

*The Political Economy of Economic Growth in Africa, 1960-2000:  
Country Case Studies*

## **Chapter 1: Overview<sup>1</sup>**

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<sup>1</sup> This chapter draws liberally on chapters 1, 2 and 12 of volume 1 (see footnote 3 below). I am grateful to Benno Ndulu for many helpful comments and to Robert Bates, Jan W. Gunning, and Growth project researchers for contributions to section 5. Any errors or omissions are my own.

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## 1. Introduction

In 1999, the African Economic Research Consortium launched a project (henceforth the 'Growth project') designed to produce the first major assessment by African research economists of the post-independence growth performance of the countries of Sub-Saharan Africa. The country studies assembled here constitute the core of that effort. Together they account for over three-quarters of the region's population and span the full variety of its growth experience.

A companion volume distills the evidence presented here into a unified analytical account of the political economy of economic growth in Sub-Saharan Africa from 1960 to 2000.<sup>3</sup> We outline that synthesis below, as a guide to the cross-cutting relevance of each of the country studies. But synthesis inevitably means compression, and there is much in these case studies that remains to be exploited. As detailed narratives of growth opportunities seized or missed, policy choices rewarded or gone awry, and struggles played out by firms and households at the microeconomic level, these chapters constitute an ongoing resource for growth scholars. In previously under-studied cases – including

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<sup>3</sup> Benno Ndulu, Stephen O'Connell, Robert Bates, Paul Collier and Charles Soludo, eds, *The Political Economy of Economic Growth in Africa, 1960-2000* (forthcoming, Cambridge University Press). The steering committee of the Growth project was composed of Benno Ndulu and Stephen O'Connell (coordinators); Jean-Paul Azam, Olusanya Ajakaiye, Robert Bates, Paul Collier, Shantayanan Devarajan, Augustin Fosu, Jan Willem Gunning, Dominique Njinkeu, and Charles Soludo. T. Ademola Oyejide collaborated in developing the project's methodology, and Charles Soludo served as co-coordinator during the initial phase of the project.

Burundi, Chad, and Togo, among others – they provide the foundation for a country-based empirical literature that has not previously existed.

Table 1 lists the research teams that participated in the Growth project. To ensure comparability and support a synthesis of the country evidence, these teams adopted a common methodology grounded in the growth econometrics literature and the rational-choice tradition in political science.<sup>4</sup> We outline that methodology in Section 2 below, as a guide to the structure of the country chapters. At the synthesis stage, the episodes identified and analyzed in these chapters became the raw materials for analysis. In Section 3, we describe the taxonomic approach adopted by the steering committee, in which ‘opportunities’ and ‘choices’ proxy for the forces of geography and governance that powerfully shaped Africa’s growth experience after 1960. Section 4 summarizes the main lessons of the synthesis. We close this chapter in Section 5 with a brief substantive introduction to the individual country studies.

\*\*\*Table 1 about here: Countries in the Growth project

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<sup>4</sup> The methodology was developed in four framework papers presented at the Growth project’s inaugural meeting at Harvard University in 1999 and published in the AERC’s Working Papers series: Collier and Gunning 2001, O’Connell and Ndulu 2001, Oyejide and Soyibo 2001, and Bates and Devarajan 2001. The Global Development Network subsequently adopted the methodology and used it to structure a set of parallel growth projects in six regions (see [www.gdnet.org](http://www.gdnet.org)).

## 2. Grounding country research

The case-study methodology has its foundation in the global growth econometrics evidence, which provides comparability across studies and addresses the 'degrees of freedom' problem characteristic of single-country analysis, and in the rational choice tradition in political economy analysis, which provides a conceptual basis for analyzing policy choice and reform.

Collier and Gunning (1999a) organized their survey of African growth experience around the growing complementarity between cross-country regression evidence and the microeconomic evidence on African economies. Within the Growth project, this complementarity became a central feature of the case-study methodology. By the late 1990s, as Collier and Gunning observed, the growth literature had virtually eliminated the "African dummy variable," which had typically soaked up between one and two percentage points of annual growth in global regressions. The systematic contours of African experience, it appeared, were increasingly well captured by differences in observable growth determinants. Meanwhile, microeconomic and sectoral evidence often existed to document the detailed operation, within Africa, of linkages that featured prominently in the cross-country evidence.<sup>5</sup> This complementarity suggested that cross-country evidence could be used to discipline the search for leading themes at the country level, while country evidence, in turn, would 'feed back' into the broad account of

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<sup>5</sup> Thus for example, openness to trade had emerged as a globally relevant determinant of growth; this was consistent with an existing country-level literature documenting the response of African cocoa farmers to export taxes.

