appropriations and defines procedures to release this envelope during the fiscal year. If part of the appropriations is not released during the fiscal years because the underlying investment projects are not ready for financing, this would create additional fiscal space for other expenditure. Under a typical PRE system, the authorities would (i) establish a PRE for domestically financed investment projects in the amount of at least 1 percent of GDP; (ii) specify in the budget that the Ministry of Budget will release financing for these projects only after it has approved feasibility studies prepared by line ministries charged with project execution; (iii) ensure that feasibility studies are prepared in line with the best international practices included in the World Bank Investment

¹³ IMF (2017), Fiscal Councils Dataset, <http://www.imf.org/external/np/fad/council>.

Assessment Guide; and (iv) and remove the projects with no or unsatisfactory feasibility studies from the next budget, or postpone their financing until the study is ready.

D. Fiscal Rules for Djibouti

62. **Fiscal rules could be useful to generate and protect the long-term fiscal space needed to support growth.** Rules could be procedural and aimed mainly at strengthening the budget process, or numerical, setting a ceiling on budgetary aggregates such as the budget deficit or spending. Such rules limit options for discretionary measures, which may reduce the scope for using fiscal space. However, by fostering a prudent and sustainable fiscal stance, fiscal rules can also help create fiscal space over the medium term. Fiscal rules have gained increased popularity, as they are associated with better fiscal performance (IMF, 2010, 2015a, 2015b).

63. **There are four main types of fiscal rules, with most countries using a combination of two or more rules** (Box 5). The four types of rules set targets on debt, the budget balance, expenditure, and revenue, respectively. Each type has different properties regarding objectives, operational guidance, and transparency. While the choice of fiscal rules depends on a country's economic circumstances, public debt and budget balance rules seem to dominate the choice and are often used in combination. About 80 percent of all fiscal rules in the world constrain public debt or the budget balance. Expenditure rules are also frequently used, mostly in advanced economies. In contrast, revenue rules are much less common. About 60 percent of countries that use a combination of rules adopt a debt rule that caps the overall public debt level and a fiscal balance rule that provides guidance to ensure this outcome.

Box 5. Fiscal Rules: International Experience

Debt Rule (DR). The debt rule sets an explicit limit or target for public debt, in percent of GDP. This rule is effective in ensuring convergence toward a debt target and is relatively easy to communicate. However, debt levels take time to be impacted by budgetary measures, and, therefore, do not provide clear short-term guidance for policy makers. Moreover, fiscal policy may become pro-cyclical when the economy is hit by shocks and the debt target is binding.

Budget Balance Rule (BBR). The budget balance rule constrains the various budgetary balances that primarily influence the debt ratio and are largely under the control of policy makers. The rule can be specified relative to the overall balance, the structural balance, the cyclically adjusted balance, or the balance over the cycle. While the first type of rule does not have any economic stabilization features, the other three types explicitly account for economic shocks. However, estimating the position in the economic cycle, typically through the output gap, is very challenging and makes the rule more difficult to communicate and monitor.

Expenditure Rule (ER). The expenditure rule sets limits on total, primary, or current spending. Such limits are typically set in absolute terms or growth rates, and occasionally in percent of GDP with the time horizon ranging often between three to five years. These rules are not linked directly to the debt sustainability objective since they do not constrain the revenue side. They can provide, however, an operational tool to trigger the required fiscal consolidation consistent with sustainability when they are accompanied by debt or budget balance rules.

Revenue Rule (RR). The revenue rule sets floors or ceilings on revenues and aims at boosting revenue collection and/or preventing an excessive tax burden. Most of these rules are not directly linked to public debt, as they do not constrain spending. These rules alone could result in a pro-cyclical fiscal policy, but like the expenditure rules, they directly affect the size of the government by adjusting the level of revenue.

Source: IMF (2015).

64. **In a debt rule, the numerical target in emerging markets and developing economies typically ranges from 40 to 60 percent of GDP.** The coverage of public debt rules mostly encompasses general government debt (consisting of the central government, the local government, and entities where central government is the source of 50 percent of revenues). Countries with debt limits set at 60 percent of GDP typically start putting in debt brakes—i.e. automatic correction mechanisms—at 50 percent. The numerical target for budget balance rules typically ranges from 1 to 3 percent of GDP (Box 6).

Box 6. Debt Rules: International Experience

Cape Verde. Short-term debt is limited to 60 percent of GDP. There is also a soft benchmark on the domestic debt-to-GDP ratio at 25 percent. Domestic borrowing is limited to 3 percent of GDP and is set in the budget law.

Mauritius. Public debt-to-GDP ratio below 50 percent to be reached by 2018.

Swaziland. Public debt ceiling of 60 percent of GDP, with a domestic debt ceiling of 25 percent and an external debt ceiling of 35 percent.

Vanuatu. General government debt below 40 percent of GDP. Ex ante balanced budget.

The Slovak Republic. When the debt-to-GDP ratio reaches 50 percent, the Minister of Finance is obliged to clarify the increase to parliament and suggest measures to reverse the growth in debt. At 53 percent of GDP, the cabinet shall pass a package of measures to trim the debt and freeze wages. At 55 percent, expenditures would be cut automatically by 3 percent and next year's budgetary expenditures would be frozen, except for co-financing of EU funds. At 57 percent of GDP, the cabinet shall submit a balanced budget.

Poland. Corrective actions are triggered when the debt ratio reaches the thresholds of 50, 55, and 60 percent of GDP. When the debt ratio exceeds 55 percent of GDP, measures to improve the budgetary situation – such as increasing VAT—are triggered automatically.

Hungary. Parliament may not adopt a State Budget Act that allows state debt to exceed 50 percent of GDP. If state debt exceeds 50 percent of GDP, Parliament may only adopt a State Budget Act that contains a reduction in state debt to GDP.

EU Budget Balance Rule: The Stability and Growth Pact (SGP) includes a limit of 3 percent of GDP for the fiscal deficit. If the deficit exceeds that limit, an excessive deficit procedure (EDP) is normally opened (corrective arm). In addition to the ceiling for the headline deficit, medium-term budgetary objectives (MTO) are set for the structural budget balance (preventive arm). MTOs are defined as a budgetary position “close to balance or in surplus.”

EU Debt Rule: The Maastricht criteria include a limit of 60 percent of GDP for general government debt. With the November 2011 governance reform, a required annual pace of debt reduction was introduced (based on a benchmark of 1/20th of the distance between the actual debt ratio and the 60 percent threshold on average over three years), starting three years after a country has left the current EDP procedure. If progress is insufficient during the transition period, an EDP can be opened, with sanctions and fines for euro area members.

