



# THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

## SELECTED ISSUES PAPER

October 2014

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# THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

## SELECTED ISSUES

September 5, 2014

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# ETHIOPIA'S DEVELOPMENT EXPERIENCE: ISSUES AND COMPARATIVE ANALYSIS WITH ASIAN PEERS

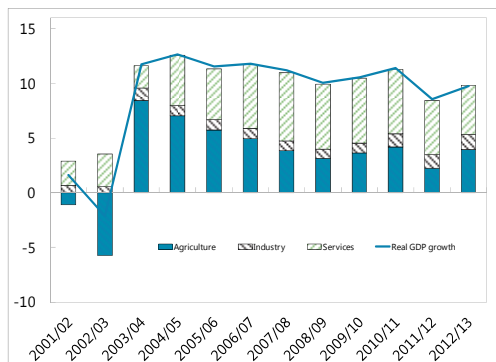
*While Ethiopia's public sector-led development strategy has delivered strong results over the past decade, it has been facing significant challenges in recent years. A model-based analysis of the country's investment program indicates that, despite positive long-run growth effects, transition challenges and macroeconomic trade-offs are associated with different financing strategies. Heavy reliance on domestic bank borrowing may require substantial fiscal and macroeconomic adjustments as well as entail a sharp increase in inflation. External commercial borrowing, on the other hand, may ease these adjustments but at the cost of significant increases in debt to GDP ratios. Comparing Ethiopia's development experience—especially in terms of structural transformation and competitiveness—with that of selected Asian countries indicates differences which point to possible adjustments in Ethiopia's development approach. This note argues that for Ethiopia to continue sustaining robust growth, leveraging the transformation power of the private sector, especially entrepreneurs, is essential.*

## BACKGROUND

1. **Ethiopia is pursuing a development strategy focused on promoting growth through high public investment.** The strategy involves concentrating government expenditures on human capital and social sectors and a dominant role for public enterprises in undertaking critical infrastructure investments. The authorities adopted a 5-year Growth and Transformation Plan (GTP) in November 2010, which aimed at average annual GDP growth of over 11 percent and achieving the Millennium Development Goals (MDGs). Among its main pillars are raising agricultural output and productivity, promoting industrialization, and investing heavily in infrastructure.
2. **Economic performance in recent years has been strong, with economic growth averaging in double-digits since 2004.** Although initially led by agriculture (Figure 1), growth has been broad-based, with a rising contribution from the services sector and some degree of export diversification.
3. **Ethiopia's development approach has been informed by the recent successful transformations in East Asia between the 1960s and 1980s.** A number of countries and jurisdictions—including China, Singapore, South Korea, Thailand, Taiwan, and Vietnam—underwent rapid economic growth and socio-economic change over a period of 30 years. With supportive public policies, these countries went from being poor agrarian societies in the 1960s to producers of high technology and high value-added goods by the 1990s.
4. **While Ethiopia has achieved some success over the past decade, sustaining the ambitious economic strategy is becoming increasingly challenging.** The macroeconomic picture is mixed with robust economic growth and inflation in single digits coexisting with negative short-term real interest rates, an overvalued exchange rate, and low reserve cover in months of imports.

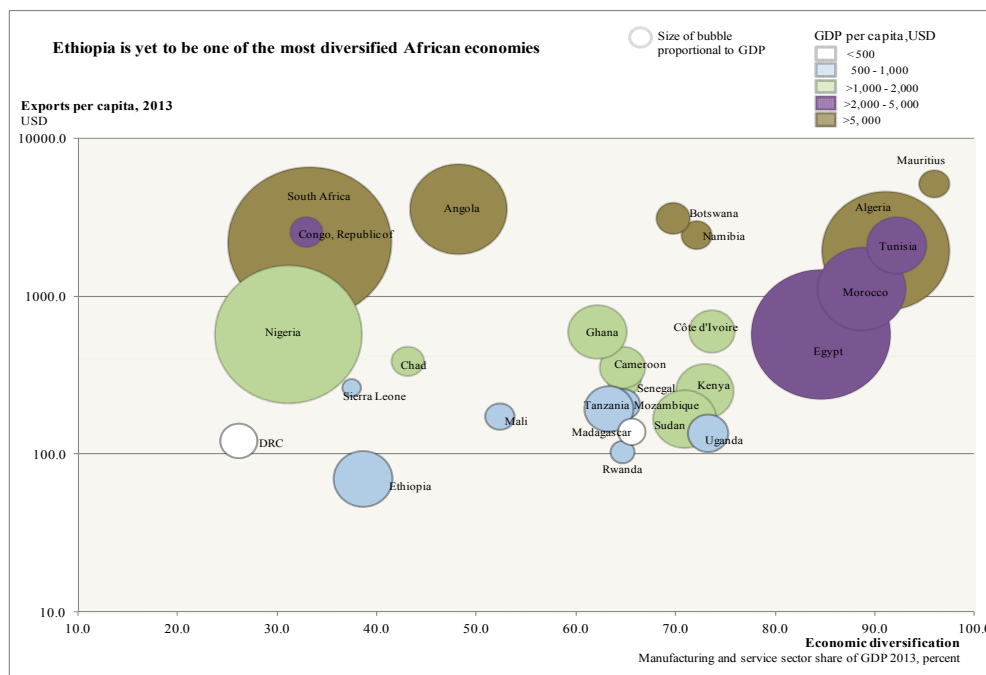
Growth in recent years has also been uneven in the context of global and domestic shocks. In addition, economic diversification is lagging behind other African economies (Figure 2).

**Figure 1. Ethiopia: Real GDP Growth and Contributions by Sector (percent)**



Sources: Ethiopian authorities and IMF staff calculations.

**Figure 2. Ethiopia: Export Diversification**



Sources: World Bank's World Economic Indicators, IMF World Economic Outlook, and IMF staff estimates.

**5. This paper compares the development experience of Ethiopia to that of the Asian countries and highlights the key differences.** It reflects on Ethiopia's recent competitiveness initiatives and investment financing strategy as well as its sustainability. Based on the lessons learned, it proposes a private sector centered approach focused on overcoming obstacles that inhibit entrepreneurial innovation necessary for industrialization and job creation.

## COMPARISON OF THE DEVELOPMENT EXPERIENCE OF ETHIOPIA AND THE ASIAN TIGERS

**6. The comparative analysis covers for each country a ten-year period characterized by high growth and implementation of various types of reforms.** The analysis considers China, South Korea, Thailand, and Vietnam as comparators. These countries are chosen because Ethiopia's development approach has been informed by their recent successful transformations which are considered as models for Ethiopia. The study period is 1982–91 for China; 1968–77 for South Korea; 1970–79 for Thailand; 2000–09 for Vietnam; and 2004–13 for Ethiopia.<sup>1</sup>

**7. Structural change, shifting resources—especially labor—from agriculture to industry is an important aspect of economic development.** Industrial sector development has been a prominent characteristic of countries transitioning from low- to middle-income economies. Experience shows that manufacturing as a share of GDP typically climbs from about 20 percent in the low income phase of development to about 40 percent during the middle-income phase of development, and the employment contribution from the industry sector increases in importance for countries as they shift from low-income to emerging economies (United Nations Development Program, 2012).

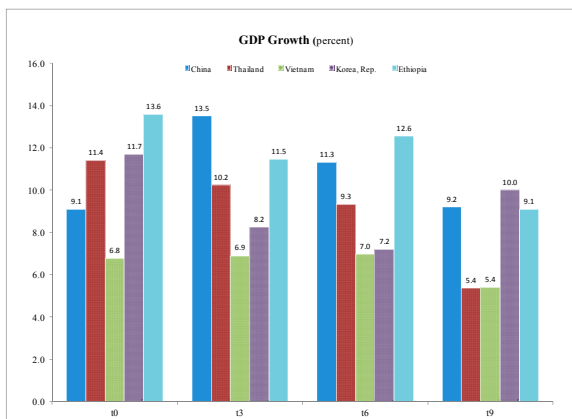
**8. The development path of the Asian comparators broadly follows this pattern of structural transformation.** There was a structural shift in the successful Asian countries toward manufacturing with substantially diminished share of agriculture and higher share of manufacturing in the GDP. The pattern in Ethiopia in contrast shows only some shift from agriculture toward the services sector, while the share of the manufacturing sector remains relatively stable and rather low (Figure 3).