African growth that was emerging from the growth literature. As described below, country teams used the cross-country literature to locate their own country in the global distribution of growth and its determinants. Detailed country-level analysis, in turn, provided sharper measures of key variables – particularly measures of policy and governance – and traced out their influence at the microeconomic and sectoral level. It also gave potential scope to expectations, policy reversals, leadership transitions, and other dynamic phenomena poorly proxied in cross-country econometric models.

Cross-country evidence is particularly useful in addressing the ‘degrees of freedom’ problem confronted by single-country analysis. In analyzing the persistent growth slowdown that got underway in Kenya around 1980s, for example, a short list of plausibly important determinants would have to include the global recession, changes in coffee and oil prices, structural adjustment policies, and political succession. Slower-moving candidates would also have to be considered, including institutional quality and distributional politics. With 40 or fewer data points, however, the scope for untangling the contributions of a large set of potentially relevant determinants is very limited. Cross-country econometrics takes the natural approach of treating each country’s experience as a partial counterfactual for Kenya’s. The assumption is heroic, but where pooling is roughly valid it greatly expands the sample of relevant evidence. The magnitude of Kenya’s policy adjustment, for example, can be compared to that of other countries, and its growth contribution scaled by a coefficient that is consistent with cross-country experience; the confounding effects of terms of trade shocks and global recession can be controlled for; some sense can be gained of the net underlying influence of Kenya’s institutions. Country analysis can then come into its own, marshalling the detailed

country- and period-specific evidence on the Kenyan growth environment and its evolution over time (see Mwega and Ndung'u, chapter 10).

Drawing on the framework paper by O'Connell and Ndulu (2001), therefore, country teams used a combination of growth accounting and cross-country regression models to formulate the key themes of their research. For most countries, growth accounting decompositions were available from Collins and Bosworth (1996), as updated by the same authors through 2000.<sup>6</sup> These decompositions track the potential contributions of factor accumulation to growth, using an aggregate production function. Any growth (or decline) in output per worker that cannot be accounted for by human or physical capital deepening is interpreted as a change in total factor productivity, a broad measure of country-level technological progress. Regression-based decompositions (using 5-year non-overlapping periods) came from two sources, one based on the parsimonious neoclassical growth or "augmented Solow" model estimated by Hoeffler (2002) and the other on a looser, Barro-style specification developed for the project by O'Connell and Ndulu (2001) and referred to in the country chapters as the "pooled full specification." Country teams used these data, in combination with the existing country literature, to characterize the evolution of the growth environment in their country and identify the key stylized facts and puzzles to be addressed.

The second methodological foundation of the country studies lies in the neoclassical or 'rational choice' approach to the political economy of policy and institutions (Bates and Devarajan 2001). A central objective of the project was to

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<sup>6</sup> The country-level decompositions are available on the CD-ROM in Ndulu and O'Connell (2001) and (2003).

understand the linkages between governance and growth, where governance embodies the full set of economic roles undertaken by the state as producer, consumer, provider of public goods, and regulator of economic activity. Our working hypothesis was that firms and households allocate resources within an incentive environment that is shaped in fundamental ways by the state (Collier and Gunning 1999a), and that the political processes that produce and support this incentive environment typically retain substantial autonomy relative to economic outcomes, at least over extended periods. Our interest was in how these processes work. Why do they sometimes produce growth-promoting incentives, and other times not?

The neoclassical political economy tradition approaches this question by interpreting political competition as competition for economic resources. In this view, any interest the political elite may have in promoting long-run growth is conditioned by its own interest in accumulation and its obligation to adjudicate competing demands for economic resources (Rodrik 1999). Salient groups include the incumbent elite itself, competing elites, and broader selectorates whose influence is determined by their success at negotiating internal free-rider problems and by the institutional rules that limit their access to power (Bates and Devarajan 2001). We challenged country teams not just to observe what had happened with respect to growth and its determinants, but to analyze why government actors took the decisions they did.