Sources: Implementation of the Fiscal Compact in the Euro Area Member States, German Council of Economic Experts, and FAD database, IMF (2015c).

65. **Several institutional and design features and prerequisites can help ensure the success of fiscal and debt rules.** Rules are most effective when they are enshrined in high-level legislation, which is more difficult to modify, even with a change of government. A top-down budgeting process needs to be introduced, where the aggregate expenditure limit is decided before the distribution of expenditures. Fiscal rules can be supported by a fiscal responsibility law, which sets out procedural and transparency responsibilities of the government towards the parliament. Establishing independent bodies, such as independent fiscal councils mentioned earlier, further enhances the credibility of fiscal rules. The use of automatic mechanisms to correct past deviations from the rule can prevent temporary

deviations to lead to a systematic debt buildup. Escape clauses provide the flexibility to deal with unforeseen and severe events; these should clearly specify the circumstances where rules-based fiscal frameworks can be suspended temporarily and include a limited range of factors that allow such escape clauses to be triggered. Finally, reliable data availability and technical forecasting capacity are important to ensure credibility, while a budget reporting system and a timely release of fiscal data are needed to allow internal and external monitoring of the rule.

66. In line with international experience, Djibouti could start by adopting a Debt Law to govern all future borrowing and by introducing a simple quantitative debt anchor. For example, the authorities could (i) develop a medium-term debt strategy integrated with the macroeconomic framework, appended to the annual budget; (ii) announce an explicit debt-to-GDP threshold deemed sustainable over the next five years and include it in the budget; (iii) commit to implementing corrective measures in subsequent budgets in case of a breach of the threshold; (iv) re-run the DSA before any new loan exceeding 0.5 percent of GDP is contracted; (v) establish a database to monitor external and domestic debt contracted by public enterprises, and the guarantees and collateral set aside by the government on such debt; (vi) and regularly publish comprehensive debt statistics on the public and private sector. Finally, the authorities could include a public debt sustainability framework in the macroeconomic framework, limit public borrowing to projects with high rates of return, and limit non-concessional borrowing to projects that can be run on a commercial basis¹⁴.

E. Conclusions

67. Overall, fiscal policy has substantial potential to support growth in Djibouti, even in a high debt environment. Creating and maintaining fiscal space are the main preconditions for continuing to support growth given limited scope to increase borrowing in a sustainable way. The multidimensional approach to fiscal space in Djibouti suggests that, with prudent policies and continued reform efforts, some fiscal space may open in the medium to long run. Additional fiscal space would provide additional support to projected growth, which if sustained would contribute to a reduction of the level of debt—a rate of growth greater than the rate of debt accumulation.

68. In the short run, the country has very limited fiscal space. Given the high risk of debt distress signaled by the DSA, there is very little space for providing additional, debt-financed fiscal support to growth. Nevertheless, with targeted policies the government can open pockets of fiscal space in the short term. Fiscal space can be created by growth-friendly tax reforms, which would expand the tax base and rebalance the tax system toward more growth-friendly consumptions taxes—designed and implemented to avoid excessive burden on lower income groups. On the expenditure side, fiscal policies could aim to rebalance the

¹⁴ IMF (2017b).

expenditure composition toward expenditure items with high growth multipliers, such as investment expenditure. To sustain current and upcoming budgetary needs, all these reforms should target at least a revenue-neutral outcome.

69. **Structural public finance reforms could also support growth.** Medium-term budgeting integrated with a public debt sustainability framework can help improve fiscal decision-making, in particular for investment. Better fiscal transparency, for example using the IMF's Fiscal Transparency Code as a reference, would give the authorities better visibility of their public resources and would help improve the trust and confidence of international investors. The introduction of the GFSM 2001/14, which is the international standard for public accounting, would provide a complete overview of public sector financial flows, assets, and liabilities. Finally, the use of contingency mechanisms, such as the precautionary reserve envelope, could help prevent possible fiscal slippages, improve the efficiency of public investment, and open additional fiscal space to support growth.

70. **To preserve fiscal and debt sustainability, Djibouti could consider introducing fiscal and debt rules.** The need and configuration of such rules may require a broad national consensus which could be established through a National Fiscal Rule Conference or Debt Conference, analogous to the successful 2015 National Tax Conference. The significant technical preparatory work needed for the introduction of such rules could draw on technical assistance from the Fund and on the experience of peers, including other countries in a similar high debt situation.

71. **The authorities have already taken steps to support growth in the current period of rapid debt accumulation.** To control debt accumulation, they have prepared a Debt Law and are working on establishing a national public debt committee. They have established a database of all debts contracted by the central government and public enterprises, as well as guaranteed by the government. They are also considering the appropriate level and configuration of a debt anchor. To ensure fiscal sustainability, the authorities are following a broadly balanced budget policy, which targets small and easily financeable overall deficits in the medium term. Finally, they are strengthening the monitoring of large investment projects, and have reduced the tax burden on small and medium-sized enterprises to allow them to contribute better to growth.

III. BUSINESS CLIMATE AND GROWTH – LESSONS FOR DJIBOUTI

This section argues that improving the business climate is the single most important factor to increase growth in Djibouti. The goal to transform the country into a middle-income economy is ambitious, yet achievable if fundamental reforms are designed and implemented steadfastly: large-scale investment in infrastructure and service exports, while important, will not be sufficient. International experience of comparator countries, which in the early 1990s had a level of per capita income comparable to that of Djibouti today, suggests that doubling and even tripling per capita GDP requires persistently sound macroeconomic policies accompanied by strong business environment reforms to unlock private investment and growth in new sectors. A simple growth model that uses the World Bank Doing Business rank as an indicator of the quality of the business environment suggests that this indicator needs to improve at least twofold—building on significant progress achieved in 2017 when Djibouti was among the top 10 reformers globally. Further reforms of public enterprises would help reduce production costs, notably energy and communication, which would also improve the business environment.

A. Introduction

72. **Transforming Djibouti into a middle-income economy by 2035 will require sustaining exceptionally rapid and inclusive growth for close to two decades.** Although the authorities' strategy does not specify the exact quantitative parameters of a middle-income economy, its target of tripling Djibouti's GDP per capita—from the current level of about US\$1,700 to above US\$5,000¹⁵—would require a sustained annual GDP growth rate of about 7 percent.

