

Growth in Ethiopia: Retrospect and Prospect

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Abstract

Ethiopia has had fairly rapid growth since the current reformist regime took power. However, part of that growth consisted of recovery from the disasters of the previous government and the civil war. The permanent component of per capita growth under the reformist government in the 1992-2001 period is estimated at about 1.1 percent per annum. That growth is explained by total factor productivity growth rather than by capital deepening. Most of the growth is due to non-agricultural sources, despite the government's commitment to agriculture-led development. This 1.1 percent growth rate also corresponds to the average growth payoff to the policy changes initiated by the current government, measured by variables such as the inflation rate, the budget deficit, the black market premium, the ratio of M2 to GDP, the level of infrastructure, and real depreciation of the currency. International comparisons suggest that a growth acceleration of the magnitude foreseen in the HIPC documents is only rarely achieved.

Further increases in Ethiopia's growth potential would require a second generation of reforms that address some of the poor initial conditions -- the poor quality of institutions, the high illiteracy, the low level of openness to trade, and the low degree of structural transformation of the economy (measured by urbanization). This does not even take into account other severe long-term problems like the AIDS pandemic and environmental degradation. Poor institutions include flawed democracy and human rights, lack of property rights in land, and excessive business regulation. Since any reforms to these initial conditions take time (and have already taken time) to implement and bring to completion, the 4 percent per capita HIPC growth projection seems overly optimistic even under the best case reform scenarios for the medium term. The government should assess how it will deal with debt servicing requirements and other macro balances under a scenario of lower growth and saving than what is projected in the HIPC documents.

Ethiopia's long history of involvement with foreign donors has not yielded very happy results. The current relationship is one of a top-heavy donor bureaucracy imposing too many burdens and too many agendas on a small group of managers in Ethiopia's national and regional governments. It would be better to experiment with more decentralized mechanisms to match the multitudinous needy poor in Ethiopia with donors who want to help the poor.

Introduction

Many observers over the last half century have identified Ethiopia as a land of great potential. The World Bank's first country report on Ethiopia in 1950 cited its "industrious and intelligent" people and believed that "the possibilities for the country's further economic growth are significant." Observers have long noted the achievements of the Ethiopian Diaspora around the world. Despite these hopes, Ethiopia has had one of the lowest growth rates in the world over the past half-century and as a result remains one of the least developed nations in the world. It has known various types of regimes, from monarchy to Marxist-Leninist to reformist, but growth has been mediocre to poor under all of them. It has known major disasters of drought, famine, AIDS, civil war, and international war, and these disasters have absorbed a high share of the government's paltry aid and tax revenues.

This paper examines the growth record in Ethiopia with an eye towards future growth potential. It first does a traditional sources of growth accounting exercise, analyzes the permanent and temporary components of growth, then examines how much of the higher growth under the current reformist regime can be explained by policy changes. It compares the projected growth in the HIPC debt sustainability analysis to historical and comparative experience to see whether these projections are realistic. The paper next examines what would be needed from a second generation of reforms to raise Ethiopia's growth and development potential, examining what regional, rural/urban, and gender imbalances need to be redressed as part of these second generation reforms. Lastly the paper takes a look at the record of foreign assistance in Ethiopia and how its performance can be improved.

Sources of growth

I analyze the sources of growth in three distinct periods: the monarchy (before 1972), the regime of the Derg (1973-1990), and the reformist leadership (1991-2001). I decompose growth into total factor productivity growth and capital deepening using the methodology of Klenow-Rodriguez-Clare 1997, which attributes growth to transitional capital deepening only to the extent that capital growth exceeds the rate of output growth.

$$\Delta \ln(Y/L) = \alpha/(1-\alpha)\Delta \ln(K/Y) + \Delta \ln A$$

where Y is GDP, L is Labor, K is capital stock, α is the share of capital in output, and A is the total factor productivity term. I refer to the first term as “capital deepening” and the second term as “TFP growth.”

This contrasts with traditional sources of growth accounting, which even in the neoclassical steady state in which all growth is due to productivity growth and labor force growth would attribute a portion equal to the capital share times the capital growth rate to capital accumulation. I also estimate the initial capital stock using a methodology that imposes consistency between the capital deepening implied by the initial capital stock and the actual capital deepening. According to this decomposition, we have the following pattern of productivity growth and capital deepening in the three distinct periods.

Table 1: Sources of growth accounting

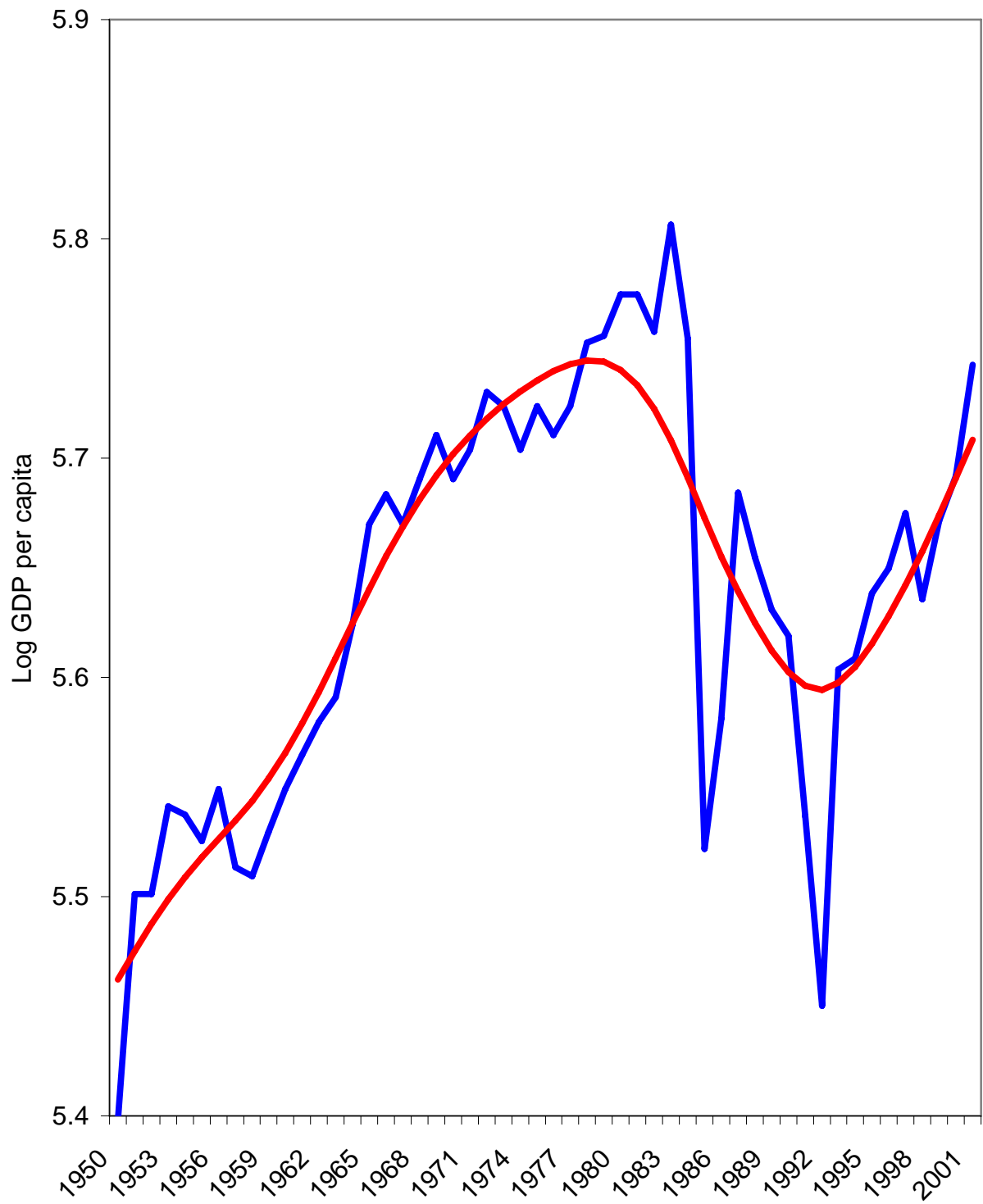
Regime	dates	Capital deepening contribution	TFP growth	Growth of output per person	Estimated permanent component of growth
Monarchy	1951 to 1973	0.25%	1.26%	1.51%	1.14%
Derg	1974 to 1991	0.20%	-1.22%	-1.02%	-0.71%
Reformist	1992 to 2001	-0.52%	2.58%	2.06%	1.12%
Total	1951 to 2001	0.08%	0.59%	0.68%	0.48%

TFP growth is the dominant influence in all three periods, strongly positive in the Monarchy and Reformist periods, and negative during the Derg period. Capital deepening plays a much smaller role and is inversely related to TFP growth – there was capital deepening during the Derg regime, and capital shallowing during the reformist period. The negative TFP growth during the Derg may reflect the extent to which capital accumulation was exaggerated by going to non-productive uses and hence was not “true” capital accumulation. Growth of output per person was negative during the Derg regime and positive during both the monarchy and reformist periods. However, because of the length of the negative growth Derg period and the fairly modest growth in the monarchy and reformist periods, the average growth of output per person for the whole period 1951-2001 is barely above zero. In total, per capita income in 2001 is only 41 percent above its very low level in 1951, which is explained by a level of total factor productivity 35 percent higher and by 4 percent higher greater capital intensity.

The fastest TFP growth and per capita growth is in the reformist period, which may augur well for future growth prospects. However, that growth contains some element of recovery from the civil war that preceded it, and so the underlying permanent growth is overstated. Per capita income in 2001 was still at a level first attained in 1978, and so the degree of recovery from the disasters of the Derg and civil war eras is fairly modest. Using standard econometric techniques (the Hodrick-Prescott filter) to estimate the permanent tendency in income (which eliminates the temporary deep drops in 1991-92), we find the same growth of log permanent income in the monarchy and reformist periods, with the intervening Derg period a permanent shift down in income (see Figure 1). The