**9. Industrialization is a key strategic pillar of the GTP.** The plan envisages an increase in the share of the industrial sector from 13 to 19 percent of GDP in the plan period (2010/11–2014/15), implying an average annual growth rate of the industrial sector of 20 percent. Actual performance in this sector is falling considerably short of the plan objectives and is in marked contrast to the successful Asian countries (Figure 4).

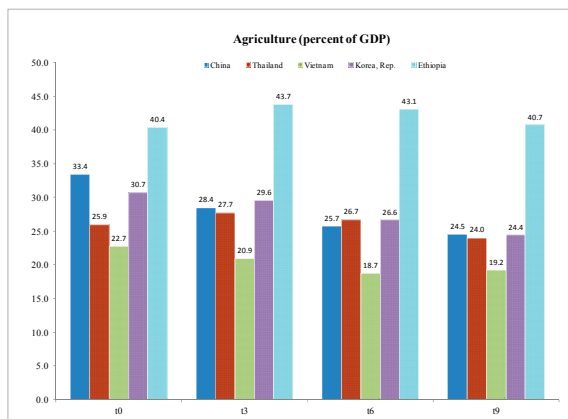
<sup>1</sup> Differences in initial conditions, including geographical or regional resource endowments, could be important factors and are not considered here.

**Figure 3. Ethiopia: Comparative Growth and GDP Contribution by Sector**

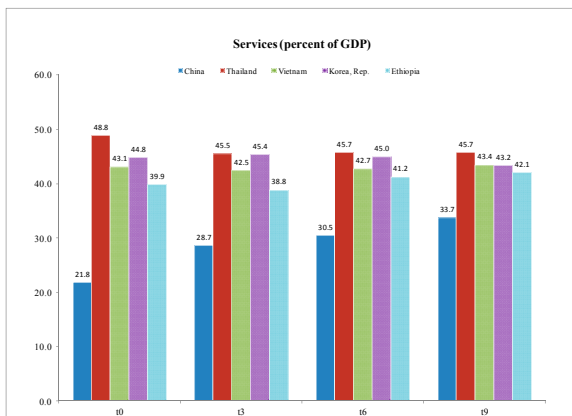
*Strong growth in line with comparator*



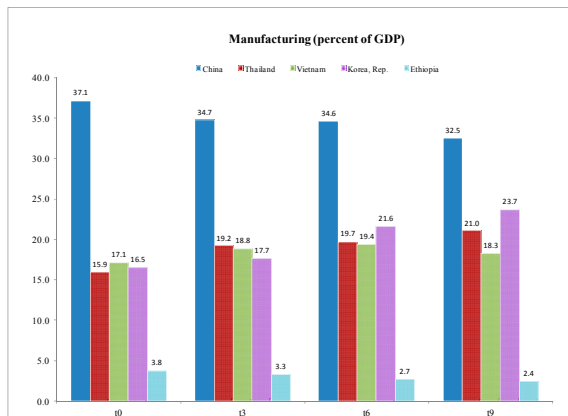
*Agriculture is the most important contributor in Ethiopia and has declined only marginally*



*With the exception of China, Ethiopia's services sector is relatively comparable to Asian comparators...*



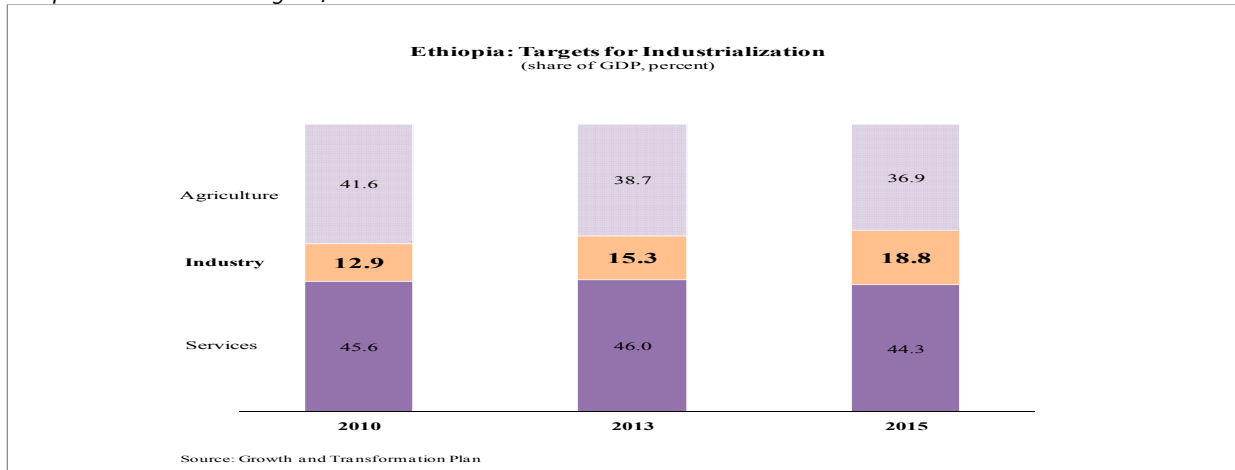
*...and manufacturing remains insignificant*



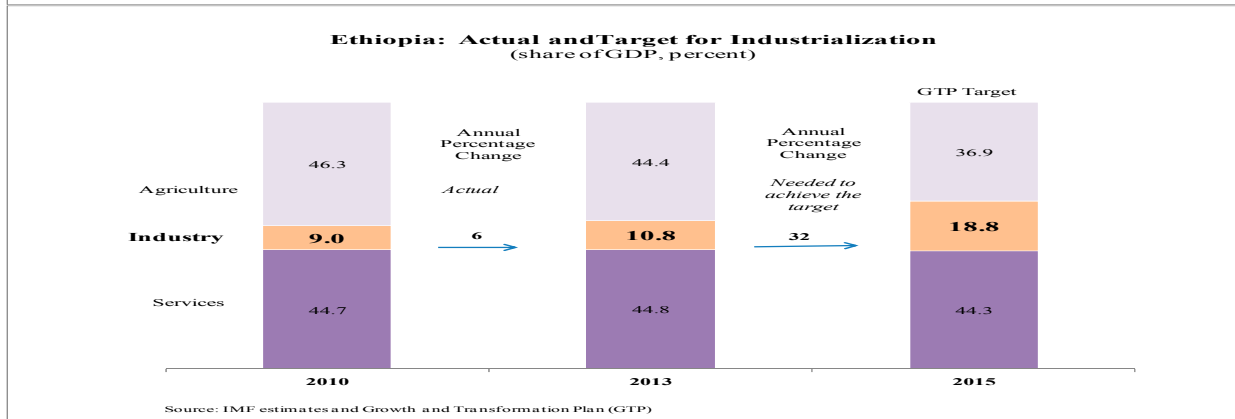
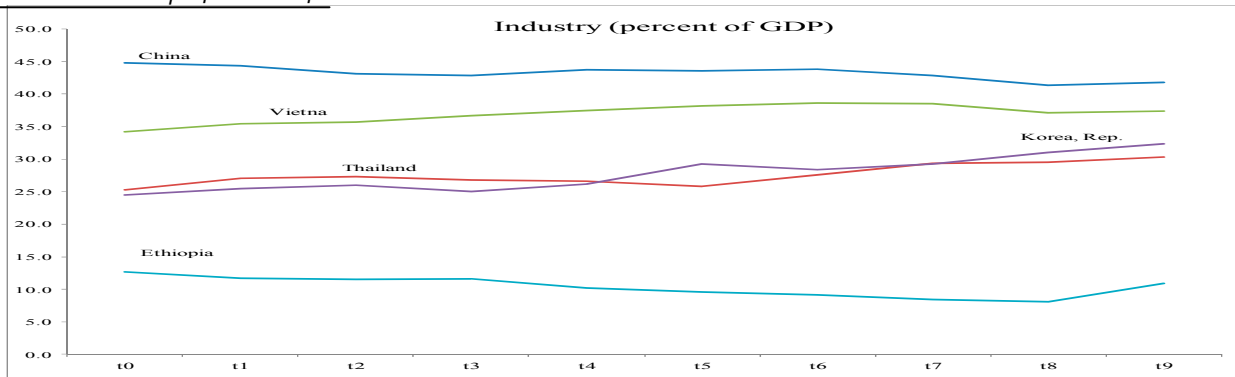
Source: IMF and World Bank's World Development Indicators.