73. **The rest of this section is structured as follows. Section II describes the selection of comparators for Djibouti** that have achieved the desired growth rate in the past 20 years, presents a simple Solow-type growth model, estimates the growth rate needed to achieve the desired level of steady state GDP per capita consistent with a middle-income economy status by 2035, and performs policy simulations on the structural reforms needed to increase the potential growth rate. Section III discusses the policies needed to improve the business climate in key macroeconomic areas. Section IV concludes.

B. Growth Framework

Comparators and the Model

74. **Other maritime hubs such as Dubai, Singapore, and Hong Kong SAR come to mind as possible comparators for Djibouti's vision as a hub of East Africa and a middle-income economy.** Based on their geographical location and characteristics, those are often mentioned as possible economies Djibouti should try to emulate. However, they are

¹⁵ Subsequent calculations are PPP-based.

high-income economies and would not be suitable comparators for Djibouti at its current stage of development.

75. **For the purposes of this section, the comparators for Djibouti were selected based on their high and sustained rate of growth.** For the period 1990–2014, all countries were ranked by the highest cumulative GDP per capita growth rate in PPP terms (Figure 15). The periods of the highest average growth rates were established and the cumulative levels of debt accumulated by 2014 were also calculated. Further filtering included several steps. First, most advanced economies were excluded as their economic base is substantially different from Djibouti's. Second, from the remaining list, all countries with a cumulative per capita growth below twofold between 1990 and 2014 were removed; this is the minimum growth threshold Djibouti needs to achieve if it aims at tripling in GDP per capita in 20 years. Third, to control for unequal starting conditions, all countries with a GDP per capita in PPP terms two times higher/lower than that of Djibouti in 1990, i.e., below US\$1,500 and above US\$6,000, were suppressed. Finally, to control for scale, China and India were also dropped from the list.

Figure 15. Comparator Countries

Country	Growth episodes		Episode length	Average growth	GDP per capita in PPP			2018 DB rank	WB classification	
	Start	End			1990 level	2014 level	2014/1990		Lower middle income	Upper middle income
Cape Verde	1991	2008	18	7.2	1,609	6,343	3.9	127	X	
Vietnam	1991	2014	24	5.4	1,501	5,370	3.6	68	X	
Bhutan	1991	2012	22	5.2	2,332	7,500	3.2	75	X	
Lao PDR	1991	2014	24	5.0	1,622	4,925	3.0	141	X	
Sri Lanka	1999	2014	16	5.5	3,340	10,043	3.0	111	X	
Dominican Republic	1991	1999	13	3.7	5,278	12,505	2.4	99		X
Albania	1992	2009	18	6.2	4,350	10,160	2.3	65		X
Mongolia	2000	2014	15	7.1	5,122	11,509	2.2	62		X
Indonesia	2000	2014	15	4.1	4,548	10,099	2.2	72	X	
Peru	2002	2013	12	4.7	5,280	11,514	2.2	58		X
Armenia	1993	2007	15	8.5	3,736	7,763	2.1	47	X	
Ghana	2003	2014	12	4.6	1,920	3,953	2.1	120	X	
Guyana	1991	1996	8	4.2	3,231	6,545	2.0	126		
Tunisia	1995	2007	13	3.6	5,502	10,768	2.0	88		X
Djibouti	1994	2014	11	2.6	3,050	3,016	1.0	154	X	

Source: IMF WEO database, Doing Business 2018 Report.

76. **Five countries emerge as comparators based on the selected filters.** Cape Verde, Vietnam, Bhutan, Lao PDR, and Sri Lanka tripled their GDP per capita in the past quarter century and were comparable to Djibouti in their level of development in the early 1990s. Although some of them advanced from low-income to lower middle-income status, none of them, so far, has reached upper middle-income status.

77. **Growth can be driven by multiple factors.** In the most general form, average growth can be explained by multiple parameters (Sachs and Warner 1997):

$$\Delta \bar{y} = \alpha_i + \beta \sum_{n=1}^{n=i} X + \varepsilon_i$$

where the dependent variable is the average real GDP per capita growth in country i , the right-hand side variable X is a vector of country-specific variables that explain growth, and ε_i is a country-specific random error. The explanatory variables include variables that may be important for growth—such as physical and social capital, labor, and the size of government. The explanatory variables also include the level of GDP at the start of the estimation period to account for differences in the starting conditions. The average GDP growth rate is taken over long periods, e.g. ten or more years. The regression of real GDP growth on multiple independent variables is performed on a cross-section of countries with available data.

78. The parameters of the growth model were estimated using a panel sample of countries. The panel included 109 countries for which data was available for 1990–2012. As in Sachs and Warner (1997), several variables that may explain growth were considered, including the World Bank Doing Business (DB) rank, real export growth, economic complexity, economic diversification, investment rate, percentage of population with some secondary education, average years of schooling, adjusted net saving, mortality rate, life expectancy at birth, log GDP per person in 1990, average annual growth in GDP per capita, percentage of GDP in natural resources, natural resource value added per person, costs of exports, and non-market economy status. The DB rank is the only available measure of business climate harmonized across countries used among the explanatory variables. It provides a standardized measure of the ease of doing business based on business regulations and their enforcement across 190 economies across ten sets of indicators.

79. Only a few were found to have a significant impact on growth. These are the initial level of per capita income in 1990, the business environment as captured by the DB rank, the investment ratio (total public and private investment in percent of GDP), and real export growth.¹⁶ The constant in the regressions equation was assumed to capture all other factors affecting growth (Figure 16). The estimated parameters for these four variables are statistically significant and have the expected sign. The coefficient on the initial condition has the negative sign since higher initial GDP is associated with a lower growth rate. Improvements in the business environment lead to a better (lower) DB rank and the coefficient has the expected negative sign. Both higher investment and higher export production and demand usually lead to higher growth and the coefficients are positive, as expected.

¹⁶ This approach has limitations. A panel may not capture all the determinants of growth relevant to a particular country.

Figure 16. Average Growth Factors

GDP growth per capita 1990-2012	Coef.	Std. Err.	t-stat.	P> t	95% Conf. interval
Constant	9.008	2.149	4.190	0.000	4.736 13.280
GDP per capita in 1990	-0.978	0.215	-4.550	0.000	-1.405 -0.551
Doing Business rank	-0.011	0.003	-3.740	0.000	-0.017 -0.005
Investment (percent of GDP)	0.046	0.020	2.290	0.025	0.006 0.087
Real exports growth (percent)	0.219	0.042	5.180	0.000	0.135 0.304
Number of observations	109				
R-squared	0.661				

Source: Staff estimates, Sacks and Warner (1997).