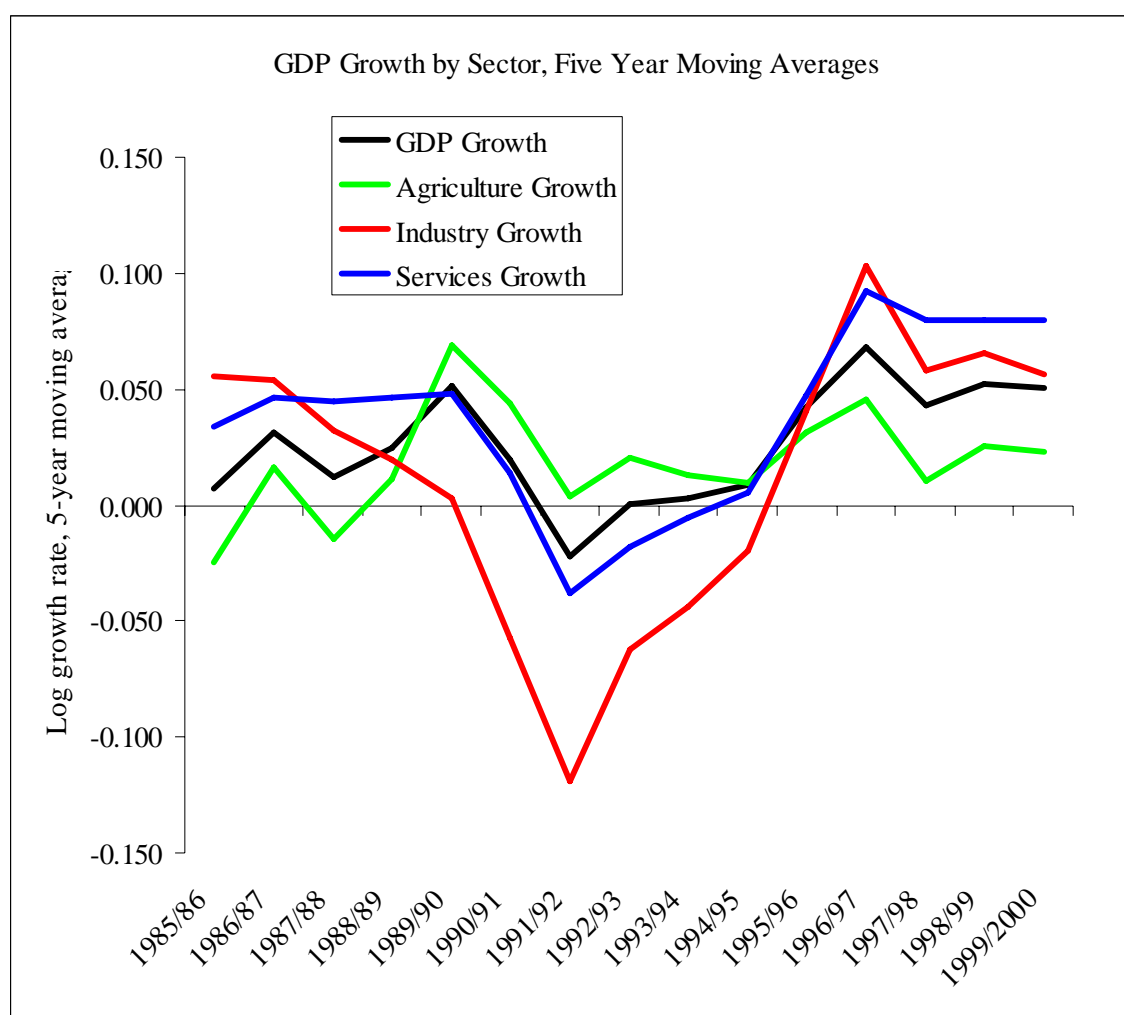
modest permanent component of growth after 1992 suggests that further action would be needed to promote accelerated growth.

Figure 1: Actual GDP per capita and estimated permanent component using HP filter



Composition of growth

I next look at the supply-side and demand-side composition of growth. On the supply-side, industrial growth has been the most volatile component (figure). It was affected severely by the civil war in the late 80s, then recovered strongly in the 1990s. Services growth also was a leading sector in the 1990s. Agricultural growth has been more stable and less tied to the overall cycle in GDP growth. However, it has been a lagging sector in the 1990s, despite the government's reform program that stresses agriculture led development.



Overall, in the period 1991/92-1999/2000, growth has derived mostly from the service sector. Despite its much smaller size, industry has made as large a contribution to growth as agriculture (Table 2).

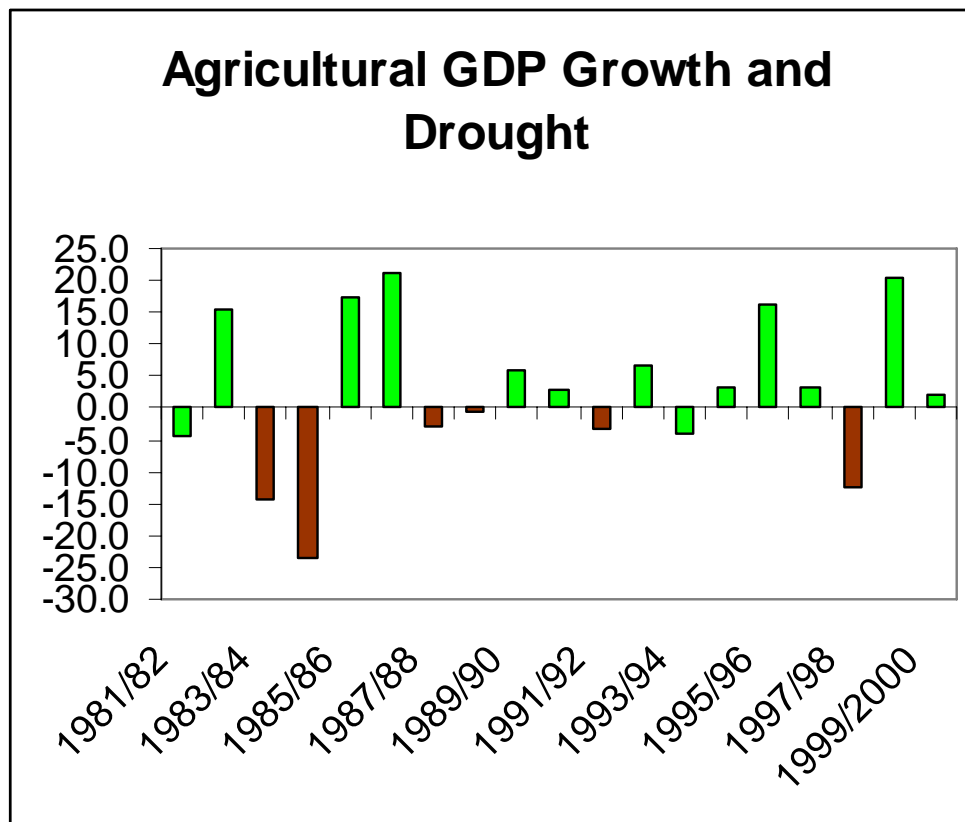
Decomposition of Ethiopian growth in the 1990s by sector (average log growth per annum)

	1992/93-1999/2000
Agriculture Share	48.8
Industry Share	11.0
Services Share	40.1

Average log growth per annum	1992/93-1999/2000
Agriculture Growth	2.1%
Industry Growth	8.5%
Services Growth	9.1%
GDP growth	5.5%

Decomposition	1992/93-1999/2000
Agriculture Component	1.0%
Industry Component	0.9%
Services Component	3.6%
GDP Total	5.5%

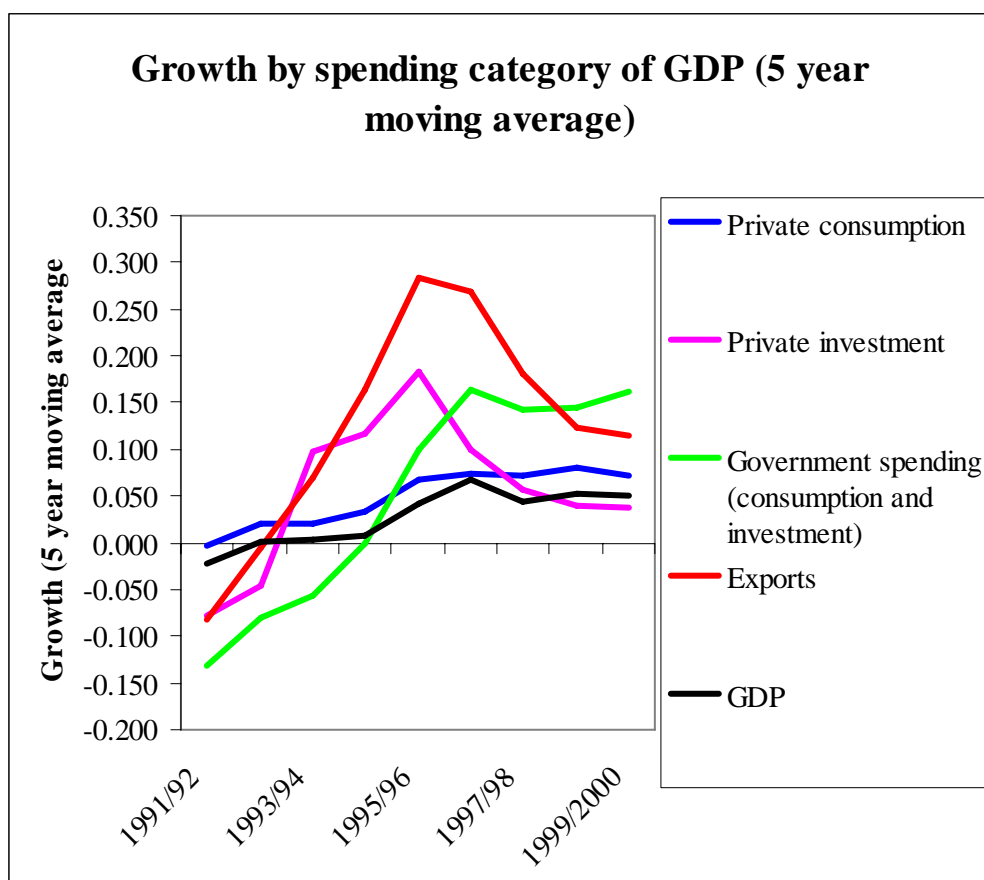
Agriculture is obviously affected by other things besides government reform efforts. The coffee sector has been badly hit by the 29 percent decline in coffee prices between June 1998 and June 2001. Weather conditions also play a big role in Ethiopian agriculture. The seeming stability of agricultural growth using 5 year averages hides the catastrophic effects that recurrent drought has had on harvests at intervals less than 5 years. The next figure shows year to year growth of Agriculture GDP (not including forestry or fishing, unlike the above numbers), noting which years were drought years (shown in brown). Drought explains the big contractions of agricultural output in 1983/84, 1984/85, 1987/88, 1991/92 and 1997/98. Each drought has been associated with the death or displacement of from one to seven million people. A major challenge for government policy is to foment insurance mechanisms that help farmers smooth food consumption from good years to bad years.



There are also long-run problems in agriculture that pose a huge challenge, such as deforestation and soil erosion and degradation. Ethiopia has gone from about 40 percent forest cover three or four decades ago to only about 3 percent currently, with almost all of that in the southwest and in danger of extinction from forest fires set by farmers (Lemessa and Perault 2001). This situation has a simple explanation, with a classic “tragedy of the commons” with the lack of private property rights in land. The lack of land titling has been common to all three political regimes covered here (for different reasons). Surprisingly, despite the current government’s commitment to market reforms, they have held back from the introduction of private property rights in land.²

² In recent years, leases have provided a modest degree of land tenure security, although they cannot be sold or used as collateral.

On the demand side, the leading sector in the growth recovery of the 1990s has been exports, which surged in the early 1990s and continue to lead growth through the late 1990s (figure). This might augur well for future growth prospects, except that Adugna 1999 finds no causal relationship between export growth and GDP growth in Ethiopia (he speculates that exports have few linkages to the rest of the economy). A less healthy sign is that the other leading sector in the 1990s has been government spending (both public consumption and investment). This is a little worrisome, as the double-digit growth in public spending is probably not sustainable for long. Also worrisome is the weak performance of private investment in the late 1990s, after an initial strong recovery early in the reform period.