**Figure 4. Ethiopia: Targets for Industrialization in the GTP and Actual Performance<sup>1</sup>**

*Ethiopia has ambitious targets for industrialization...*



*...but the actual performance falls short.*



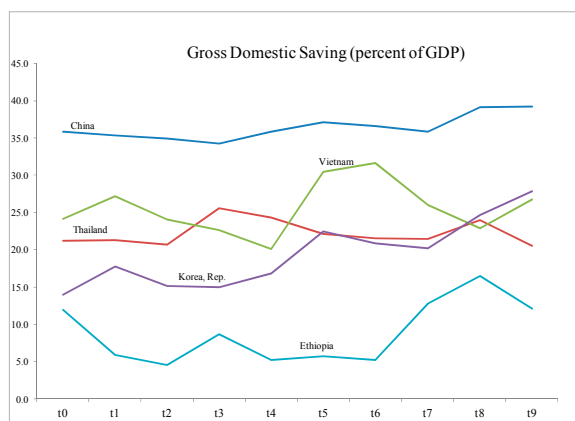
<sup>1</sup> The data in the first chart of the panel are planned raw authorities' numbers derived from the GTP. However the actual data used for 2010 and 2013 in the second chart is derived from national account using actual aggregate GDP numbers. Source: IMF and World Bank's World Development Indicators.



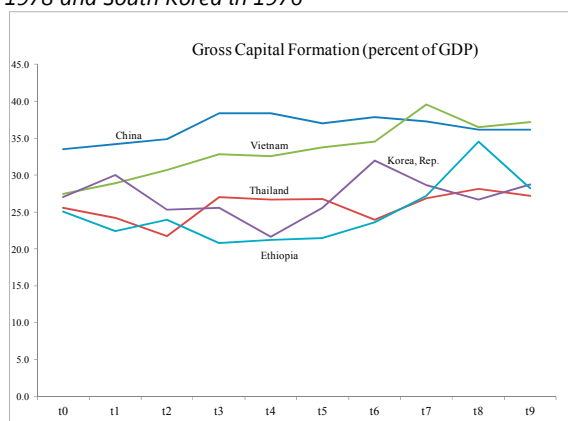
**10. Achieving and sustaining the high growth rates set out in the GTP requires substantial capital formation and associated resource mobilization.** With binding external financing constraints, critical investments need to be financed from domestic sources (at least partially), and this implies high levels of domestic savings. The relatively low GDP per capita limits the potential for domestic savings in the short-run which would be encouraged by offering attractive interest rate for savers. Ethiopia’s record in mobilizing resources compares unfavorably with the Asian comparators with domestic credit to the private sector and gross capital formation in Ethiopia relatively low compared to the Asian peers (Figure 5). While domestic resources have been crucial in financing investment in Asian peers, Ethiopia appears to have less room on that front.

**Figure 5. Ethiopia: Comparative Domestic Financing Performance**

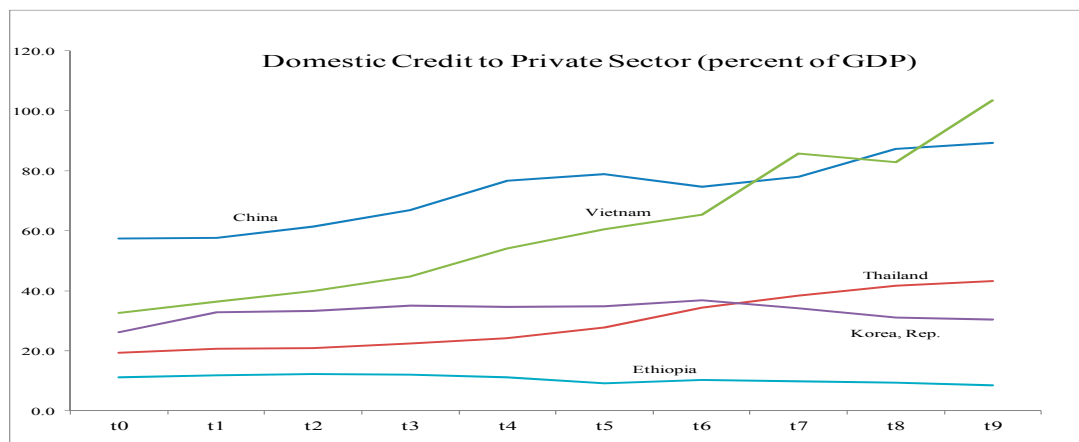
*Compared to its Asian models, Ethiopia’s domestic saving is markedly lower*



*...and Ethiopia’s gross capital formation as a share of GDP in 2012 caught up only with that of China in 1990 and Vietnam in 2008, although it exceeded that of Thailand in 1978 and South Korea in 1976*



*Domestic credit to private sector significantly underperforms that of the Asian comparators.*

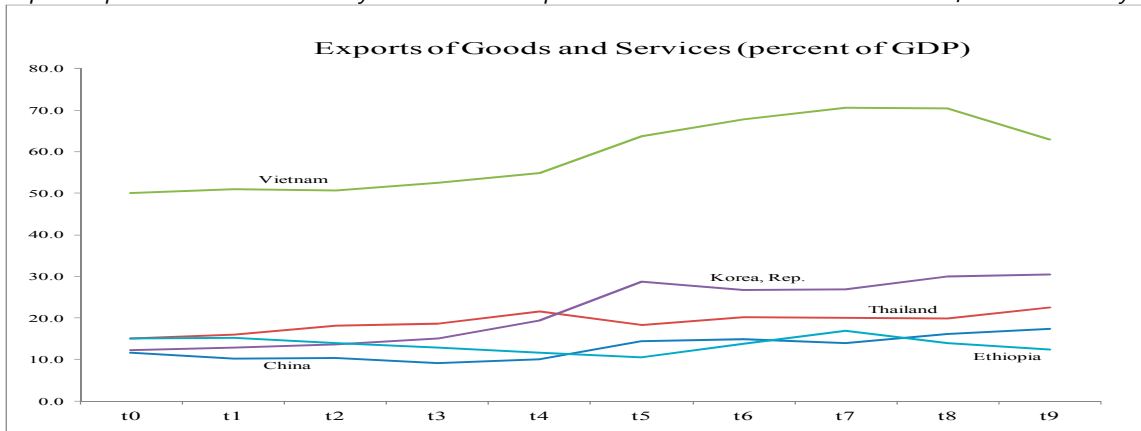


Sources: IMF and World Bank’s World Development Indicators.