80. **This simple regression may help identify key long-term growth factors for Djibouti.** First, while in this framework the potential per capita growth rate depends on given starting conditions, such as the initial level of income, it also explicitly depends on policy variables, which can be improved by public policies. Second, the model can be used to estimate the growth rate needed to achieve the desired level of steady state GDP per capita level, again conditional on the initial income and policy variables¹⁷. This targeted growth rate may be viewed as an important policy objective for the authorities. Third, the model can be used to conduct policy simulations to identify the set of priority structural reforms that can help increase the potential growth rate to the desired level, therefore providing the authorities with a strong argument for domestic reforms in specific areas. Finally, the model helps distill lessons from comparator countries on specific reforms that have been successful there and may be also successful in Djibouti given the similarities in their level of development.

81. **The model does not capture all potential growth-creating policies, and therefore its results should be treated as indicative.** The model relies on a limited number of quantifiable variables, and even the Doing Business rank captures only partially the host of structural parameters affecting economic growth, including governance, private sector participation, regional integration. Also, growth in Djibouti depends heavily on exogenous factors, such as demand for port services by Ethiopia, exports to the Gulf countries, the level

¹⁷ Growth of GDP per capita can be viewed as a transition from its current level to the steady-state level. Barro and Sala-i-Martin (1995) show that the time path of per capita GDP can be presented as:

$$y_t = (1 - e^{\beta t})y_{ss} + e^{\beta t}y_0$$

Following Sachs and Warner (1997), per capita GDP will be initially y_0 and will reach the steady state y_{ss} in the long run, if parameter $\beta < 0$. Growth will be initially faster, but will decelerate gradually over time as it approaches the steady state. The larger the gap ($y_{ss} - y_0$) between the current level of GDP per capita and its steady state level, the faster will be the growth rate of the country; this is consistent with the empirically observed trend that low-income countries tend to grow on average faster than high-income countries as the former start from lower base.

of financial inflows, in particular from China, and the state of international trade which affects the volume of transshipments of goods through Djiboutian ports. Both positive and negative spillovers from these exogenous factors will affect growth in Djibouti.

Empirical Results for Djibouti

82. Comparator countries outperformed Djibouti on many policy variables important for long-term growth. While Djibouti's investment ratio was close to the comparators' average in 1990–2014 (before the 2015–17 investment boom), its real export growth was well below, and its 2018 Doing Business ranking was the lowest, irrespective of a substantial improvement from the previous year (Figure 17).

Figure 17. Comparators' Performance

	Doing business rank 2018	Average 1990-2014 investment (percent of GDP)	Average 1990-2014 export growth (percent)
Cape Verde	127	18.3	n.a.
Vietnam	68	28.1	15.8
Bhutan	75	18.3	n.a.
Lao PDR	141	18.3	14.2
Sri Lanka	111	26.1	5.9
Dominican Republic	99	27.7	6.1
Albania	65	n.a.	n.a.
Mongolia	62	n.a.	n.a.
Indonesia	72	30.7	6.4
Peru	58	20.7	8.5
Armenia	47	n.a.	n.a.
Ghana	120	19.1	11.0
Guyana	126	n.a.	n.a.
Tunisia	88	24.0	4.1
Djibouti	154	21.1	2.2

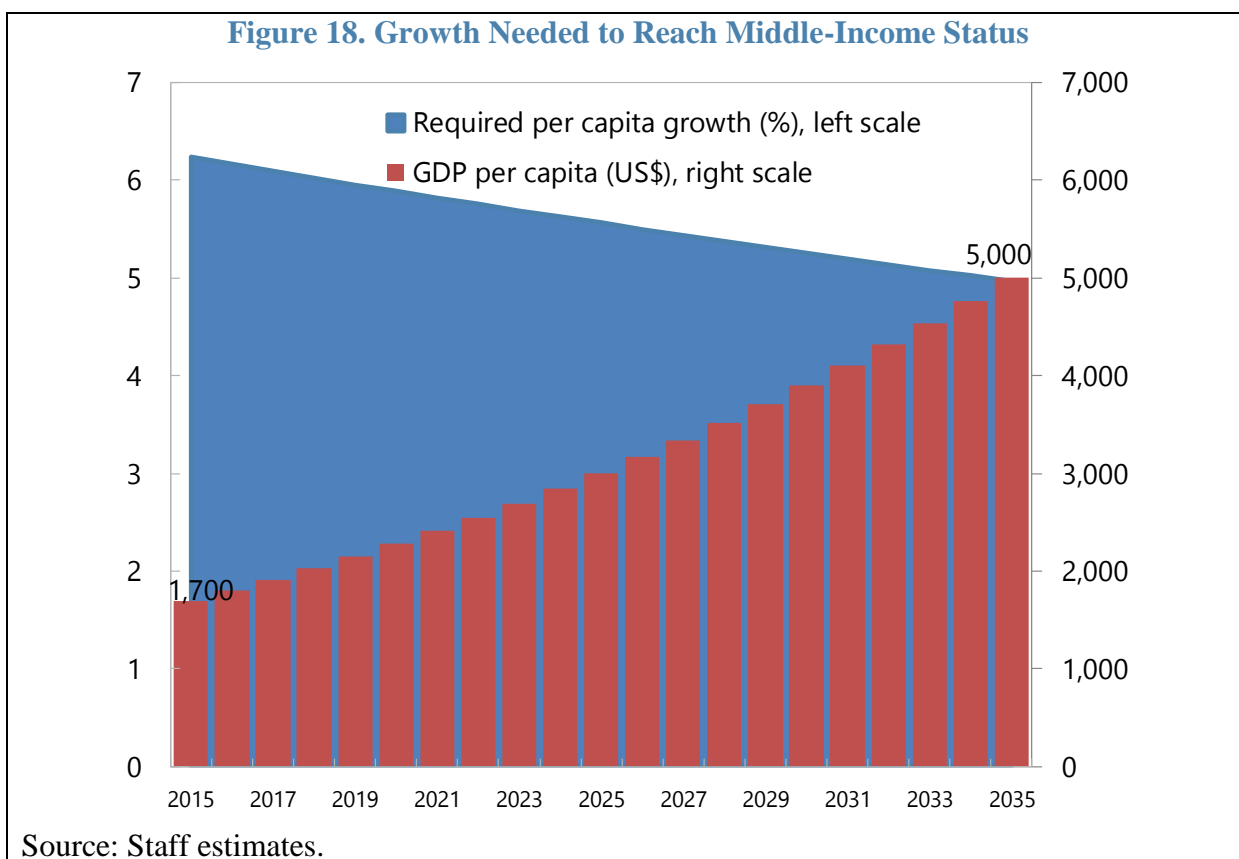
Source: World Bank, 2018a, WEO October 2016 database.