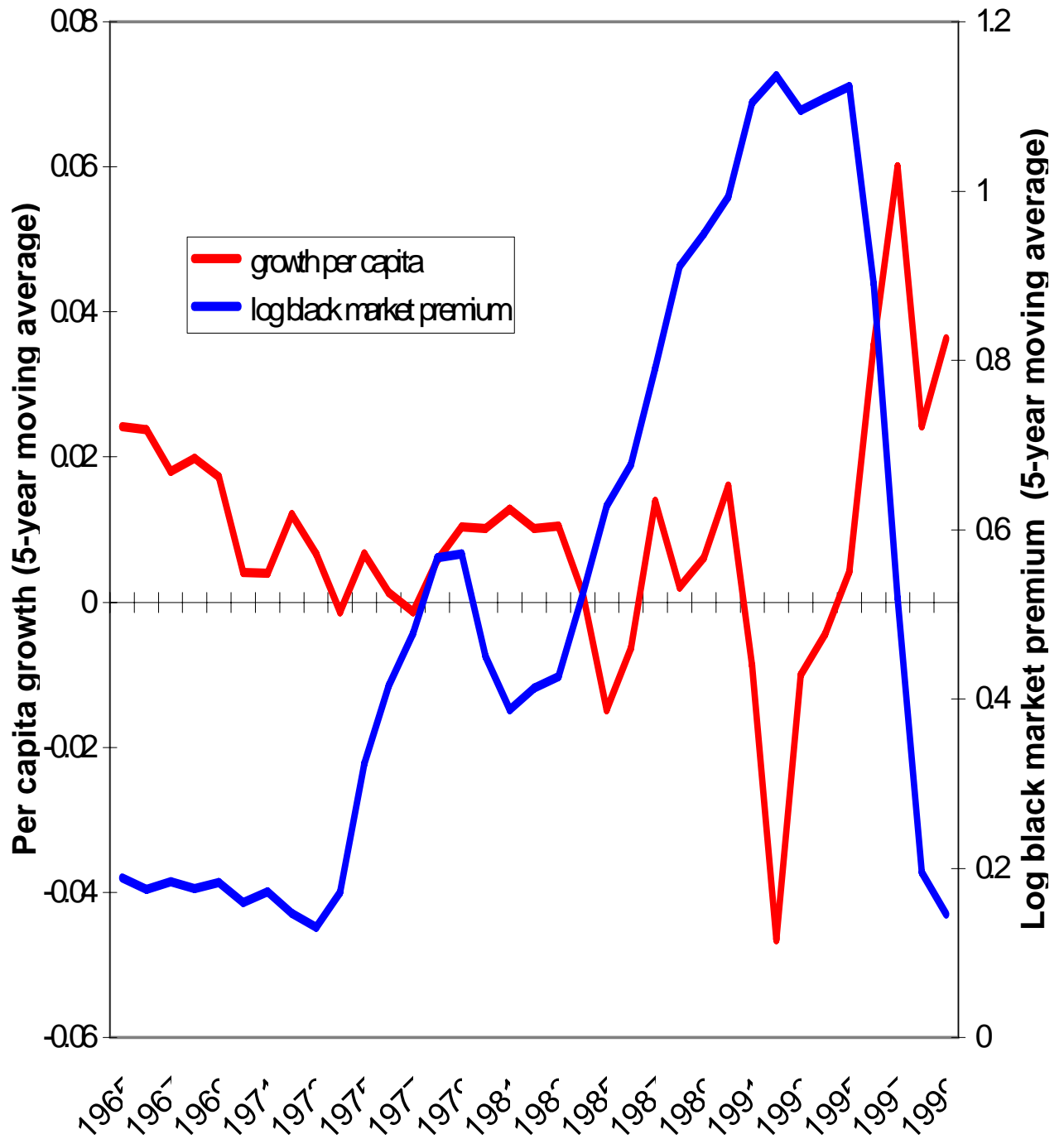


Policy reform and growth

We can also look at the growth recovery in the Reformist period another way, by seeing how much of the change in growth is explained by policy reforms. I compare first the Reformist period 1992-2001 with the last decade of the Derg period (1982-91), using coefficients on policy changes derived from cross-country cross-decade growth regressions for the whole world sample, 1960-99. There are major problems with policy and growth regressions, such as their open-ended specification that makes results on individual policies not robust. Policy and growth regressions also appear to be driven by extreme policies rather than by the moderate range of policies in which most countries are operating (Easterly 2005). Even extreme policies may be proxying for institutional deficiencies rather than reflecting the causal effect of policies (Acemoglu et al. 2005). Hence, these results for Ethiopia are meant to be illustrative rather than a precise measurement of the contribution of each policy or all policies; it may also help that Ethiopia's policy variables were in the extreme range prior to the Reformist period.

I find that about 1.4 percentage points of the 2.8 percentage point growth increase in the Reformist period can be explained by policy changes (Table 2). Financial deepening, real depreciation, and the reduction of the black market premium on foreign exchange have the most important growth impacts (see Figure 2 on illustrative inverse relationship between the black market premium and growth in Ethiopia). Only half of the growth change is explained. However, recall from the Table 1 that the change in growth after the end of the civil war contained some transitory elements, so the policy change would explain a larger share of the underlying permanent change in growth.

Figure 2 Growth and black market premium



The effects of policies on current growth potential are also understated by this calculation because they use the average policy over the period 1992-2001. Given the trend towards improved policies, several policy variables were significantly better by the end of the period than their average for the whole period. If we recalculated growth effects taking into account policy attainment at the end of the period, then the coefficients predict a total growth change of 2 percentage points. This would still predict only a per capita growth rate of 1.3 percent per annum with current policies, not much above the permanent component of growth estimated above for the 1992-2001 period. Although per capita growth was about 5 percent in fiscal year 2000/2001, this was probably a temporary aberration reflecting a good cereal harvest (IMF and IDA 2001). Given the likely recurrence of drought in the future and its severe effect on the economy (Adugna 1999), it would not be prudent to take one year of good growth during favorable climactic conditions as indicating continued high growth potential.

Table 2: Results from reform in the 1990s							Regression results from cross-country panel regressions	
Policy variable	average 1982-91	average 1992-2001	Latest value (ca. 2001)	growth effect of change from 1982-91 to 1992-2001 averages	Growth effect of further reform by end of period	total effect of reform from 82-91 to end of period	coefficient on policy	t-statistic
Log inflation	0.068	0.041	0.038	0.03%	0.00%	0.03%	-0.00998	-1.37
Overall budget deficit (% of GDP)	-7.00	-6.23	-4.80	0.06%	0.12%	0.17%	0.00083	1.97
M2 to GDP	30.24	40.63	37.48	0.30%	-0.09%	0.21%	0.00029	2.22
Real overvaluation index (greater than 100 is overvaluation)	98.82	52.48	35.35	0.35%	0.13%	0.47%	-0.00007	-2.08
Log black market premium	0.890	0.311	0.011	0.69%	0.36%	1.04%	-0.01188	-3.09
Log telephones per worker	0.762	0.931	1.109	0.11%	0.12%	0.23%	0.00665	2.93
total growth change explained by policy effects				1.42%	0.63%	2.05%		
GDP per capita growth	-0.76%	2.06%		2.82%				

Evaluating future prospects

This record makes the per capita growth of 4 percent per capita 2001-2021 projected in the HIPC debt relief documents very challenging. Analysis of all countries' growth rates in 1980-99 finds only 8 countries out of 108 with per capita growth above 4 percent. The eight are (starting with the most rapid growers) China, Taiwan, Korea, St. Kitts, Singapore, Ireland, Thailand, and Botswana.

To look at it another way, a 4 percent per capita growth target implies an increase of about 3 percentage points over the permanent growth component in 1992-2001. How many countries have achieved an increase in growth of 3 percentage points from one decade to the next? Comparing 1990-99 with 1980-89, there were 20 countries out of 130 countries with data that achieved a growth increase of 3 percentage points. Comparing successive 20 year periods, there are even fewer countries that achieved a 3 percentage point growth increase – only China and Chad out of 90 countries had a growth increase of more than 3 percentage points from 1960-79 to 1980-99.

From these historical and comparative perspectives, it seems unlikely that Ethiopia can attain the 4 percent per capita growth for 2001-2021 assumed in the HIPC debt sustainability analysis. This analysis has not even taken into account some problems like the AIDS crisis and depressed coffee prices. The sustainability of debt even after relief thus remains an open question.

Fundamental determinants of long run development

To look at Ethiopia's prospects another way, does Ethiopia have the pre-conditions in place to move to a sustainable higher level of development? Theory and empirical work suggests that a high level of development requires good institutions, high literacy, high openness to trade, and a high degree of structural transformation (the degree to which output shifts out of subsistence production into higher productivity modern sector activities, proxied by urbanization ratio).³ The following regression shows how all of these variables have an effect on level of development, instrumented by variables common in the development and growth literature like dummies for commodity

production, fraction of population speaking English or another European language, ethnic fractionalization, mortality rate facing immigrants, distance from the equator, whether a country is landlocked. As usual, the IV procedure has to be taken with a grain of salt given the strong assumptions required for identification and the possibility of weak instruments for picking out the separate effects of each of the RSH variables. Another key assumption is that none of these instruments directly determine level of development. In line with previous work, I fail to reject the restriction that they can all be excluded from the regression and enter only insofar as they influence one of the right hand side variables (Table 3). However, these results are far from decisive as the test may suffer from weak power. Hence, this exercise should be seen as illustrative.

Table 3: Regression for level of development
 Dependent Variable: Log per capita income 1999
 Method: Generalized Method of Moments
 Included observations: 50

White Covariance

Convergence achieved after: 8 weight matrices, 9 total coef iterations

Instrument list: BANANAS ENGFRACT EURFRAC ETHFRAC
 LOGEM4 MAIZE MILLET OIL RICE RUBBER SILVER
 SUGARCANE TIN TROPICS WHEAT LANDLOCK
 LFRANKROM DISTEQUAT

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.3380	0.2598	28.2487	0
Illiteracy rate, 1999	-0.0180	0.0035	-5.1877	0
Quality of institutions (KKZ), 1999	0.6511	0.1292	5.0389	0
Trade Share of GDP 1999	0.0020	0.0009	2.0791	0.0433
Urbanization Ratio 1999	0.0154	0.0037	4.1161	0.0002
R-squared	0.812063	Mean dependent var		7.554365
Adjusted R-squared	0.795358	S.D. dependent var		0.942507

³ Acemoglu, Johnson, and Robinson 2001, 2002, 2005, Frankel and Romer 1999

S.E. of regression	0.426366	Sum squared resid	8.180451
		J-statistic	0.326366

p-value on overidentifying restrictions = .2928

These fundamental determinants go a long way towards explaining Ethiopia's currently low level of development, at least for illustrative purposes. If we compare the value of its right-hand-side variables with those of Korea, we find that most of the large income gap with Korea is explained by these fundamentals, with the biggest role played by Ethiopia's lag in illiteracy and structural transformation (Table 4).