Within each case study, these two elements of the project methodology – the location of country-level themes within the cross-country econometric evidence, and the search for major transitions in the governance environment for growth – come together in a *periodization* of the governance environment between 1960 and 2000. Country teams

divided each country's experience into a small set of episodes corresponding to major changes in the incentive structure facing private economic activity, particularly with respect to government intervention in markets. Within each episode, researchers focused on two questions. First, how did policies and shocks combine to produce the observed growth outcomes? Researchers were to develop microeconomic evidence linking policies and shocks to the resource allocation decisions of firms and households, and particularly to the scale and efficiency of investment in human and physical capital. Where growth appeared to be dominated by factors poorly proxied in cross-country growth regressions, these factors were to be identified and evidence brought to bear on their importance. Second, why were these policies chosen? Researchers were asked to develop evidence on the beliefs of the political elite, the interests to which they responded, and the institutions through which political competition was mediated.

### **3. Synthesizing the evidence**

At the synthesis stage, the evidence to be distilled took the form of growth episodes, each analyzed in detail by the country authors for patterns of government intervention, microeconomic responses by firms and households, and the political economy of policy choices and transitions. With a view to extracting lessons for growth strategy, we developed a two-way taxonomy of these episodes, according to the growth opportunities and policy choices they embodied.<sup>7</sup> On the opportunity dimension, the global evidence

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<sup>7</sup> In Chapter 1 of volume 1, Ndulu and O'Connell survey the growth literature under the broad headings of demography and human resources, geography, and governance.

since 1960 gives prominence to locational and endowment-based variables that influence how countries engage in global markets. Our classification stresses physical remoteness and natural resource wealth; in volume 1 we show that the growth opportunities open to coastal, landlocked, and resource-rich countries differed systematically during the period of study, and that controlling for these differences is a crucial step in interpreting growth performance. On the choice dimension, policy variables feature prominently in the growth literature and have been a focal point of the conditionality dialogue between African governments and the international financial institutions since the late 1970s. We construe policy broadly here, to include all the major ways in which African governments have shaped the incentive environment for resource allocation. This approach encompasses conventional concepts of macroeconomic and sectoral policy, but also includes the performance of public sector institutions and the emergence of systemic violence and state breakdown.

We use the three opportunity groups to structure the presentation of country studies in the current volume; our analysis of recurring policy patterns provides the organizing framework for the synthesis volume.

### *Growth opportunities*

In grouping countries by an analytical geography we are intentionally departing from the conventional division of Sub-Saharan Africa into East, West, Central, and Southern regions. The conventional approach evokes continuities of physical geography and colonial history, but its overriding appeal is that it is non-controversial. Our aim in

adopting an approach based on economic structure is to provide a more powerful basis for interpreting Africa's growth experience and thinking about growth strategy.

Our first distinction is between low-opportunity landlocked economies and high-opportunity coastal economies. The most dramatic feature of landlocked developing countries on a global basis is their relative poverty (Faye *et al.*, 2004). Outside of the industrial world, the average per-capita income of landlocked countries in the late 1990s was nearly 40 percent below that of coastal countries, and the income differential remains almost 30 percent if we restrict the comparison group to contiguous coastal neighbors.<sup>8</sup> In neoclassical growth models, lower initial income is associated, other things equal, with faster growth. But this 'conditional convergence' effect is easily overcome if the factors that reduce current income also reduce growth opportunities. This is powerfully true for

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<sup>8</sup> The 40 percent figure comes from a regression of the log of average real per capita GDP (PPP-adjusted) between 1997 and 1999 on a landlocked dummy variable and a non-SSA dummy variable. The non-SSA dummy is highly significant with a coefficient of 1.22 ( $p = 0.00$ ), reflecting the generally higher incomes of non-SSA developing countries. The landlocked dummy is  $-0.46$  ( $p = 0.01$ ) implying that predicted landlocked income is 63 percent of predicted coastal income. The regression has 129 non-industrial-country observations and an  $R^2$  of 0.42. To derive the 'coastal neighbors' comparison we calculated the average log income of contiguous coastal neighbors and subtracted the log of own income from this for the 30 landlocked countries in the sample (the advantage of the late 1990s is to include a large number of countries in Central Asia). Regressing this on a constant, the constant term is  $-0.33$  and highly significant ( $p = 0.01$ ); the predicted ratio of landlocked to contiguous coastal income in this regression is 72 percent. There is no evidence in these regressions that the income premium on coastal location is different in SSA than in the rest of the developing world: an interaction term landlocked\*non-SSA is small and insignificant in the first regression (coefficient 0.10,  $p = 0.78$ ), and a non-SSA dummy variable is small and insignificant in the second (coefficient  $-0.03$ ,  $p = 0.88$ ).