83. The model suggests that with unchanged policies, Djibouti's per capita GDP growth would remain too low to reach middle-income status in the next two decades. Given Djibouti's 1990s initial level of GDP per capita (US\$760) and under unchanged policies (a 2010 DB rank of 163,¹⁸ an average historical investment ratio of 21 percent of GDP, and an annual real export growth of 2.2 percent), the cross-country regression parameters suggest that Djibouti's average annual per capita growth rate in 2017-37 would

¹⁸ Doing Business ranks are not comparable across years as new countries are added to the list.

reach only 0.4 percent. This growth would only achieve a per capita steady state GDP level of about US\$2,800 in the very long run, compared to the current level of about US\$1,700.¹⁹ Clearly this is not sufficient to make Djibouti a middle-income economy. Therefore, unchanged policies are not an option for the Djiboutian authorities if their aspirations of becoming a middle-income economy are to be fulfilled— reforms are indispensable.

84. **A substantially higher per capita growth rate is needed to advance the Djiboutian economy to middle-income status within the next 20 years.** The model suggests that to reach the long run steady state of at least US\$5,000 per capita from the current level of US\$1,700, during 2017–2021 the per capita growth rate would need to be in the range of 5-6 percent per year on average, which given a population growth of about 2 percent would translate into a real growth rate exceeding 7-8 percent per year (Figure 18). While this is a very high growth rate relative to the current Djibouti’s growth estimated at 5-6 percent, it may yet be achievable based on the experience of comparable countries (Armenia, Cape Verde, and Vietnam) that have successfully maintained such rates for at least a decade in the recent past.



¹⁹ The predicted steady state is calculated by solving the implicit differential equation underlying the regression equation: because the estimated coefficient on the 1990 per capita GDP is negative, GDP traces out a concave path that asymptotes at the steady state.

Policy Options to Raise Growth

85. **To achieve a high and sustained growth rate, macro-structural policy reforms are needed.** The international experience suggests three broad policy areas where appropriate reforms can accelerate growth: the business environment, investment, and exports.

86. **Using the parameters found in the previous section, a static simulation can estimate how Djibouti's GDP growth would evolve if each explanatory variable of the growth model took the value of comparator countries.** This simple exercise answers the question of what Djibouti's per capita income would be in 2035 if it improved its Doing Business climate to the level of, for example, Cape Verde; or if it increased its investment ratio to the level of Sri Lanka; or if it enhanced its export potential at the rate of Vietnam²⁰ (Figure 19).

87. **Improvements in the business climate would make a sizeable contribution to raising per capita GDP.** Improving Djibouti's DB rank to the level of Albania in 2018, i.e., from 154 to 65 (or even better, to the level of Peru, or Armenia) would be sufficient to make it a middle-income economy with a steady state per capita GDP of over US\$ 5,000. However, improving the DB rank only to the level of other comparator countries, for example to the level of Guyana, Ghana, Sri Lanka or Lao PDR, would not be enough to make it a middle-income economy. Overall, Djibouti needs to improve its DB rank twofold or gain at least about 100 points. This suggests that rapid DB reforms are needed relative to other countries, with a view to gaining at least 5 ranks per year for the next 20 years. This would be very ambitious. Moreover, calculations are only a partial equilibrium and do not consider the fact that other countries would be improving their Doing Business rankings during this period.

²⁰ For these calculations, the coefficients in Figure 17 have been adjusted to linearize the nonlinear solution of the growth differential equation. Also, the assumption is that the structural changes would not affect the estimated parameters (Sachs and Warner, 1997).

Figure 19. Policy Options
(Djibouti's US\$ GDP per capita in 2035 if policies are set at the level of comparators)

Comparator	Improve doing business environment		Increase investment		Increase exports	
	DB 2017 rank	Djibouti's per capita GDP (US\$)	1990-2014 average investment/GDP (percent)	Djibouti's per capita GDP (US\$)	1990-2014 average real exports growth (percent)	Djibouti's per capita GDP (US\$)
Armenia	47	6,550	21.1	1,708	8.5	7,270
Peru	58	5,457	20.7	1,679	6.2	4,282
Albania	65	5,214	28.1	2,381	9.1	8,384
Mongolia	62	4,869	32.6	2,948	10.0	10,248
Bhutan	75	4,394	12.6	1,141	3.7	2,483
Tunisia	88	4,198	24.0	1,962	4.3	2,819
Vietnam	68	3,965	28.1	2,386	11.8	15,306
Indonesia	72	3,578	30.7	2,693	4.1	2,716
Dominican Republic	99	3,120	27.7	2,340	3.9	2,611
Ghana	120	2,947	24.8	2,036	8.6	7,475
Sri Lanka	111	2,881	26.1	2,169	5.9	4,011
Guyana	126	2,456	19.8	1,606	4.4	2,911
Cape Verde	127	2,320	18.3	1,496	10.2	10,555
Lao PDR	141	2,069	12.3	1,125	11.4	13,832
Djibouti	154	1,700	21.0	1,700	2.2	1,700

Source: Staff estimates.

88. **Investment alone, even on a massive scale, would not be sufficient to make Djibouti a middle-income economy.** Even if the average investment ratio were raised to the level of Mongolia (33 percent of GDP) or Indonesia (31 percent of DGP) and maintained at this level during the next 20 years, Djibouti would only be able to reach a per capita income of roughly US\$2,500–3,300, about half of what is needed to become a middle-income economy. The required per capita income level could only be achieved through investment alone if Djibouti, for the next two decades, maintained an investment ratio of about 50 percent of GDP—equivalent to the peak of the current investment boom in 2015. However, this is not a feasible policy option if investment is largely debt-financed, given that Djibouti already faces a high risk of debt distress.