Table 4: Development level accounting in 1999 for Korea and Ethiopia

	Constant	Institutions	Illiteracy Rate	Trade share in GDP	Urbanization ratio	Predicted Log per capita income	Actual Log Per capita income
coefficients	7.338047	0.651087	-0.018013	0.001961	0.015425		
Korea		0.483	2.4	77.365	81.16	9.013	9.255
Ethiopia		-0.117	62.6	43.122	17.16	6.483	5.952
Log income difference predicted by Korea-Ethiopia difference		0.391	1.084	0.067	0.9872	2.529	3.303

One way of looking at this equation is that countries will grow when their development fundamentals place them at a higher level of income than their current income per capita. One modestly hopeful sign for Ethiopia is that its actual per capita income is below its predicted level of development. Econometric evidence suggests that about 30 percent of the difference between actual and predicted development level is closed each decade; Ethiopia's current position below its predicted level of development would give it a per capita growth of about 1.6 percent per annum.

Looking at some of the components of the institutional quality gap, the biggest gap relative to Korea seems to be with the one labeled by Kaufmann et al. 2000 as “voice and accountability,” i.e. democracy. According to Abegaz 2001:

A striking feature of the landscape of reform in Ethiopia is the absence of an institutionalized mechanism for subjecting economic policy proposals to discussion or debate between the government and various business and civic organizations. The marginalization of important stakeholders (opposition parties, various chambers of commerce and sectoral associations, farmers’ groups, the independent press, professional associations, trade unions, local non-governmental organizations, the academic community, and the like) reflects the autocratic legacy of the country’s political systems.

Many international observers classify the country as less than fully democratic, despite the elections held in 2000 and 2001. Freedom House today classifies the country as “partly free,” with a 5 on a 1 (free) to 7 (unfree) scale. They communicate some reports of harassment of opposition politicians, although they also note the opposition parties “are often reluctant to participate in the political process.”⁴ Opposition parties contested only 20 percent of the seats to the federal parliament in the 2000 elections. The European Union hailed the 2000 elections as well-organized and an important step forward towards democracy. However, the EU noted that local elections in 2001 were a “step backward with opposition parties pulling out after large-scale intimidation and harassment” and that the political scene remains “dominated by the Tigray People’s Liberation Front (TPLF).”⁵

The US State Department 2001 Report on Human Rights, while noting some improvements, also notes “Security forces committed a number of extrajudicial killings

⁴ <http://www.freedomhouse.org/research/freeworld/2001/countryratings/ethiopia.htm>

⁵ http://europa.eu.int/comm/development/strat_papers/docs/et_csp.pdf. See also Economist Intelligence Unit Country Reports for another international perspective on the dominant role of the TPLF.

and at times beat and mistreated detainees...Arbitrary arrest and detention and prolonged pretrial detention remained problems... The Government restricted freedom of the press and continued to detain or imprison members of the press.” The government violently repressed student riots in Addis Ababa in April 2001 and imprisoned many students, most of whom have since been released. The independent group Human Rights Watch noted “a marked deterioration of civil liberties in Ethiopia during 2001.”⁶ In March 2002, there was another violent confrontation between students and government forces in the Oromo region, with some student deaths and many arrests.⁷ Recent work argues that civil liberties are an economic as well as political issue, as they affect the rate of return to development projects (Isham, Kaufmann, and Pritchett 1995).

Despite the avowed commitment to federalism of the current government, one Ethiopian scholar says it is more rhetoric than reality:

One must understand that the Constitution is only meant for foreign consumption, and not for internal implementation...Some policies might have changed from the former regimes of Haile Selassie and the Derg, but one thing always remains intact in Ethiopia: politics is run from the center with a top-down control. This is also the case today. (Quoted in Tronvoll 2000).

The 2001 US State Department report on human rights notes that “Highly centralized authority, poverty, civil conflict, and unfamiliarity with democratic concepts combine to complicate the implementation of federalism.”⁸

Ethiopia institutional indicators, 1999 and 2001

	1999	2001
Voice and Accountability	-0.50	-0.85

⁶ <http://www.humanrightswatch.org/wr2k2/africa5.html>

⁷

http://www.irinnews.org/report.asp?ReportID=27169&SelectRegion=Horn_of_Africa&SelectCountry=ETHIOPIA

⁸ <http://www.state.gov/g/drl/rls/hrrpt/2001/af/8372.htm>

Political Stability and Violence	0.14	-0.55
Government Effectiveness	-0.15	-1.01
Regulatory Quality	-0.03	-0.71
Rule of Law	0.27	-0.24
Control of Corruption	-0.44	-0.40

Note: Index Ranges from about -2.5 to +2.5, with a difference of 1 indicating one standard deviation in the sample. An increase in the indicator implies better institutions for the dimension shown. Source: Kaufmann, Kraay, and Zoido-Lobaton 2000 and 2002

As shown in the table, voice and accountability actually worsened slightly between 1999 and 2001. Other indicators of institutional quality, except for corruption, also worsened over the last two years.

The business climate for structural transformation certainly seems to show considerable room for improvement. Foreign direct investment in Ethiopia was only 0.09 percent of GDP over 1992-98. The Midroc group, headed by a Saudi Arabian with an Ethiopian mother, accounts for a large share of even this miniscule amount. Only 21 FDI projects out of 152 approved in 1993-98 remained operational in 1999. Foreign investors are prohibited from entering major sectors like banking, telecommunications, and power supply, and are evaluated on a case by case basis for other sectors. Convuluted bureaucratic regulatory procedures inhibit both foreign and private investment.

Outside analysts have cited involvement of political parties in “private” companies as another inhibiting factor in private sector development. The Tigray Peoples’ Liberation Front is alleged to own a large number of agricultural, industrial and financial businesses under the umbrella of the Endowment Fund for the Rehabilitation of

Tigray.⁹ Meanwhile, the privatization program has been slow to take off. The description of the business environment by the local economics correspondent of the Addis Tribune is relevant even if perhaps biased:

Individuals cannot own land; houses and other properties confiscated by the predatory Derg regime continue to be in the possession of the present government; the official policy of ethnic bias prompts leaders to allocate disproportionate amounts of public resources to favoured regions; the mixing of politics with business is flagrantly practiced...foreign participation in the banking and insurance sector is banned; directed credit is commonplace; top-notch university lecturers and experienced civil servants have been dismissed or forced into early retirement; peasants critical of official economic policy and political thinking have been disposed of their plots of land; commercial farming is eyed with suspicion.¹⁰

In many African countries, the business environment is complicated by tensions between the indigenous political elite and a business elite of non-African origin (for example, Lebanese, Indian, and European minorities in countries like Ivory Coast, Kenya, or Zimbabwe.). This is not a feature of the business environment in Ethiopia, as the role of non-African economic elites is insignificant. However, there is considerable disparity in business ownership between indigenous ethnic groups in Ethiopia. Seventy-two percent of businesses in Addis Ababa are owned by the Amharic or Gurage ethnic groups, who make up only 34 percent of the national population (Mengistae 2001). While the large share of the Amharic group (43 percent) is only moderately greater than their share in the population (30 percent), the disproportionate ownership share of the Gurage (29 percent) is remarkable considering they make up only 4 percent of the national population! Moreover, Mengistae 2001 shows that Gurage-owned businesses are larger and have more rapid growth rates. Expanding the puzzle further, the Gurage owners are

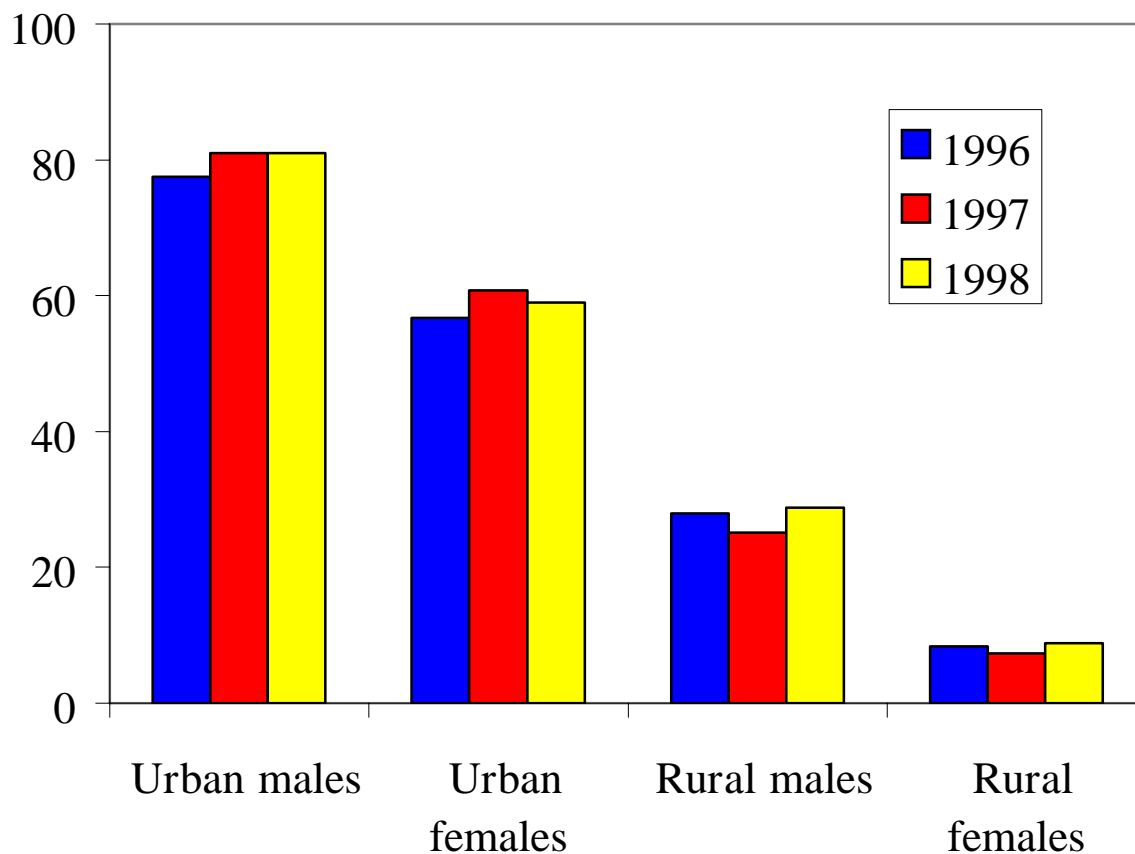
⁹ Abegaz 2001, p. 207

¹⁰ Quoted in Abegaz 2001, p. 195

the least educated in the sample.¹¹ So Ethiopia seems to reflect the common pattern of many countries that a minority ethnic group is disproportionately represented in business, a fact that often complicates the business-government relationship.

¹¹ Population shares are taken from Tronvoll 2000 and are based on 1994 data. The Gurage are originally from the Rift Valley lakes area of southern Ethiopia. The Gurage are known for their own traditional religion although today a substantial share are Ethiopian Orthodox, Lutheran, or Muslim.