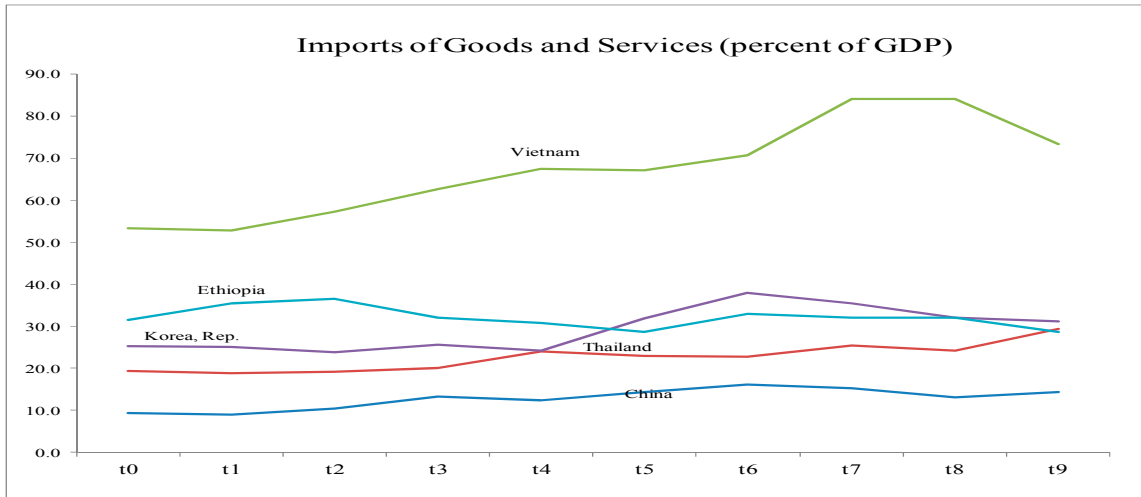
**11. Both import substitution and export promotion are key elements of Ethiopia’s development strategy.** Export earnings provide the foreign exchange needed for some investments that require capital goods imports. The exports sector in Ethiopia has not been as dynamic as the Asian comparators, while import requirements have remained high relative to the Asian comparators with the exception of Vietnam (Figure 6).

**Figure 6. Ethiopia: Comparative Export and Import Performance**

*Ethiopia’s exports have not been as dynamic as its comparators and have declined as a share of GDP in recent years*



*Ethiopia’s imports are sizeable with an overall higher share in GDP compared to its Asian models with the exception of Vietnam.*



Sources: IMF and World Bank’s World Development Indicators.

**12. Overall, the analysis above indicates that Ethiopia’s performance lags behind that of the Asian comparators.** Beyond differences in initial conditions, this raises the question of why Ethiopia so far has not been able to replicate the performance of the successful Asian countries.

## ETHIOPIA'S EXPORT COMPETITIVENESS

**13. Ethiopia’s export competitiveness is hampered by an overvalued exchange rate and lagging export productivity.** A key factor in the latter is trade costs which are assessed using the World Bank Logistics Performance Index (LPI). An overall LPI score measures the efficacy of a country's logistics based on efficiency of customs clearance process, quality of trade and transport-related infrastructure, ease of arranging competitive shipments in terms of price, quality of logistics services, ability to track and trace consignments, and frequency with which shipments reach the consignee within the scheduled time. The index provides a cross-country comparison of major trade logistics categories and ranges from 1 to 5, with a higher score representing better performance. Ethiopia ranks at the lower end of the surveyed countries in all the six key dimensions of logistics performance measured (Table 1). Relative to Asian comparators, the difference is stark: China, Korea and Vietnam all have overall LPI scores of 3.00 or higher.

<b>Table 1. Ethiopia: Comparative Performance of Ethiopia in Trade Logistics 2012</b>							
	<b>Overall LPI score</b>	<b>Customs</b>	<b>Infrastructure</b>	<b>International Shipments</b>	<b>Logistics Competence</b>	<b>Tracking &amp; Tracing</b>	<b>Timeliness</b>
Ethiopia	2.24	2.03	2.22	2.35	2.16	2.10	2.54
China	3.52	3.25	3.61	3.46	3.47	3.52	3.80
Thailand	3.18	2.96	3.08	3.21	2.98	3.18	3.63
Korea, Rep.	3.70	3.42	3.74	3.67	3.65	3.68	4.02
Vietnam	3.0	2.65	2.68	3.14	2.68	3.16	3.64

Source: World Bank, Logistics Performance Index (LPI).

**14. Ethiopia's poor logistics raise costs for local industries and hamper the country's competitiveness in the global market.** Inefficient logistics not only impede Ethiopia's exports potential, they also increase the costs for consumers for imported goods. Improving trade logistics are thus very important for making Ethiopia's export sector globally competitive.

**15. Ethiopia is a landlocked country and trade and border logistics are critical for it to develop a thriving and diverse export sector.** All the six key dimensions of logistics performance measured suggest that trade logistics are fundamentally weak and need to be improved. Djibouti is the main port for sea transport in and out of Ethiopia, and situated 700 km from Addis Ababa, making the cost of in-land transportation an important factor. According to the World Bank's "Doing Business" study in 2012 it costs US\$2,660 to import a container to Ethiopia (and US\$1,760 to export), compared with US\$545 in China and US\$670 in Vietnam. Thus, poor trade logistics is a key contributing factor of Ethiopia's poor performance compared to the Asian countries.

## ETHIOPIA'S RECENT COMPETITIVENESS INITIATIVES AND INVESTMENT FINANCING STRATEGY

### A. Recent Initiatives

**16. The Ethiopian authorities have identified the logistics system as a key priority and have tried to improve the system.** A first step in this regard was the establishment of the Ethiopian Shipping and Logistics Enterprise (ELSE), which resulted from the merger of the three major state-owned enterprises, notably Ethiopian Shipping Lines, Ethiopian Maritime, and Transit Services and Ethiopian Dry Port Service Enterprise. Giving the mandate to one agent to take charge of transiting and transporting shipments until delivery to the importers was aimed to save time and cost for them.

**17. Despite these initiatives, improvements in the logistics system did not materialize, forcing an opening toward private operators.** Anecdotal evidence points to increased time for clearing imports worsening congestion at Djibouti port and Ethiopia's main dry port (Mojo). This highlighted the difficulties of reforms favoring public entities not run on commercial basis, with inadequate involvement of the private sector. The authorities likely recognized this and amended in late 2012 their earlier directive thereby allowing other private transit operators to work in parallel with ELSE. The exclusive right for deep sea transport for imports remains with ELSE. Other government initiatives to improve logistics system and competitiveness focused mainly on transport infrastructure (roads and railways), which require significant investments and financing.

### B. Investment Financing Strategy Risks

**18. The high economic growth envisaged in the GTP is in line with the country's objective of reaching middle income status by 2025.** The GTP requires large public sector borrowing and domestic resource mobilization to finance high levels of investment. The current level of domestic savings is insufficient to finance the high investment (particularly public), thus opening up a large

resource gap (Figure 7). There is a risk that the investment levels envisaged under the plan would not materialize and may outstrip the absorptive capacity of the economy.

**19. Achieving the GTP’s growth objectives requires a significant scaling-up of investment.**

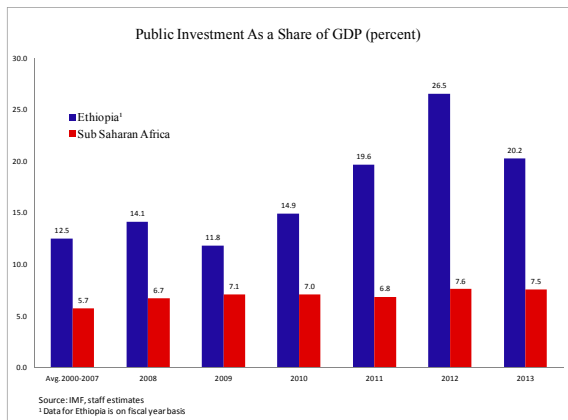
The plan is characterized by substantial upfront “off-budget” financing, with a significant part undertaken by public enterprises. The financing plan in the GTP envisages borrowing levels that average 15 percent of GDP annually, of which some two-thirds is to be borrowed externally (Table 2). However, the external financing at appropriate terms is constrained, placing greater pressure on domestic financing. Developments in the first three years (2010/11–2012/13) of the GTP suggest that the investment drive in the priority projects through directed domestic credit is squeezing the availability of credit and foreign exchange for the rest of the economy (Figure 5). The very large domestic financing needs of the GTP may be alleviated to some extent by removing the disincentive to save due to negative real interest rates. This poses a risk of reversion to substantial monetary financing or excessive non-concessional borrowing if the authorities decide to catch up on the planned investment.