89. **Export-led growth could in principle raise Djibouti to middle-income status, but would likely require substantial export diversification which would take time to come about.** Achieving and sustaining a 10 percent annual growth rate of real exports for the next 20 years, as has been the case recently in Mongolia, Vietnam, Cape Verde, and Lao PDR, would alone take Djibouti to middle-income status. However, this scenario is unlikely. In some of the above-mentioned countries, the rapid export growth was driven mainly by a natural resource discovery, exploration, and subsequent boom, and Djibouti lacks natural resources that could be exported on a large scale. Thus, unless a major discovery of an exportable resource is made in the immediate future, Djibouti can count only on expanding its exports of port and transshipment services following the coming online of the planned new ports. These service exports, which constitute about 30 percent of Djibouti's GDP and

80 percent of overall exports, have in the recent past experienced only an annual growth rate slightly above 2 percent. Thus, increasing the growth rate of exports fivefold and sustaining it during the next two decades would require a major structural transformation and diversification of the economy.

90. **Even though the model-based simulations suggest that investment and exports have a smaller impact on growth in the short run, they remain important drivers of growth in the long run.** For this reason, Djibouti's investment-to-GDP ratio, which is relatively high and comparable to peer countries, should be maintained. However, investment should be increasingly financed by the private sector, to avoid further worsening of the public debt burden and associated vulnerabilities. In fact, in addition to increasing debt service obligations, the rising public capital stock will require additional resources in operations and maintenance, and therefore adequate provision in the medium-term fiscal framework. Export diversification is also important, and—given Djibouti's circumstances—should be mainly directed toward new services such as tourism, telecommunications, and advanced port services.

91. **Overall, a combination of structural reforms—focused on the business environment—would be needed to accelerate growth decisively.** Since the business environment is a major factor for growth, and investment alone is not sufficient, the emphasis should be on structural reforms to improve the business climate. A strong improvement in the business climate by at least 70 points in the DB ranking, which would place Djibouti in the 100–110 range, supported by a permanent increase of the investment ratio to about 25–30 percent of GDP, as in the Dominican Republic, Ghana, or Sri Lanka, would allow Djibouti to achieve middle-income status by 2035. Advancing by only 40–50 ranks in the DB ranking—to the level of Lao PDR and Sri Lanka (130–140)—would not only require raising investment to the level of at least Indonesia or Vietnam (28 percent of GDP), but also doubling the export growth rate to at least the level of Bhutan and Guyana (to about 4 percent annually). Although progressing in all directions simultaneously is challenging, success is unlikely without a critical mass of structural reforms that can generate a virtuous cycle where major improvements in the business environment support both higher private investment and higher export diversification.

C. Policies to Improve the Business Environment

92. **Djibouti has achieved progress in improving its business environment.** Based on the DB indicators, although there have been some improvements in recent years, Djibouti was ranked only 154 out of 190 countries in 2018 (Figure 17). According to the DB database, advances in 2008–2016 in specific areas were substantial but on par with other countries. While reforms in some areas helped improve the DB rank, others represented setbacks.

93. **In the past few years, the authorities have taken steps to improve the DB rank.** The greatest advances have been in trading across borders: the authorities implemented an electronic manifest system, reduced documentation requirements for exporting and importing

(by improving port administration and eliminating some health and technical formalities), and built a new container terminal. Djibouti made property registration faster by improving efficiency at the department of property of the Ministry of Finance. The authorities made resolving insolvency easier by adopting a new commercial code, which allows an insolvent debtor to file for preventive settlement, legal redress, or liquidation, and sets out clear rules on the steps and procedures for each of the alternatives available. In getting credit, Djibouti strengthened its secured transactions system by adopting a new commercial code that broadens the range of movable assets that can be used as collateral. Also, Djibouti made starting a business easier by simplifying the company name search and by eliminating the minimum capital requirement, as well as the requirement to publish a notice of commencement of activities. Further advances in starting a business were made in 2016-17 with the opening of a single window for company registration.

94. **According to the 2018 DB report, further improvements have been achieved in several areas.** Starting a business: Djibouti made starting a business less costly by exempting new companies from professional license fees and reducing fees to register a business and publish the notice of commencement. Dealing with construction permits: Djibouti made obtaining a construction permit easier by reducing the cost of concrete inspections and by implementing decennial liability for all professionals involved in construction projects. registering property: Djibouti made registering property easier by increasing the transparency of the land administration system. Getting credit: Djibouti improved access to credit information by adopting a law that creates a new credit information system. Protecting minority investors: Djibouti strengthened minority investor protections by requiring greater disclosure of transactions with interested parties, strengthening remedies against interested directors, extending access to corporate information before trial, increasing shareholder rights and role in major corporate decisions, clarifying ownership and control structures and requiring greater corporate transparency. Djibouti's distance to frontier score improved by 3.79 percentage points.

95. **DB ranks help identify the areas where further reforms can help improve the business climate** (Figure 20). Out of 10 DB topics, five topics—starting a business (115) dealing with construction permits (84), protecting minority investors (96), paying taxes (108), and resolving insolvency (73) rank better than the overall rank of 154. In the other five, Djibouti scores lower than its overall rank: getting electricity (169), registering property (168), getting credit (183), trading across borders (159), and enforcing contracts (175). While the overall rank is not a simple average of the ranks by topics, but rather is based on the distance to frontier (DTF) score, these ranks by DB topic still indicate the main structural weaknesses, both relative to its own overall ranking and that of comparators.²¹

²¹ Calculating the DB ranks involves three steps. In the first step, individual components for all 41 indicators are normalized to a common unit. In the second step, the scores obtained for individual indicators for each economy are aggregated through simple averaging into one distance to frontier score, first for each topic and