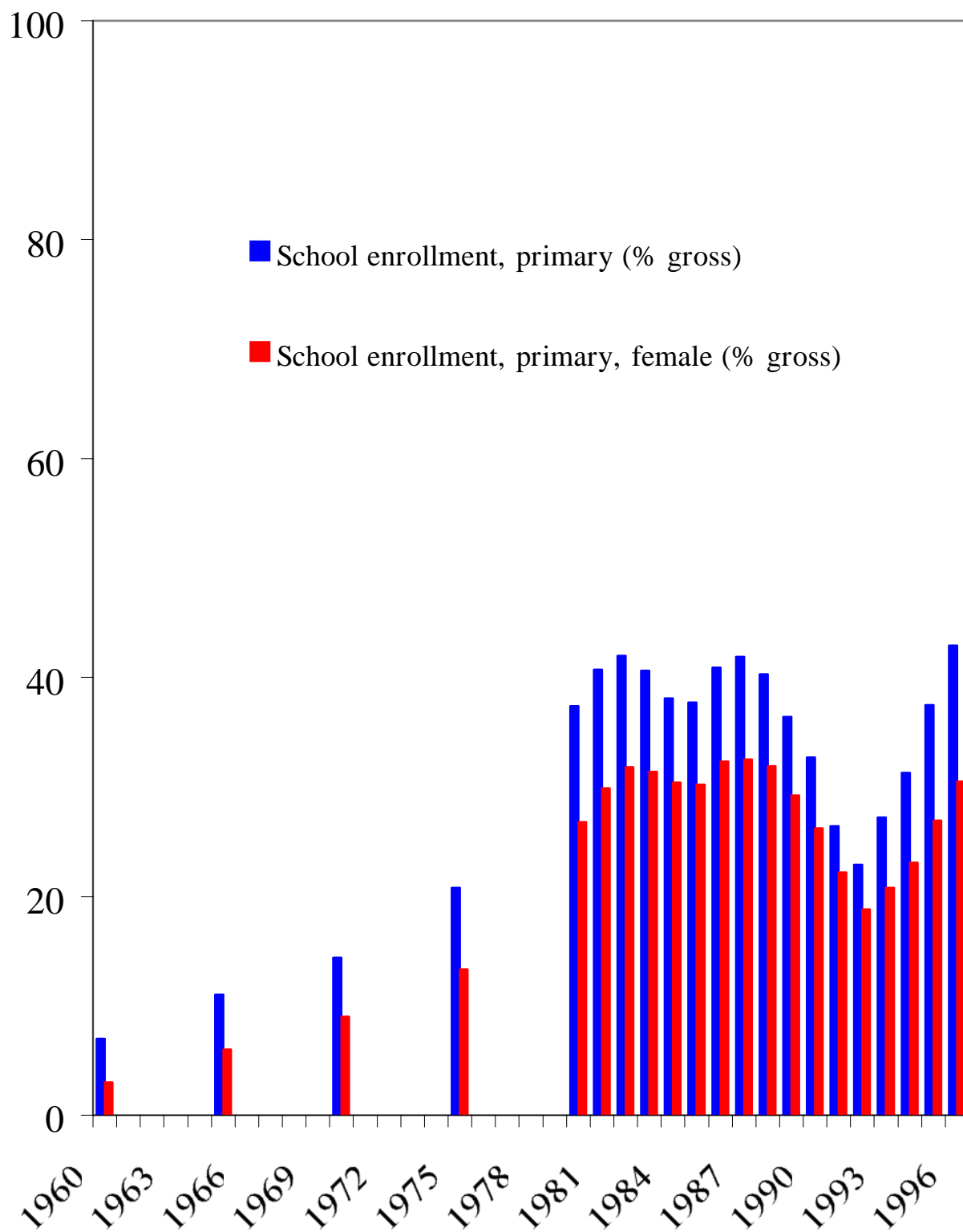
Figure 4a: Literacy rates (percent of population above age 10)



A big reform push would not be easy, since so many indicators of social development are low in Ethiopia. Closing the illiteracy gap would imply a major effort on increasing schooling in the rural areas and for females, where the literacy rates are the lowest (see Figure 4a).

However, the persistent lag in literacy has deep roots. Despite some progress since the 19060s, Ethiopia continues to have one of the lowest primary education enrollment rates in the world (Figure 4b).

Figure 4b: Primary school enrollment



The initial conditions under the monarchy fits with a political economy explanation for low human capital of the type of Bourguignon and Verdier 2000 and Engermann and Sokoloff 2000. In this story, an aristocratic elite does not want to invest in literacy of the majority for fear that a literate population would be a more politically active one (a fear somewhat realized in the important role of university students in the socialist revolution of 1974). The socialist government succeeded in raising enrollment and the reformist government maintained this record, but it still remains far below comparators and has fluctuated with the vicissitudes of war. The current regime has a mixed record in improving education.

Illiteracy is but one dimension of Ethiopia's social crisis, which puts it among the least socially developed nations in the world. Another indicator, the percent of children suffering from malnutrition (measured by low height for age, or stunting) is alarmingly high, especially in rural areas (Figure 5). Sanitary conditions for the population are also adverse, as few have access to modern toilet facilities (Figure 6).

A severe HIV/AIDS crisis is underway, with falling life expectancy and 10.6 percent of the adult population already infected. AIDS is the leading cause of death for those aged 15 to 49, and there are 650,000 AIDS orphans. Ethiopia has the world's third largest population of HIV/AIDS patients. Although donors and the government have initiated programs to combat the pandemic, there is still not enough effort to prevent an even greater health and development catastrophe.

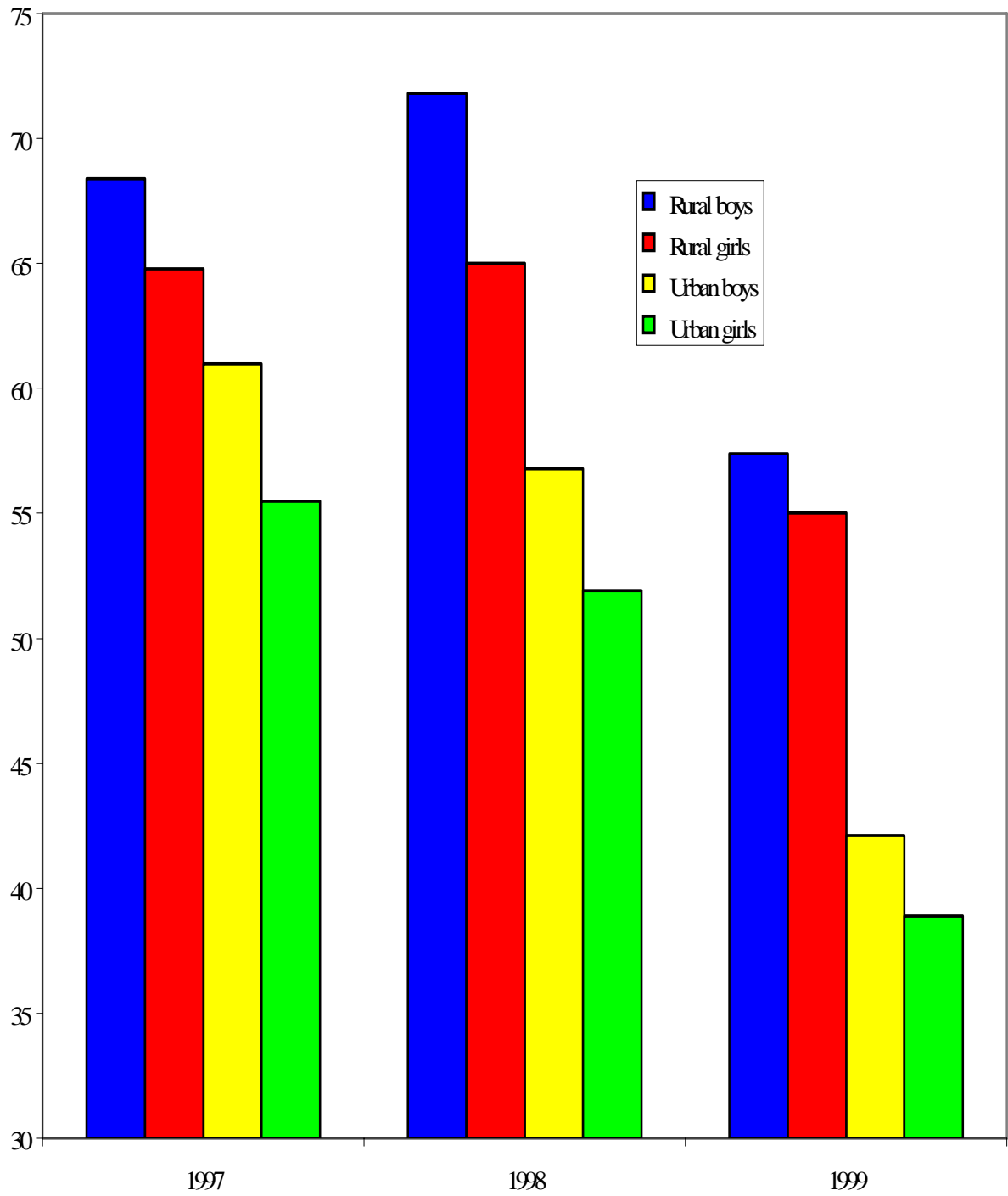
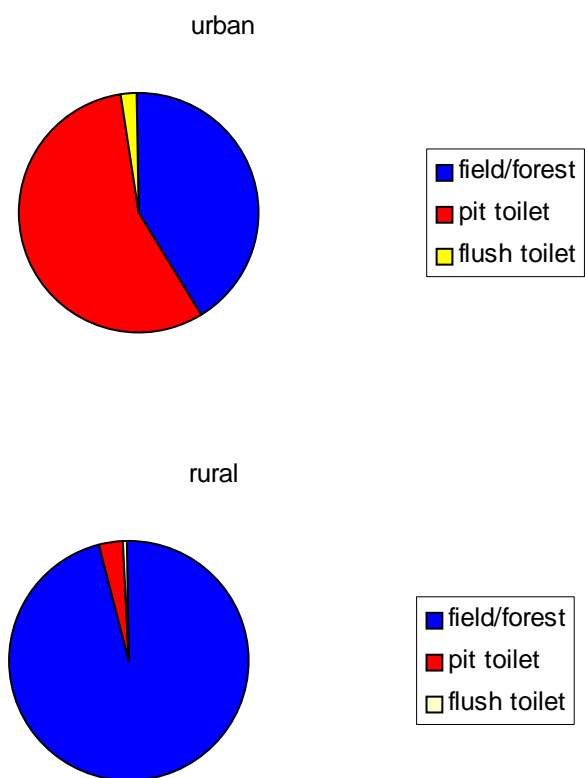
Figure 5: Percent of Ethiopian children stunted

Figure 6: Share of population with access to toilet facilities by type



More generally, Ethiopia has among the worst indicators of social development and infrastructure penetration in the world in a wide variety of indicators (Table 5):

Table 5: Rank of Ethiopia in infrastructure and social indicators

	Ethiopia percentile rank in cross- country sample, 1999
Cars per capita	1%
Computers per capita	1%
Fertility rate control (higher ranking means decrease in fertility rate)	5%
HIV infection rate control (higher ranking means lower HIV infection rate)	9%
Literacy rate	4%
Female Literacy	11%
GDP per capita	0%
Infant mortality control (higher ranking means lower infant mortality)	9%
Under-5 mortality control (higher ranking means lower under-5 mortality)	10%
Primary enrollment	2%
Female primary enrollment	1%
Radios per capita	21%
Percent of roads paved	6%
Secondary enrollment	4%
Female Secondary enrollment	7%
Child nutrition (higher ranking means lower stunting)	0%
Telephones per capita	4%
Televisions per capita	2%

The road transport network is among the least developed in the world, with only 20 percent of the land area lying within 10 kilometers of an all-weather road. There is only one railroad in the country, between Addis Ababa and Djibouti. Both roads and rails are in poor condition. (European Union 2001).