<b>Table 2. Ethiopia: Financing Requirement of the Growth and Transformation Plan<sup>1</sup></b>					
	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>	<b>2014/15</b>
	(percent of GDP)				
General government	2.7	1.7	1.9	1.9	3.3
Net external financing	1.0	0.8	0.8	0.8	0.6
Net domestic financing	1.6	0.9	1.1	1.2	2.7
Privatization	0.1	0.0	0.0	0.0	0.0
Off-budget	18.2	27.5	22.3	14.4	8.3
<i>Of which: own resources</i>	6.1	9.2	7.4	4.8	2.8
Domestic currency	8.0	13.3	10.7	6.8	3.9
Foreign currency	10.2	14.2	11.6	7.6	4.4

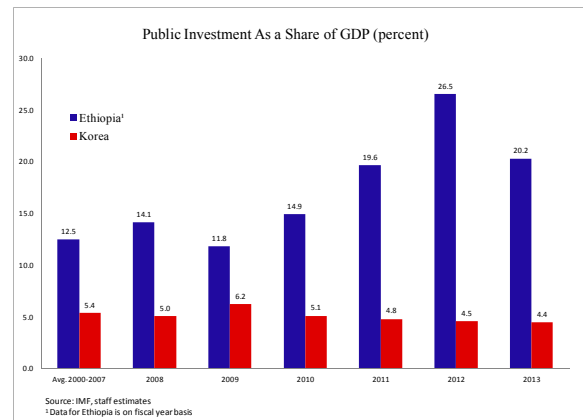
<sup>1</sup> Calculated using nominal GDP assumed in the GTP.

**Figure 7. Ethiopia: Public Investment as a Share of GDP: Ethiopia versus SSA and Asian Comparators**

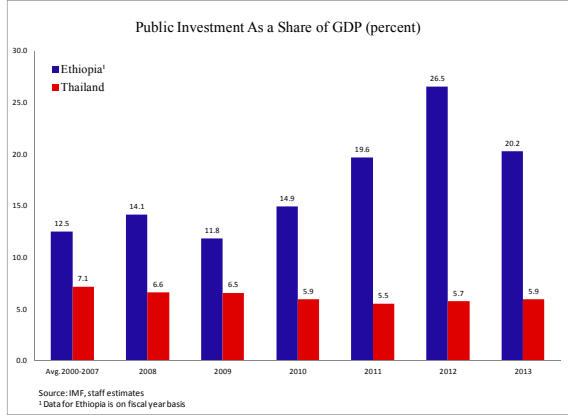
*Ethiopia public investment outperforms SSA ...*



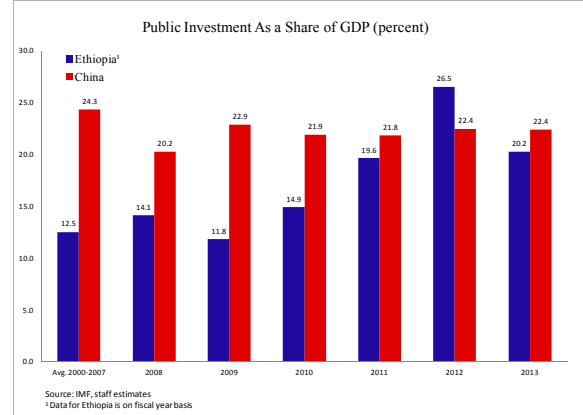
*... and that of South Korea*



*... and Thailand in line with Ethiopia's development approach...*



*...but underperforms China.*



### C. Sustainability of Ethiopia's Infrastructure Investment Program: A Model-Based Analysis

**20. The sustainability of Ethiopia's investment program is assessed using a variant of the open-economy Debt, Investment and Growth (DIG) model developed by Buffie et al. (2012). Box 1 lists the main features of the model's general structure and calibration assumptions.**

#### The Investment Program

**21. The model considers a big-push investment program of the type envisioned by the GTP.** Energy investments increase very rapidly in the short run, while infrastructure investment increases more gradually. In the long run, the capital stock in the energy sector increases by 250 percent and the stock of infrastructure doubles. The path for energy investment and the efficiency gains associated with the construction of the Renaissance Dam increase the total supply of energy four-fold (300 percent) at the 10-year horizon. As a result, electricity exports increase substantially: by year 10, they account for 38 percent of total energy sales. Public

investment is limited to energy and physical infrastructure. The model does not account for public investment in enterprises that produce “regular” non-infrastructure goods and services (e.g., sugar). The results would be less favorable if the investment program included large investments in enterprises of this sort.

### Illustrative Scenarios

**22. Model simulations consider two financing scenarios: domestic bank borrowing and external commercial borrowing.** The ambitious investment plans are not fully funded by concessional loans and grants. This opens up a financing gap that has to be covered by some combination of fiscal adjustment and additional borrowing. To illustrate the role of the different financing strategies the analysis considers two base case scenarios to cover the financing gap: (i) a transfer adjustment (cutting other government non-capital expenditures) supplemented with domestic bank borrowing versus (ii) a transfer adjustment supplemented with external commercial borrowing.<sup>2</sup> The following assumptions apply to all the simulations.

- Nominal base money growth is held at 16 percent (trend growth plus 8 percent).
- New concessional loans equal 2.2 percent of GDP in year one and then decrease steadily to 1 percent of GDP in year ten. Repayments start after an 8-year grace period.
- Paths for all variables reflect deviations from the trend growth rate (5 percent per capita).
- The requirement that civil servants sacrifice one-month’s pay to buy Renaissance Dam bonds is analytically equivalent to time-varying transfer payments.
- Purchases of Diaspora bonds by Ethiopians living abroad are part of non-concessional borrowing.

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<sup>2</sup> Initially the VAT rate, the second policy instrument besides transfer, is kept constant. Note that this implies that indirect tax revenues as percent of GDP may decline as the economy grows.

### Box 1. Ethiopia: General Structure and Calibration of the Model

#### *General Structure of the Model*

- An open-economy set-up with two private sectors that produce traded and non-traded goods.
- A flexible specification of public investments in energy and infrastructure.
- A state-owned energy sector that exports electricity to neighboring countries and sells to firms and households at different prices (below shadow prices).
- A state-owned banking system, where a large fraction of deposits are lent to the government. The government effectively borrows at the negative real deposit rate. The banking system also provides some loans to the private sector at a controlled interest rate for investment in big, lumpy projects. These loans may finance high- or low-return projects. Seigniorage and profits/losses of state-owned banks enter the consolidated public sector budget constraint.
- The model allows for different government financing options. Aid and concessional borrowing flows are exogenously given. Absent additional financing sources, the government adjusts taxes and/or transfers to finance the public investment scaling up. The model then considers external commercial borrowing and domestic borrowing (including bank borrowing) to help finance the public investment surge, with taxes and transfers responding to stabilize debt levels over time. Private sector holds money and bank deposits, where the deposit rate is set by the government. The private capital account is closed.
- The model tracks the paths of several key macroeconomic variables, including, inflation, GDP, real wages, private investment, private consumption, private capital, public capital, taxes, transfers, sectoral output, and external debt.
- The economy has a flexible exchange rate. Policy instruments adjust in the *long run* to ensure that inflation and the rate of currency depreciation return to the target value chosen by the government.

#### *Calibration of the Model (Base Case)*

- Initial return on infrastructure investment equals 20 percent.
- Initial return on energy investment with existing technology is 30 percent. The high return reflects the scarcity of power. The shadow price of energy sold to firms is 3.76 times higher than the current tariff (US\$.03kWh). The financial return at EEPCO is a modest 8 percent. The export price is US\$.075kWh (2.5 times the domestic tariff).
- The Renaissance Dam is much more efficient than existing power plants. According to EEPCo's estimates, it will reduce average per unit operating plus maintenance costs by 30 percent. The model is calibrated to capture this efficiency gain.
- 50 percent of bank credit is allocated to the public sector.
- No cost increases from absorptive capacity constraints. (The investment surge does, however, increase construction costs in the short run.)



**Domestic Bank Borrowing**

**23. The simulations show that the investment plan may bring substantial medium- to long-run real benefits to the economy.** For instance, in the case of domestic bank borrowing, where the share of bank credit allocated to the public sector adjusts endogenously to finance the investment program and there is no external commercial borrowing, by year thirty, real GDP increases by 40 percent relative to its original level (steady state), as showed in Figure 8. Private consumption and investment are crowded in—i.e., by year thirty, private demand expands by about 20 percent relative to the steady state. These positive results depend on the structural conditions of the economy. The baseline calibration of key parameters, such as the rates of return on infrastructure and energy are favorable and yield positive medium- to long-run macroeconomic effects. Under less favorable calibration the positive effects could be significantly diminished.