Figure 20. Doing Business Summary

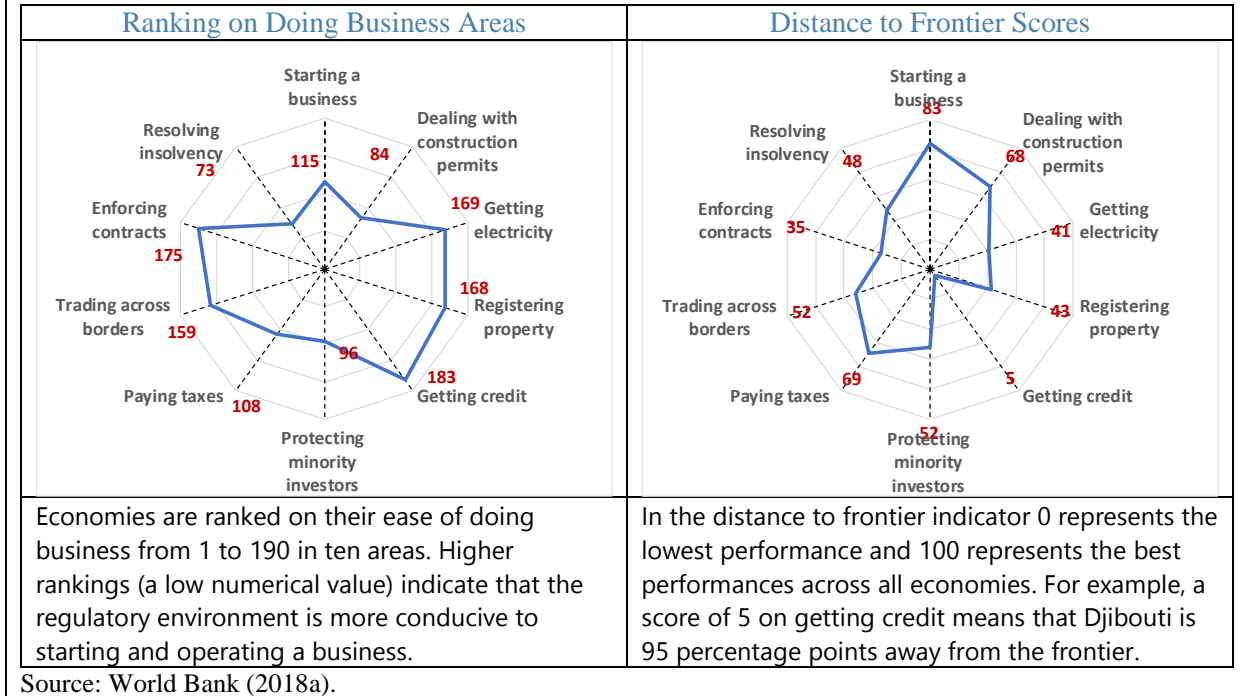
Ease of doing business rank (1–190)	154	Overall distance to frontier (DTF) score (0–100)	49.58	Population	942,333
Starting a business (rank)	115	Getting credit (rank)	183	Trading across borders (rank)	159
DTF score for starting a business (0–100)	83.38	DTF score for getting credit (0–100)	5.00	DTF score for trading across borders (0–100)	51.87
Procedures (number)	7	Strength of legal rights index (0–12)	1	<i>Time to export</i>	
Time (days)	14	Depth of credit information index (0–8)	0	Documentary compliance (hours)	72
Cost (% of income per capita)	35.0	Credit bureau coverage (% of adults)	0.0	Border compliance (hours)	109
Minimum capital (% of income per capita)	0.0	Credit registry coverage (% of adults)	0.4	<i>Cost to export</i>	95
				Border compliance (US\$)	944
Dealing with construction permits (rank)	84	Protecting minority investors (rank)	96	<i>Time to import</i>	
DTF score for dealing with construction permits (0–100)	68.48	DTF score for protecting minority investors (0–100)	51.67	Documentary compliance (hours)	50
Procedures (number)	17	Extent of disclosure index (0–10)	7	Border compliance (hours)	78
Time (days)	111	Extent of director liability index (0–10)	7	<i>Cost to import</i>	
Cost (% of warehouse value)	5.4	Ease of shareholder suits index (0–10)	3	Documentary compliance (US\$)	100
Building quality control index (0–15)	11.0	Extent of shareholder rights index (0–10)	6	Border compliance (US\$)	1,209
		Extent of ownership and control index (0–10)	5		
Getting electricity (rank)	169	Extent of corporate transparency index (0–10)	3	Enforcing contracts (rank)	175
DTF score for getting electricity (0–100)	40.75			DTF score for enforcing contracts (0–100)	34.78
Procedures (number)	4	Paying taxes (rank)	108	Time (days)	1,025
Time (days)	125	DTF score for paying taxes (0–100)	68.91	Cost (% of claim)	34.0
Cost (% of income per capita)	5,979.9	Payments (number per year)	35	Quality of judicial processes index (0–18)	3
Reliability of supply and transparency of tariffs index (0–8)	0	Time (hours per year)	76		
		Total tax rate (% of profit)	37.7	Resolving insolvency (rank)	73
Registering property (rank)	168	Postfiling index (0–100)	49.57	DTF score for resolving insolvency (0–100)	48.32
DTF score for registering property (0–100)	42.65			Time (years)	2.3
Procedures (number)	6			Cost (% of estate)	11.0
Time (days)	39			Recovery rate (cents on the dollar)	37.5
Cost (% of property value)	12.7			Strength of insolvency framework index (0–16)	9.0
Quality of land administration index (0–30)	4.5				

Source: World Bank (2018).

96. **Djibouti's DB environment in individual topics varies substantially** (Figure 21). In the 2018 Doing Business ranking, at one extreme Djibouti has a relatively high rank of 73 on resolving insolvency (with a DTF score of 52), and the 84th rank on dealing with construction permits (with a DTF score of 68). These two areas of DB substantially improve the overall rank. At the other extreme, Djibouti has the lowest rank relative to its own average in enforcing contracts (175) and access to credit (183) with the DTF scores of 35 and 5, respectively, which clearly worsens the overall rank.

then across all 10 topics. In the third step, the rank of economies is determined by sorting the aggregate distance to frontier scores.

Figure 21. Business Environment in Key Areas



97. **The Doing Business reports point to specific reform areas.** Strong legal rights and good information on borrowers and lenders can help improve Djibouti's rank on access to credit and its allocation in Djibouti (Figure 21). Sound collateral laws enable businesses to use their assets, especially movable property, as security to generate capital. Strong creditors' rights have been associated with higher ratios of private sector credit to the GDP. Credit information systems enable lenders to view a potential borrower's financial history when assessing risk. For borrowers, they allow the establishment of a good credit history that will facilitate their access to credit. However, in Djibouti only two out of four indicators on the access to credit are ranked non-zero. The law in Djibouti allows businesses to grant security rights without requiring a specific description of collateral. On another 11 categories of the strength of legal rights index, Djibouti is ranked at zero. Only 0.4 percent of the adult population has credit history and is included in the credit registry. Credit registries are not yet operational, therefore the index on the depth of credit information is zero.