Household living conditions are poor, especially in rural areas (Table 6):

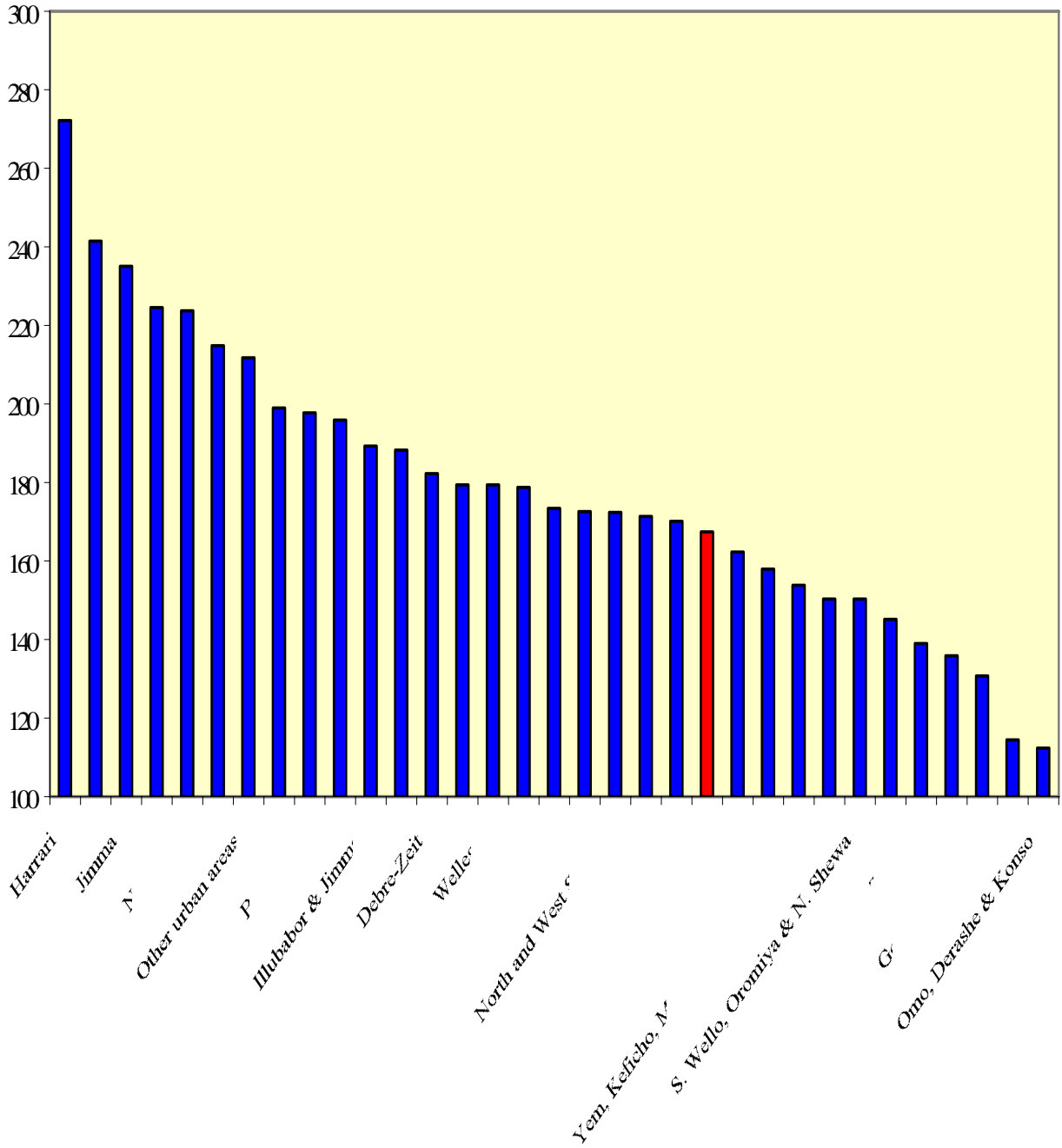
Housing living conditions, Ethiopia, 2000	Urban	Rural
Percent with electricity	76.2	0.4
Percent with piped water	80.8	5.3
Percent with earth/sand/dung floors	66.0	97.7
Percent with 3 or more persons per sleeping room	56.2	78.2

Source: Central Statistical Authority and ORC Macro 2001.

The final aspect of the social crisis is the widespread prevalence of poverty. The large majority of the population would be considered to be in absolute poverty according to international standards (IMF and IDA 2001). About half of Ethiopians cannot afford to spend enough to consume their daily minimum nutritional requirement (Welfare Monitoring Unit 1999, Ethiopian Government 2000). Recent research suggests that growth in 1994-1997 reduced poverty, but the rate of poverty reduction with respect to growth was fairly low (Bigsten et al. 2001). This is in part due to an increase in inequality over this period. Another study found economic reforms and growth reduced poverty from 1989 to 1995, but some of the poorest groups did not benefit (Dercon 2001). Another study found an overall decline in the extreme poverty rate from 1989 to 1995, although part of the improvement may have been due to better weather in 1995 (Ethiopian Government 2000).

Regional inequality and ethnic issues

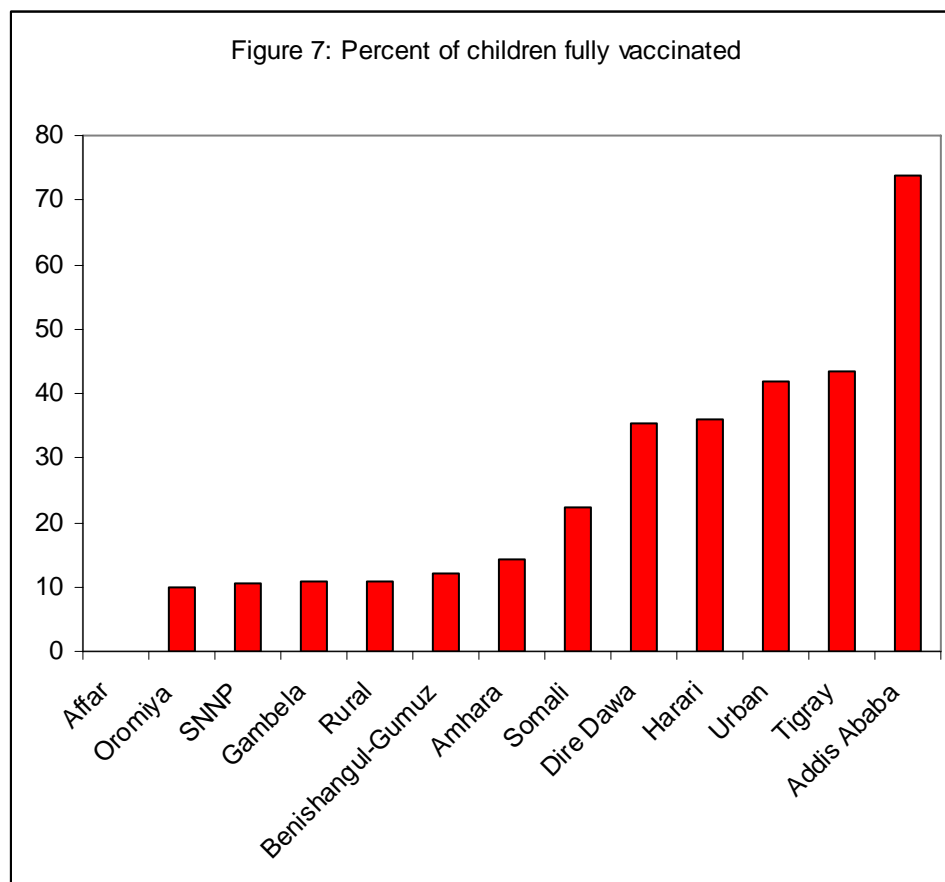
Contrary to the perception that a low income economy cannot have much inequality, there is surprising disparity in poverty rates between different regions, ranging



from a high of 77.4 percent in Omo, Derashe & Konso to only 13.3 percent in Harrari.¹²

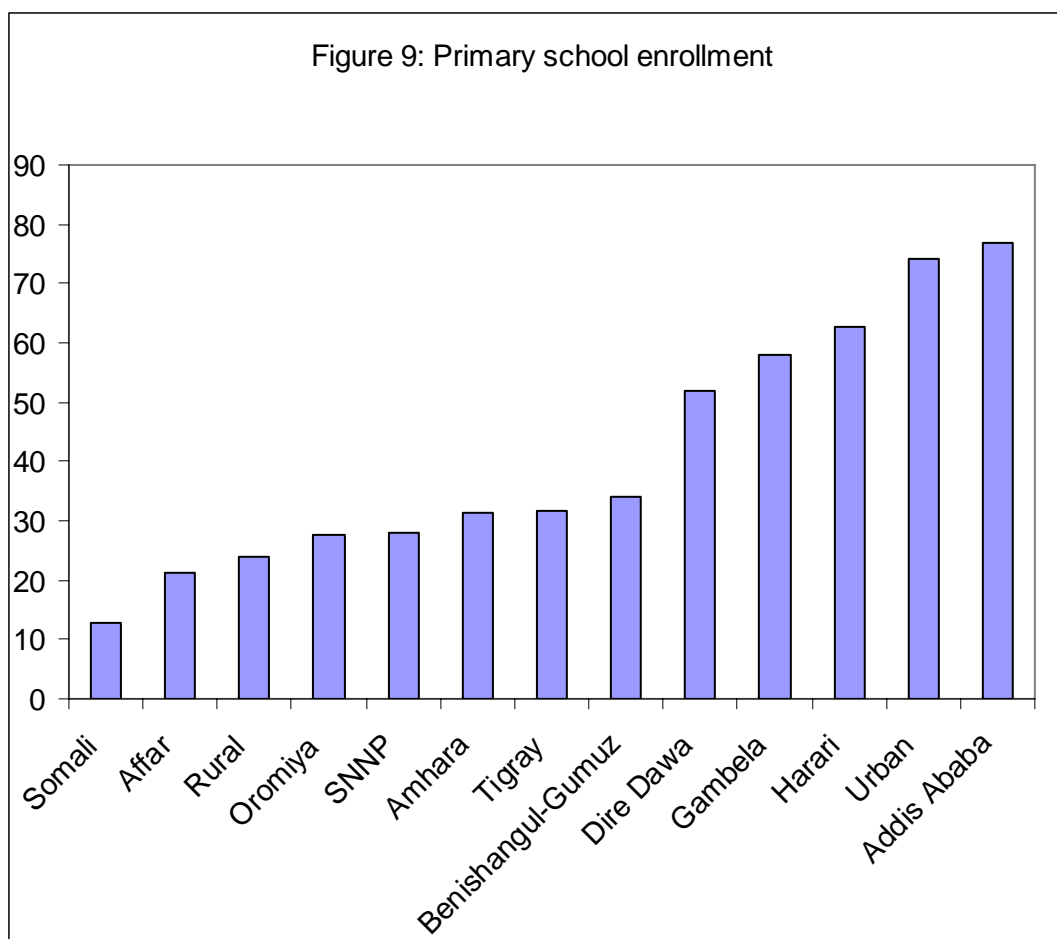
The latter region is 2.4 times richer per capita than the former, a startlingly high degree of regional disparity for a nation with such a low average income (see figure 7).