**24. In the transition (short- to medium-term), domestic bank borrowing may require a substantial fiscal adjustment to prevent macroeconomic instability.** When covering part of the financing gap with bank borrowing, transfers have to decrease by more than 5 percent of GDP within two years (Figure 8). The public sector already borrows 50 percent of bank credit. Since bank deposits are approximately 20 percent of GDP, it can borrow at most another 9–10 percent of GDP by seizing all bank credit. In fact, by year three the share of public sector bank credit rises from 50 percent to approximately 68 percent. But this is not enough to finance the big-push investment program for more than a couple of years—drastic fiscal adjustments are required for debt stability. Domestic bank borrowing also induces significant crowding out of private consumption and investment in the short run, as well as a sharp increase in inflation:<sup>3</sup> since real output changes very little in the short run, higher public investment requires lower private sector spending; the inflation tax then adjusts to help crowd-out private consumption and investment.

*External Commercial Borrowing*

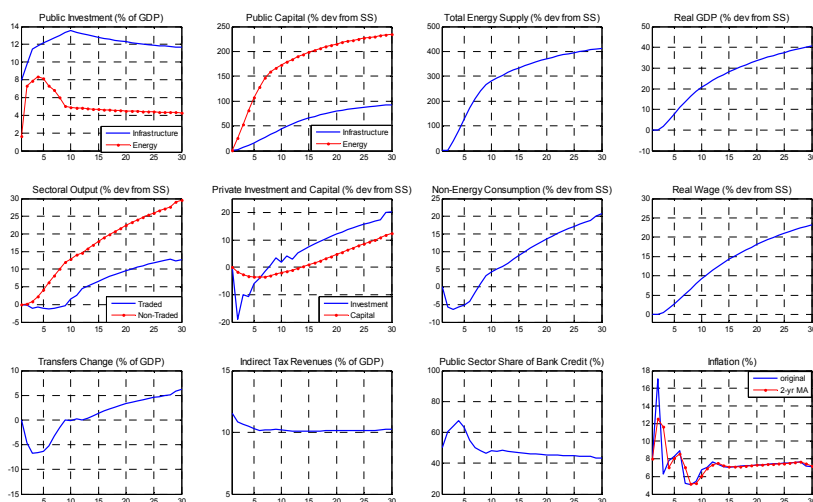
**25. External commercial borrowing helps to ease the fiscal and macroeconomic adjustment in the short- to medium-term but at the cost of increasing the debt-to-GDP ratios.** In this financing scenario, the share of bank credit allocated to the public sector is fixed at 50 percent, while external commercial borrowing (at a real interest rate of 6 percent in dollars) adjusts to finance the investment program. In contrast to the domestic bank borrowing case, under external commercial borrowing, macroeconomic stability does not require difficult, large cuts in transfer payments and there is a much smaller increase in inflation in the short run—the moving

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<sup>3</sup> The model is mainly a tool for evaluating the medium/long-run effects of public investment programs on growth and debt sustainability. It was *not* built to accurately track short-run price dynamics. The assumptions of perfect price and wage flexibility, a floating exchange rate, and immediate full pass-through of changes in the exchange rate to domestic prices of traded goods exaggerate short-run volatility of inflation. The 2-year moving average of inflation showed in Figure 8 is a better guide to the inflationary impact of the investment program.

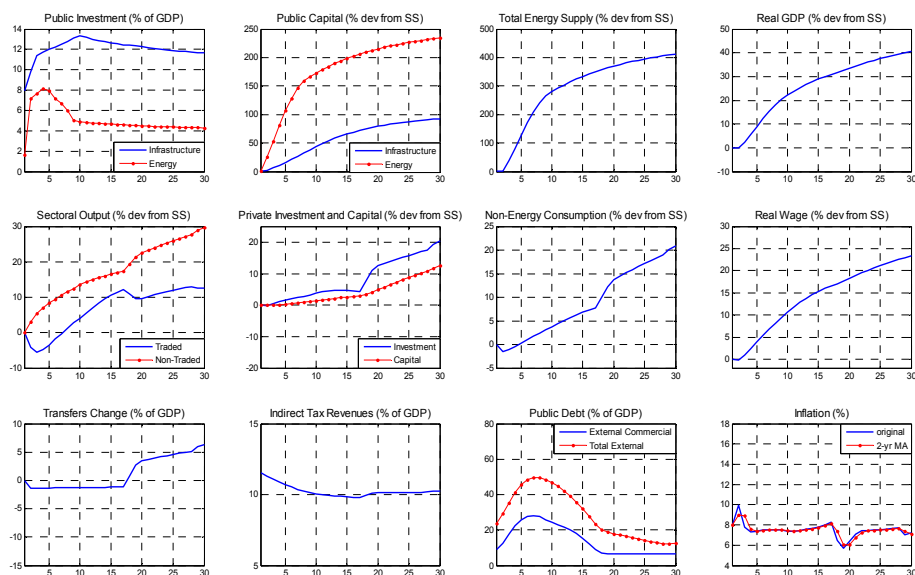
average measure of inflation stays below 9 percent in the first year (Figure 9). As a result, no temporary crowding out of private investment is observed. External borrowing relaxes the national budget constraint, allowing both public and private investment to increase continuously. Therefore, prudent external commercial borrowing can help avoid the crowding out of the private sector.

**Figure 8. Domestic Bank Borrowing (Base Case)**



Source: IMF staff estimates.

**26. The macroeconomic gains associated with external commercial borrowing have to be balanced against risks associated with significant increases in the ratios of debt to GDP.** Under external commercial borrowing, the simulation results show substantial increases in the ratios of non-concessional debt and total external debt to GDP (Figure 9). Total debt to GDP increases from 24 percent to 48 percent of GDP in 5 years, posing risks to debt sustainability. External commercial borrowing entails risks even under the assumption of a highly efficient big-push public investment program, although the rapid growth in the external debt is only for a period of time, as after year ten, external debt decreases rapidly because the investment program pays big economic and financial returns (especially the energy component of the program). However, substantial inefficiencies or lower rates of returns may reduce the growth pay-off and fiscal gains of the program indicating that debt may become unsustainable.

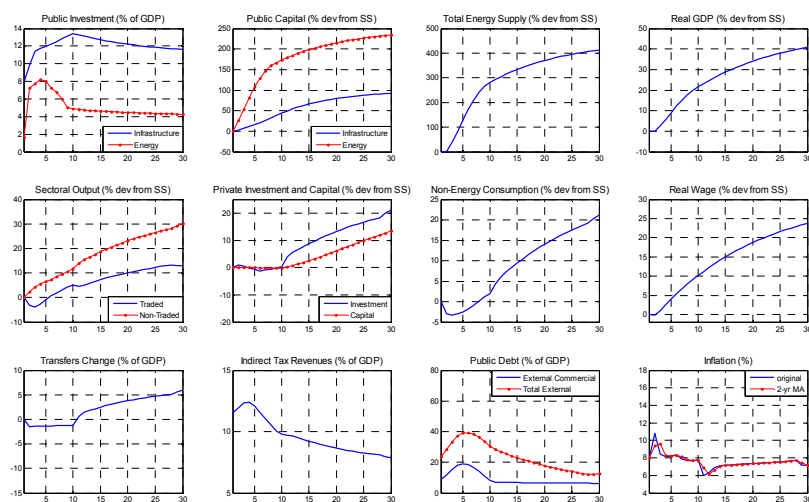
**Figure 9. External Commercial Borrowing**

Source: IMF staff estimates.