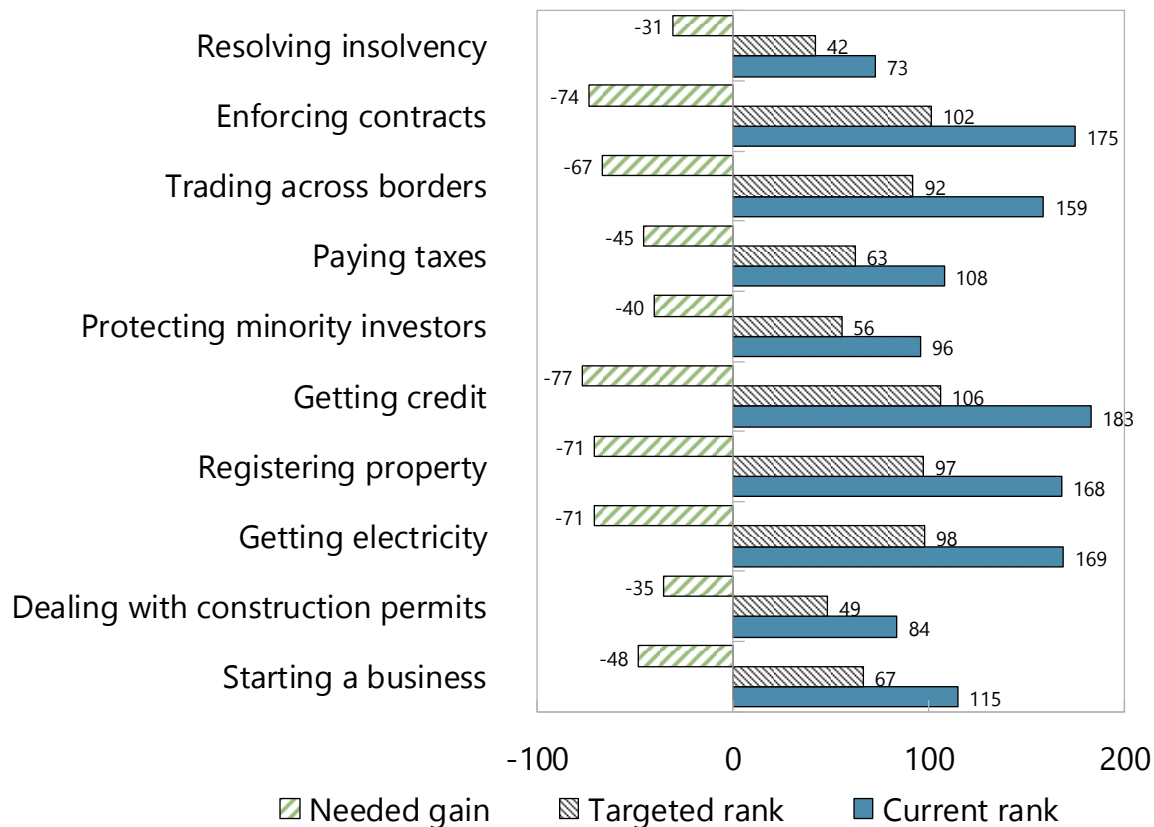
Figure 22. Getting Credit Indicators

	Index
Strength of legal rights index (0–12)	1
Rights of borrowers and lenders through collateral laws	
Protection of secured creditors' rights through bankruptcy laws	
Depth of credit information index (0–8)	0
Scope and accessibility of credit information distributed by credit bureaus and credit registries	
Credit bureau coverage (% of adults)	0
Number of individuals and firms listed in largest credit bureau as percentage of adult population	
Credit registry coverage (% of adults)	0.4
Number of individuals and firms listed in credit registry as percentage of adult population	

Source: World Bank, 2018b.

98. **A significant improvement in the business environment can be achieved only if it is broad-based and affects all DB areas.** Clearly, the most progress is needed in improving access to credit (Figure 22). It should be supported by advances in contract enforcement, protecting minority investors, and other areas where the ranks are below Djibouti's overall average. However, such an advance alone will not be sufficient and should be complemented by reforms in all other areas—including because other countries are also continuously improving their own frameworks as well. Under the assumption that Djibouti should gain at least 70–80 points in the overall DB rank to raise per capita income to the level of a middle-income economy, an illustrative calculation suggests that an improvement on each individual DB category should be in the order of 30–80 points, depending on its current DTF score.

Figure 23. Targeted DB Ranks Gains



Source: Staff estimates.

99. **While challenging, such a substantial improvement in the business climate may be achievable.** The effort should be frontloaded, as a favorable business climate is the main precondition for achieving the high per capita income associated middle-income economy status by 2035. Quick advances are possible and have been observed in the past in many countries, including Vietnam, Mongolia, and Armenia, and have always been associated with a critical mass of deep reforms. In Djibouti, such reforms are already under consideration in DB areas such as paying taxes, by implementing major reforms of the tax system that are under consideration following the recommendations of the 2015 National Tax Conference; access to credit, where the authorities are developing the system of credit bureaus, credit information, and a guarantee fund; and access to electricity, with a number of projects of trans-border energy supply and geothermal energy generation nearing completion. Progress in other areas would require additional deep legal and institutional reforms.

D. Conclusions

100. **Improving the business environment is critical to raise Djibouti's growth rate to the level needed to transform it an emerging economy by 2035.** The goal of reaching \$5,000 per capita income is achievable, subject to strong macroeconomic policy

implementation, debt sustainability, and a critical mass of deep frontloaded macro-structural reforms focused on improving the business environment. Under this scenario, Djibouti could grow by 7 percent annually, with particularly high growth in the next few years—as needed to reach its per capital income target. Such growth rates cannot be achieved under unchanged policies, even with very high investment rates. And while achieving such growth rates is no guarantee of improved inclusiveness, many of the policies that are needed to improve the business climate can also help improve inclusiveness: for example, easier access to credit and better contract enforcement can increase opportunities for poorer segments of the population.

101. Djibouti’s progress toward middle-income economy status can be tracked against several comparator countries. Useful comparators are countries that have already achieved and sustained high growth rates in the past 20 years, have at least tripled their per capita GDP, or have succeeded in specific reform areas of direct interest to Djibouti.

102. International experience applied to Djibouti suggests that a healthy business environment is one of the most critical factors for growth. In the case of Djibouti, other significant variables that explain growth—such as the investment ratio and real exports growth—are less critical. Given the areas where Djibouti underperforms relative to its average DB rank, reforms should target in particular the energy sector, getting credit, taxation, investor protection, and property rights.

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