Other social indicators show high variation across regions. For example, childhood vaccination rates range from zero among the Afar to 74 percent in Addis Ababa(Figure 8).



Source: Central Statistical Authority and ORC Macro 2001. Fully vaccinated means those who have received BCG, measles, three doses of DPT, and polio vaccine (excluding polio vaccine given at birth).

Primary school enrollment also shows significant differences across regions:

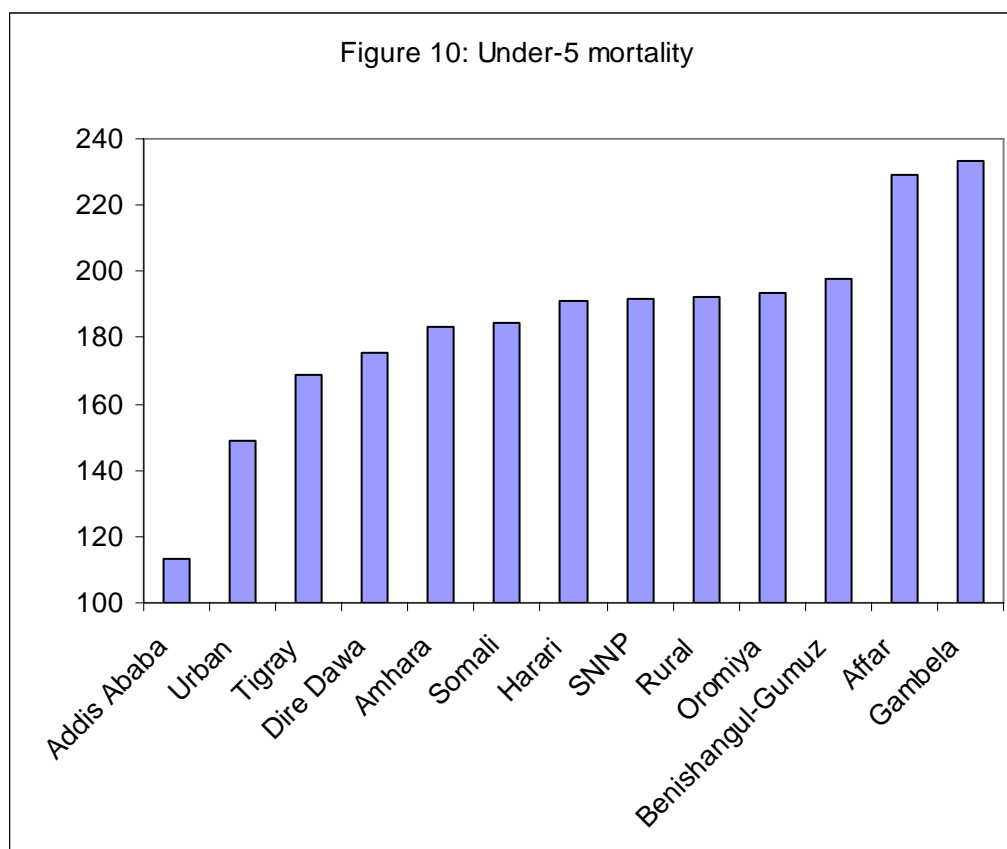


Source: Central Statistical Authority and ORC Macro 2001.

Another study found that admission to federally administered institutions of higher education tended to overrepresent urban students from Addis Ababa, Dire Dawa, and

Harar, and underrepresent students from Afar, Benishangul-Gumuz, Gambella, Somali, and SNNP. For example, of the 3.2 million Somalis in Ethiopia in 1998, only 25 were students in higher education institutions (Tronvoll 2000).

Finally, there are significant differences across regions in child mortality rates:



Source: Central Statistical Authority and ORC Macro 2001.

Since the regions are based on ethnicity, one might think that there is a high level of interethnic inequality in Ethiopia. Certainly Ethiopia is a remarkably diverse country, with more than 80 different languages spoken within the national boundaries. Large interethnic differences would complicate the government's attainment of a federalist state

in which all ethnic groups feel they have equal opportunities and self-determination.

However, closer examination of the figures above does not really support the picture of large interethnic differences. The main cleavage seems to be between urban areas like Addis Ababa (especially Addis Ababa), Dire Dawa, and Harari, and the remainder of the country that is mainly rural. There is some evidence that the Afar and the Somali are disadvantaged relative to the rest. However, differences between the home regions of the three most politically salient groups, the Tigray, the Amhara, and the Oromo, do not seem to be large or even consistent across different indicators. Urban/rural gaps are far more important than rural/rural ethnic gaps.

Still, the current government's attempt to resolve ethnic differences by decentralizing power to ethnically defined regions, including the promotion of local languages, remains deeply controversial. At one extreme, some observers see it as a ploy by the Tigrayan ruling elite to divide the potential opposition along ethnic lines, as well as to undercut the national government bureaucracy. The rulers are alleged to have coopted participants from other ethnic groups rather than allowed representative organizations to emerge. Some Ethiopians decry the threat to the unity and identity of the country and the "ethnicization" of politics:

The ruling EPRDF takes the position of 'self determination including cessation' for regions organized along language and cultural lines while many political groups, including the majority of the inherited bureaucracy, oppose this framework ... ethnicization in Ethiopia is dangerously worrisome not only because it is undemocratic at local level but also even if it is the ethnic politics is being pursued rather vigorously (with all its investor insecurity) at federal level. (Geda and Defege 2001)

More charitable observers see government policy as an honest attempt to address the ethnic divisions that have bedeviled Ethiopia for much of its history (today there continues to be an armed insurgency by the Oromo Liberation Front). As with ethnic

issues in many countries, there are competing visions in current political discourse. One vision is that of long-standing Amhara dominance of the state, and its “colonialization” of other “nationalities.” Some who accept this vision see the current government as responding to this history by granting autonomy to the “nationalities;” others see the current government as simply substituting Tigray dominance for Amhara dominance (see Tronvoll 2000).

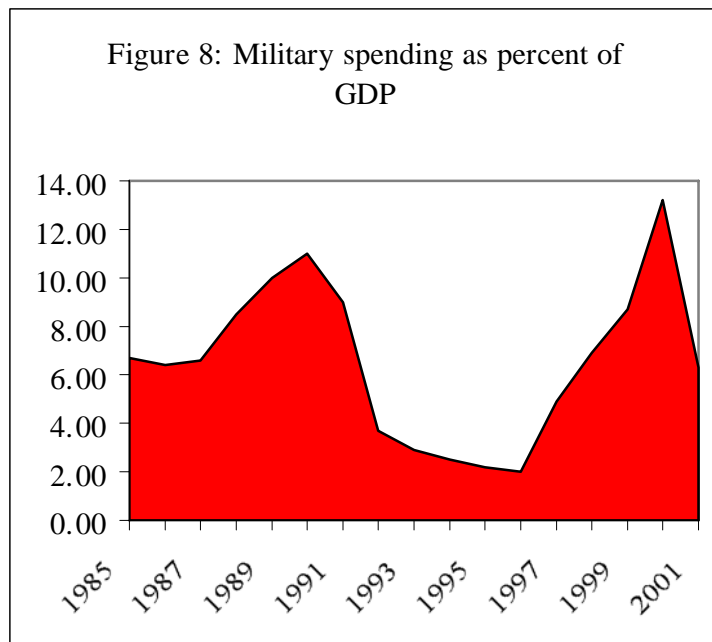
A much different vision is that Ethiopia coalesced historically as a multiethnic nation. According to this vision, there was always substantial blurring of the lines between different ethnic groups, including intermarriage and participation of non-Amhara groups in the Amhara-dominated central governments. According to the latter vision, first the monarchy and later Marxism provided unifying ideas that cut across ethnicity. The problem now after both the monarchy and Marxism have failed is to find another unifying national idea, according to this second vision. The war with Eritrea complicated further the tension between nationalism and federalism. (See the discussion in Levine 2000).

Aid and development

Ethiopia remains among the least developed nations in the world despite a relatively high inflow of foreign aid over the past few decades. Out of 100 nations on which we have complete statistics for 1960-98 on overseas development assistance, Ethiopia ranks 17th in total ODA received -- \$20 billion total over 1960-98 in 1995 dollars. This compares to a present value of external debt of about \$2.7 billion in 2001, and total GDP of about \$6.4 billion. (Ethiopia also reached the decision point for HIPC relief in 2001, with estimated debt relief at \$1.3 billion in present value terms.)

Obviously, with a per capita income today of \$100 per annum, the productive payoff from the aid received was not high, reflecting the poor institutional incentives, and the necessity of using aid for humanitarian needs like famine relief. (Although the necessity of using aid for humanitarian needs is itself an endogenous function of government and institutional failure.)

An additional important factor is the unfortunate consumption of government revenues by military uses (see figure 8). After initially falling under the post-civil war reformist regime, military spending surged again during the war with Eritrea. The war consumed one-third of all public spending during fiscal year 1999/2000 (European Union 2001).