*External Commercial Borrowing: Increasing Energy Prices for Firms and Tax Revenues*

**27. Additional fiscal supporting measures may help slowdown the quick accumulation of debt, while maintaining some of the benefits of external commercial borrowing.** Fiscal supporting measures, such as doubling energy prices charged to firms or increasing tax revenues by about 1 percent of GDP, can induce large, dramatic reductions in the growth of external debt (Figure 10). In contrast to the case where these additional fiscal measures are absent (Figure 9), the ratio of non-concessional (external commercial) debt to GDP starts decreasing after year six and total debt is stays below 40 percent of GDP. Inflation is also stable, and although in the short- to medium-term private consumption and investment are moderately affected, the positive medium- to long-run effects on these variables are very comparable to the ones absent these fiscal supporting measures.

**Figure 10. External Commercial Borrowing Combined with Increases in Energy Prices for Firms and Taxes**

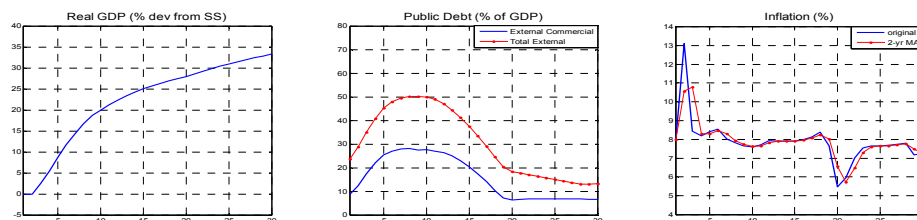


Source: IMF staff estimates.

**28. However, even with these additional fiscal supporting measures, poorly run and inefficient investment programs may jeopardize debt sustainability.** When the return on infrastructure is lowered to 10 percent and absorptive capacity constraints increase investment costs for infrastructure projects, the debt outlook becomes cloudy. The simulation results show that external debt may reach 50 percent of GDP for several years (Figure 11). The ratio of non-concessional (external commercial) debt to GDP does not drop below 20 percent until year 15, while the ratio for total external debt does not fall below 40 percent until year 14. In addition, the moving-average inflation rate jumps to 10.6 percent in year one and to 10.8 percent in year two.

**29. The analysis in this section suggests that careful consideration needs to be given to Ethiopia's investment program, especially in terms of its financing options and the impact on the private sector.** Despite positive long-run growth effects, transition challenges and macroeconomic trade-offs are associated with different financing strategies. Domestic bank borrowing may require substantial fiscal and macroeconomic adjustments (private sector crowding out) as well as a sharp increase in inflation. External commercial borrowing, on the other hand, may ease these adjustments but at the cost of increases in debt to GDP ratios that may raise debt sustainability concerns. The analysis highlights the importance of combining supporting fiscal measures with well-run and efficient investment programs to maximize the growth and development benefits, while ensuring macroeconomic stability and debt sustainability. In the context of GTP II, considerations could be given to reorienting the development strategy more toward the private sector to support the investment effort and alleviate the burden on public sector.

**Figure 11. External Commercial Borrowing: Energy Price and Tax Increases with a Low Return on Infrastructure and Absorptive Capacity Constraints**



Source: IMF staff estimates.

**30. To sum up, the analysis above indicates that while Ethiopia’s state led development strategy has so far generated good results in terms of economic growth and improving social indicators, the structural transformation towards manufacturing and export oriented activities has not materialized as in the successful Asian countries.** Factors hampering progress include, an environment hampering entrepreneurship, inadequate leveraging of the private sector, weak business climate, and weak incentives for domestic savings—characterized by negative real rates of interest, limited financial instruments, and an underdeveloped financial system.

## THE WAY FORWARD: A STRATEGY ORIENTED TOWARDS THE PRIVATE SECTOR

**31. Ethiopia’s development strategy has favored heavy investment in capital and labor.** However, despite their criticality, capital and labor would not be enough for high and sustained growth to take place. There is a need for entrepreneurship to connect them. Ethiopia needs to invest not only in capital and labor, but also in entrepreneurship. Entrepreneurship has played a key role in Asian countries’ success. South Korea is a case in point where many entrepreneurs in different fields became world-class big conglomerates such as Samsung, Hyundai, and LG (Leokki Geumseong). These three major conglomerates account for more than 30 percent of the South Korea’s GDP.

**32. Adapting policies to provide greater scope for the private sector, especially entrepreneurship, will be important going forward.** The experience with the authorities’ early initiatives to improve the country’s competitiveness through improvements in the logistics system, which forced them to slightly open up to private operators, underscores the need for private sector involvement in the country’s development process.

**33. Entrepreneurship is critical in the process of structural change and industrialization.**

Entrepreneurial innovation could lead to reallocation of resources from the traditional or agricultural sector to the modern, especially manufacturing sector (Gries and Naudé, 2010).

**34. A policy package to overcome the obstacles that inhibit entrepreneurial innovation—necessary for industrialization and job creation—is essential.**

The relationship between government and the private sector should be a key area of reform. Unlike in the past where industrial policy was either focused on creation and growth of state-owned enterprises, there is a need now for industrial policy to be a nuanced partnership between entrepreneurs and the state (Acs and Naudé, 2013).

**35. Entrepreneur-state nexus needs further harnessing.**

Entrepreneurs create new firms that introduce new products and processes that entail positive externalities for the economy. Entrepreneurs can take advantage of scale economies and increase the size of firms—which can provide incentives for clustering and locational economies. Entrepreneurs can also raise the returns to human and physical capital, thereby encouraging further investment and education (Gries and Naudé, 2010). The state thus needs to work with the private sector to elaborate and implement a policy package that addresses the entrepreneurship-inhibiting market failures.

**36. In Asia countries where industrialization has been successful, industrial policy properly considered the nature of the country’s entrepreneurs and their relation to the state.**

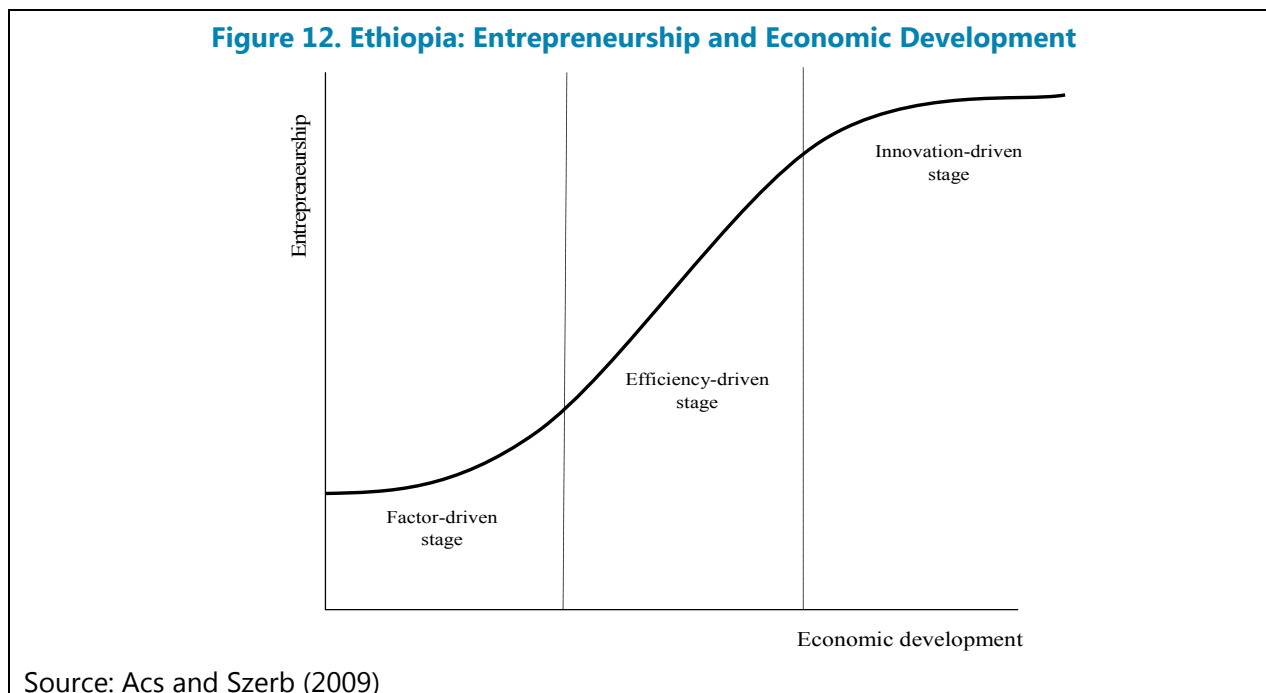
For example, in Singapore and Korea, entrepreneurial base was initially judged to be lacking. Consequently, industrial policy was first oriented towards complementing and strengthening the domestic entrepreneurial base, through facilitating the entry of foreign entrepreneurship and providing financial support to allow entrepreneurs to take on more risk in imitating and adopting foreign technology (Nelson and Pack 1999). In China, entrepreneurs were allowed to influence the evolution of the institutional framework shaping the country’s industrial policy, a process known as “institutional entrepreneurship” (Siebert, 2007).