A recurrent problem with foreign aid in Ethiopia, as in other low income countries, is the heavy burden that the top-heavy donor community places on the relatively scarce skilled managers in the national and regional governments (see Figure 9). Agencies involved in Ethiopia include the International Monetary Fund, World Bank, Consultative Group to Help the Poorest, Special Program of Assistance for Africa, United Nations Development Program, UN Economic Commission on Africa, African Development Bank, UNICEF, UNAids, World Trade Organization, Development Committee, Food and Agriculture Organization, UNIDO, UN Environment Program, International Labor Organization, International Fund for Agricultural Development, Paris Club, Development Assistance Group on Ethiopia, USAID, DFID, Nordic Development Fund, other bilateral donors, and 310 nongovernmental organizations (NGOs). The donors require these managers to prepare multiple documents in a consultative and participatory fashion, which although salutary is very time consuming. For the World

Bank alone, the country team is required to produce with the cooperation of the Ethiopian authorities five different assessments of the country (Poverty Assessment (PA), Public Expenditure Review (PER), Country Financial Accountability Assessment (CFAA), Country Procurement Assessment Review (CPAR), and Country Economic Memorandum (CEM)/Development Policy Review (DPR)) as well as encouraged to produce four sector reports (Country Gender Assessment, Country Environmental Analysis, Financial Sector Assessment Program Report, and Investment Climate Assessment). Twelve other sector reports are mentioned in World Bank management guidance to country teams (City Development Strategy, Corporate Governance Assessment, Country Infrastructure Framework Report, Education Sector Review, Energy and Environment Review, Health Sector Review, Institutional Governance Review, Knowledge-Based Economy Study, Legal and Judicial Sector Assessment, Risk and Vulnerability Assessment, Rural Development Assessment, Social Analysis), but are mercifully optional. The donors do ask the Ethiopian government to prepare a Poverty Reduction Strategy Paper, in accordance with the fourteen-point Comprehensive Development Framework (CDF) of the World Bank. The government is also asked to simultaneously undertake structural reforms such as the Civil Service Reform Program (CRSP), implementation of a Financial Information Management System (FIMS) in government, financial sector reform in line with the Basel standards and the eleven areas of International Standards and Codes recommended by the IMF and World Bank, privatization, and lowering trade barriers in ways governed by the World Trade Organization (WTO).

The donors further ask Ethiopian government staff to have a multisector, multiyear expenditure framework to guide the aid, in an environment where centralized planning is even more difficult than in a rich economy due to poor monitoring and information systems. The donors ask these managers to meet multiple policy targets – overall economic development, poverty reduction, environmental protection, improving gender equality, improving regional equality, participation of civil society, etc. – with relatively few effective policy instruments at their disposal. The result is that multiple international actors and agendas are trying to exert claims on scarce managerial resources in Ethiopia in order to reach the multitudinous objectives and beneficiaries (see Figure 9). It is not surprising that one major donor noted a “slow pace of disbursement,” which is due to “capacity constraints” at both the government and donor level. This in turn led this donor to emphasize “capacity building” as the “major cross-cutting theme” of its development assistance (European Union 2001). There is a certain irony in donors increasing the pressure on the government’s managerial capacity through donor red tape and then turning around and trying to satisfy their own demands through “capacity building.” No amount of “capacity-building” seems likely to relieve the severe managerial bottlenecks to the foreign aid process.

Nor does capacity-building address the infringement of national sovereignty through the donors’ imposition of their own agendas on the government and society of Ethiopia. Dealing with the donor bureaucracy’s thousand-pound gorilla is an unwelcome distraction to political leaders in a country facing the grave challenges that Ethiopia does.

The Poverty Reduction Strategy Paper Sourcebook of the multilateral agencies recommends “agreeing on financing priorities for individual donors within the framework of a global external assistance strategy” in order to “reduce the risk of financing non-priority spending, which often occurs when external assistance agreements are negotiated on a project-by-project and donor-by-donor basis.” This recommendation seems to ignore the much greater risk of ineffective use of aid when donors require a “global strategy” in an environment of scarce managerial resources, few available government policy instruments, and extremely limited beneficiary feedback. The current reformist government of Ethiopia wisely moved away from the central planning approach to development of the previous regime; donors should not try now to impose central planning of foreign assistance. Rather the donors and the government could explore decentralized mechanisms for delivery of foreign assistance, empowering local community groups to freely choose from the range of wares offered by donors subject to some budget constraint.

One possible approach that the government could try on a small experimental scale is to issue “aid vouchers” to local poor communities, who could redeem these vouchers with any donor or with the government in exchange for donor or government services of their choice. The government could also experiment with including an option for poor households of exchanging their vouchers for a long-term international financial asset. Such a scheme is not a panacea to solve the many problems of reaching the poor with foreign assistance and would have to be carefully designed to minimize the many kinds of market failure that could plague such an experiment. Another plan being discussed in the donor community is to create a central “aid pool” with money from all

donors, with unrestricted block grants made to those governments whose overall program and track record qualifies for assistance (Kanbur, Sandler, and Morrison 1999). It seems like fresh experiments are desirable in view of the disappointing past record of aid and the current overemphasis on top-down planning with little beneficiary feedback.

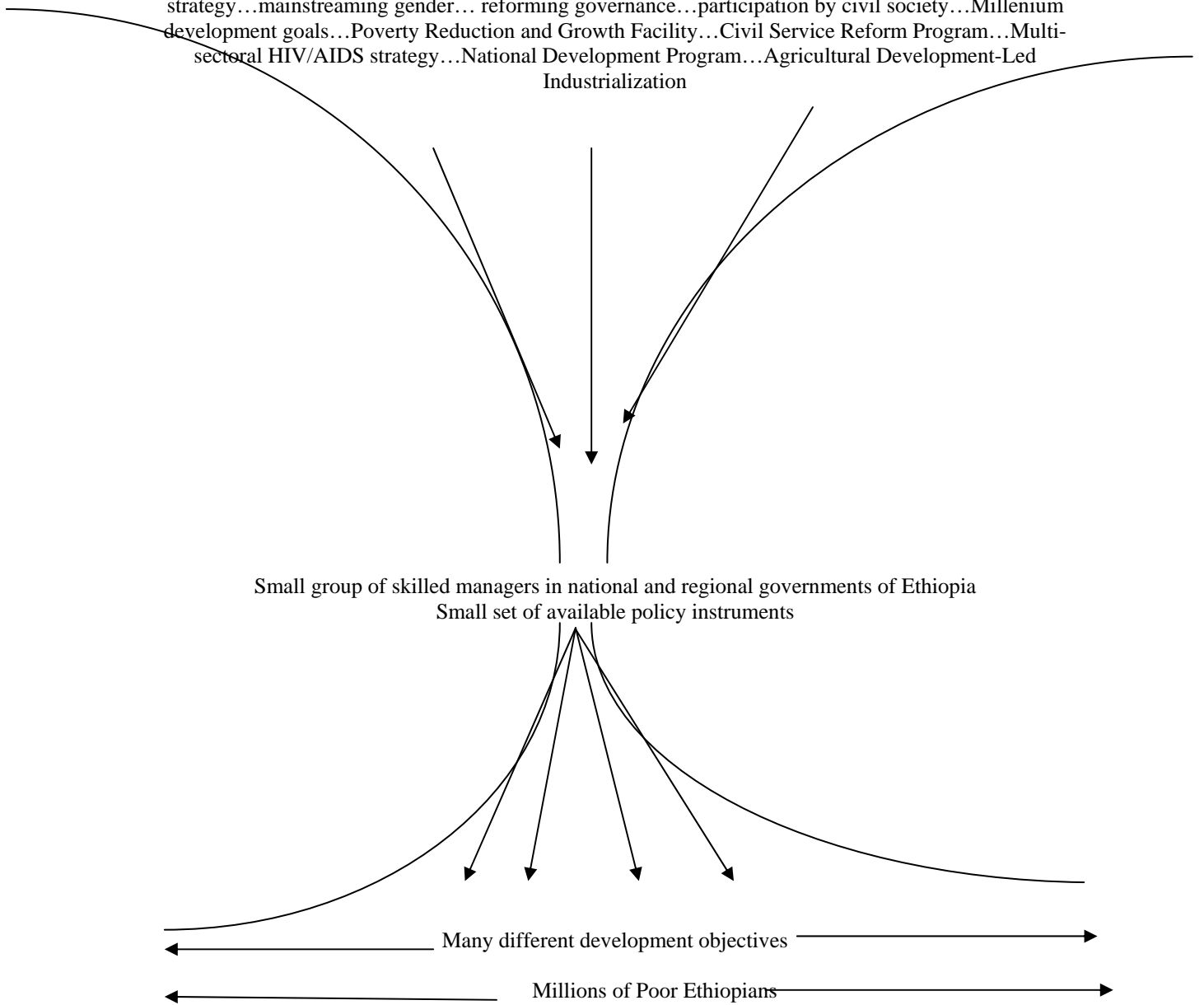
Application of projects and governments for scarce aid donor funds can hopefully be done in a way that doesn't infringe national sovereignty, just as someone applying for financing to a venture capital fund must demonstrate a good business plan but doesn't cede autonomy and control to the venture capitalist.¹³

¹³ To put this in perspective, think of whether the United States would have been willing at any point in its history to have international agencies or foreign governments dictate its policies or institutions. The most famous case of "foreign aid" to the US happened early in American history with French military support to the American revolution – but remember George Washington was in command.

Figure 9: Can Foreign Assistance Reach the Poor Through the Hourglass?

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Interim Poverty Reduction Strategy Paper...Comprehensive Development Framework...Decision Point Document for Enhanced HIPC Initiative...Medium-term Expenditure Framework...1000pp PRSP Sourcebook...Capacity-building ...Integrated Framework...National environmental strategy...mainstreaming gender... reforming governance...participation by civil society...Millenium development goals...Poverty Reduction and Growth Facility...Civil Service Reform Program...Multi-sectoral HIV/AIDS strategy...National Development Program...Agricultural Development-Led Industrialization



Conclusion

Ethiopia has had fairly rapid growth since the current reformist regime took power. However, part of that growth consisted of recovery from the disasters of the previous government and the civil war. The permanent component of per capita growth under the reformist government in the 1992-2001 period is estimated at about 1.1 percent per annum. That growth is explained by total factor productivity growth rather than by capital deepening. This 1.1 percent growth rate also corresponds to the average growth payoff to the policy changes initiated by the current government, measured by variables such as the inflation rate, the budget deficit, the black market premium, the ratio of M2 to GDP, the level of infrastructure, and real depreciation of the currency. The projection of 4 percent per capita growth in the HIPC documents for 2001-2021 is thus unlikely to be achieved. International comparisons suggest that a growth acceleration of this magnitude, or for that matter a per capita growth of 4 percent or above, is only rarely achieved.

Further increases in Ethiopia's growth potential would probably require addressing some of the poor initial conditions -- the poor quality of institutions, the high illiteracy, the low level of openness to trade, and the low degree of structural transformation of the economy (measured by variables like urbanization and share of agriculture). Although policy and growth regressions are not a reliable tool to make such statements with great confidence, this is one area where theory (or common sense) and empirics seem rather uncontroversial. Poor institutions include flawed democracy and human rights, lack of property rights in land, and excessive business regulation. This does

not even take into account other severe long-term problems like the inadequate attention to the AIDS pandemic and environmental degradation. The substantial inequality between urban and rural areas of Ethiopia in illiteracy and other social indicators suggest that redressing such imbalances will be another necessary condition to achieve these goals. However, since all of these reforms take time to implement and bring to completion, the 4 percent per capita growth projection still seems overly optimistic even under the best case reform scenarios for the medium term. The government should assess how it will deal with debt servicing requirements and other macro balances under a scenario of lower growth and saving than what is projected in the HIPC documents.

Ethiopia's long history of involvement with foreign donors has not yielded very happy results. The current relationship is one of a top-heavy donor bureaucracy imposing too many burdens and too many agendas on a small group of managers and political leaders in Ethiopia's national and regional governments. It would be better to experiment with more decentralized mechanisms to match the multitudinous needy poor in Ethiopia with donors who want to help the poor.

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