**37. The relationship between entrepreneurship and economic development exhibits an S-shape form depending on the stage of development (Figure 12) (Acs and Szerb, 2009; Acs and Naudé, 2013).**

Different phases of development can be grouped into three broad stages: a factor-driven stage; an efficiency-driven stage; and an innovation-driven stage (Porter, Sachs, and McArthur, 2002).<sup>4</sup>

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<sup>4</sup> In the factor-driven stage, production factors play a leading role and production is more intensive in un-skilled labor and natural resources. In the efficiency-driven stage, production is more efficient and movement towards technology frontier starts. Entrepreneurship’s role increases markedly in this second stage. In the innovation-driven stage, the focus shifts to knowledge which plays the leading role. This stage is biased towards the production of high value-added and innovative goods to expand the technological frontier. In this stage, entrepreneurial activity is particularly crucial, playing a more important role at an increasing rate, but levels off as economies become fully developed.



**38. Ethiopia appears to be in the factor driven development stage.** The Global Competitiveness Index (GCI) framework identifies the various factors that determine or facilitate the transition from one development stage to another.<sup>5</sup> The factors range from institutions, infrastructure, macroeconomic environment, financial market development, to business sophistication and innovation. Based on these factors, GCI is compiled and ranges from 1 to 7, with 7 being the most desirable outcome. This metric indicates that Ethiopia is still in factor driven stage while most of its comparators are in efficiency- or innovation-driven stage, with the exception of Vietnam. Although Vietnam is still in factor-driven stage, its performance in the GCI is much better than that of Ethiopia. Vietnam ranks 70 out of 148 countries while Ethiopia ranks 127. (Tables 3, 4, and 5).

<sup>5</sup> Sala-I-Martin and others (2013), "The Global Competitiveness Index 2013–14: Sustaining Growth, Building Resilience" in The Global Competitiveness Report 2013–14, Klaus Schwab (ed).

<b>Table 3. Ethiopia: GCI Score and Ranking, 2013–14</b>				
Country/Economy	<b>GCI 2013–14</b>		<b>GCI 2012–13</b>	
	Rank (out of 148)	Score (1–7)	Rank (out of 144)	Score (1–7)
China	29	4.84	29	4.83
Thailand	37	4.54	38	4.52
Korea, Rep.	25	5.01	19	5.12
Vietnam	70	4.18	75	4.11
Ethiopia	127	3.50	121	3.55

Source: Klaus Schwab, The Global Competitiveness Report (2012–13 and 2013–14).

<b>Table 4. Ethiopia: CGI Sub-index Score and Ranking, 2013–14</b>								
Country/Economy	<b>Overall Index</b>		<b>Basic Requirements</b>		<b>Efficiency Enhancers</b>		<b>Innovation and Sophistication factors</b>	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
China	29	4.84	31	5.28	31	4.63	34	4.1
Thailand	37	4.54	49	4.86	40	4.43	52	3.83
Korea, Rep.	25	5.01	20	5.6	23	4.89	20	4.82
Vietnam	70	4.18	86	4.36	74	3.98	85	3.41
Ethiopia	127	3.5	123	3.67	126	3.27	127	2.98

Source: The Global Competitiveness Report, 2013–14.



<b>Table 5. Ethiopia: Stage of Economic Development: Ethiopia and Comparators</b>		
<b>Country</b>	<b>Stage of Development</b>	
China	Stage 2.	Efficiency Driven
Thailand	Stage 2.	Efficiency Driven
Korea, Rep.	Stage 3.	Innovation Driven
Vietnam	Stage 1.	Factor Driven
Ethiopia	Stage 1.	Factor Driven

Source: The Global Competitiveness Report, 2013–14.

**39. Ethiopia’s policies to promote entrepreneurship—necessary to transition out of the factor driven stage—need strengthening.** The country’s score in the 2014 Global Entrepreneurship and Development Index (GEDI), which captures the contextual features of entrepreneurship across individual and institutional variables, is 19.8 out of 100. It ranks 111 out of 121 countries, while Korea ranks 33 and China 47. Ethiopia’s very low score is an indication of major obstacles for entrepreneurship. By comparison, despite its state-led development strategy with a strong political regime, China provides an environment that is markedly more conducive to entrepreneurship than Ethiopia (Table 6).

<b>Table 6. Ethiopia: Global Entrepreneurship and Development Index (2014)</b>		
<b>Country</b>	<b>Rank (out of 121)</b>	<b>Score</b>
Ethiopia	<b>111</b>	19.8
China	<b>47</b>	41.6
Thailand	65	35.5
Korea	33	46.7
Vietnam	n.a.	n.a.

Source: 2014 Global Entrepreneurship and Development Index based on Acs and Szerb (2009).

**40. Ethiopia’s aim to reach middle income levels by 2025 implies moving to the efficiency-driven stage which would necessitate a greater entrepreneurship role.** Moving to the efficiency-driven stage will pave the way toward the innovation-driven stage. Given the importance of entrepreneurship in the efficiency- and innovation-driven stages, it is important that the authorities better leverage the private sector, especially entrepreneurs.

## CONCLUSION

**41. Ethiopia’s public sector-led development strategy has delivered robust growth and rising living standards.** The sustainability of these results may require adjustments as suggested by the lessons from the experience of the Asian comparators.

**42. Focusing on entrepreneurship could be a key aspect of the adjustments.** While Ethiopia has so far favored heavy investment in capital and labor, the timing appears right to equally focus on entrepreneurship which is vital for connecting capital and labor in order to increase productivity and output. Promoting entrepreneurship—a key engine for innovation—can be an important catalyst for Ethiopia to transition out of the factor driven stage.

**43. Harnessing the transformation power of the private sector, through entrepreneurship, is increasingly important for Ethiopia.** Industrial sector development is crucial for the transition from low-to middle-income economy. Structural change, shifting resources—especially labor—from agriculture to industry, which is a success indicator for economic development, cannot be achieved without harnessing entrepreneurs’ ingenuity, opportunity perception, and startup or new product creation capabilities. Creating a private sector friendly environment will facilitate this process through the emergence of entrepreneurs. This would require some opening up of the economy to broaden business opportunities for the private sector.

**44. For example, while the government can retain control in some strategic sectors—such as power generation and defense industry—opening up others would broaden business opportunities for private sector as well as bringing efficiency in the liberalized sectors.** The manufacturing sector which is lagging behind offers wide scope for private sector involvement. For example, opening up the telecommunication sector, the transport and trade logistics, as well as the sugar industry to private sector (including foreign investors) is critical. The banking sector should not just be opened to local private sector, but also to foreign investors. This could attract new investment; improve efficiency, and delivery of services.

**45. Developing a proper legal framework for public-private partnerships (PPP) would incentivize private investors’ participation, while allowing the government to still have stake in ventures in strategic sectors.** Given government’s cautious approach to harnessing the private sector, PPPs offer an opportunity to engage the private sector while exercising oversight and some influence over the decision making process within the ventures. This requires putting in place a transparent institutional framework, an appropriate legal framework, establishing credible regulations, and creating a dedicated and specialized PPP unit.

**46. Ethiopia's global competitiveness is at stake.** Taking these steps in addition to introducing better incentives for savings, including higher and more stable real interest rates, would eliminate bottlenecks, facilitate the financing of entrepreneurial activities, and ultimately improve the country's competitiveness.

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