landlockedness. The most obvious factor is high transport costs, which separate landlocked states from the trade exposure that has a causal impact on growth in global samples (Frankel and Romer 1999, Gallup and Sachs 1999) and which appear to have an even larger impact on growth in SSA than elsewhere (Block 2001, O'Connell and Ndulu 2001). But levels of human development also condition growth opportunities, as do measures of demographic burden including the relative size of the working age population and its evolution over time. In our survey of the growth evidence Benno Ndulu and I (volume 1) show that landlockedness exerts a strong and negative indirect impact on predicted growth via these channels.<sup>9</sup>

The growth challenges of landlocked countries are mirrored, of course, by the advantages of a coastal location. The spectacular growth success of Asian coastal exporters of manufactured goods is the development success story of the post-WWII period and the driving force behind the convergence of the population-weighted distribution of global income during this phase of globalization (Sala-i-Martin 2006, Firebaugh 2003).

A second distinction cuts across the landlocked/coastal divide to separate 'resource-rich' countries, whether landlocked or coastal, from all others. Resource-rich economies are economies whose growth is driven more powerfully by primary commodity endowments, typically in minerals or energy resources, than by location. Global experience suggests that commodity wealth holds out growth opportunities that

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<sup>9</sup> In a similar vein O'Connell (2004) finds that predicted annual long-run growth based on 'deep' econometric instruments for trade exposure and institutional quality is fully half a point higher for the coastal group than the landlocked or resource-rich groups.

are unavailable even to the coastal high-opportunity economies: in Africa, Botswana provides a potent example of these opportunities. But natural resource abundance also undermines the competitiveness of other sectors producing traded goods (the 'Dutch disease'), increases the risk of civil war (Collier and Hoeffler 2004), and may divert resources into zero-sum distributional struggles on an ongoing basis (Ross 2003). On a global basis, the adverse influences dominate: the econometrics literature finds strong evidence of a 'natural resource curse' in the period since 1960, with primary commodity exporters tending systematically to grow more slowly than exporters of manufactures and/or services (Sachs and Warner 2001).

The analytical geography reviewed here suggests that landlocked and resource-scarce, coastal and resource-scarce, and resource-rich countries face systematically different growth opportunities. In the synthesis volume we use a time-varying classification to operationalize these distinctions: coastal or landlocked countries become resource-rich in the first year they exceed a pair of thresholds for the shares of primary commodities in exports and primary commodity rents in GDP.<sup>10</sup> A country like Nigeria is therefore classified as coastal and resource-scarce until 1971, and as resource-rich thereafter. For the present volume the natural approach is to group countries according to their dominant opportunity classification over the entire post-independence period (see Table 1). We place Ethiopia, not politically landlocked until 1994, and The Sudan, with

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<sup>10</sup> Collier and O'Connell (volume 1) define a country as resource-rich starting in the first year it satisfies the following three conditions: (i) current rents from energy, minerals and forests exceed 5% of Gross National Income (GNI); (ii) a forward moving average of these rents exceeds 10% of GNI; (iii) the share of primary commodities in exports exceeds 20% for at least a 5-year period following this initial year.

its Red Sea coastline, among the landlocked countries; this judgmental adjustment reflects the vast internal territories of these countries and their limited access to the sea.<sup>11</sup>

Figure 1 looks at differences in export structure and development level by opportunity group (using the time-invariant classification), for Sub-Saharan Africa and an aggregate representing “all other developing areas.” The figure uses all countries with continuously available observations. Two observations on export structure stand out. First, although resource wealth varies along a more/less continuum rather than by the either/or classification we are using, our definition captures sharp structural differences in economic endowments. Many of our resource-scarce countries have appreciable commodity exports – gold in Ghana, phosphates in Togo – but the resource-rich countries are, by comparison, a highly non-diversified group on average. Second, African resource-rich countries have hardened their primary-commodity specialization over time – they are in fact the only group in the diagram to have a higher share of primary commodities in exports at the end of the period than at the beginning. This reflects a broader phenomenon within Africa: in each of the opportunity groups, African countries reduced their primary export share over time by less than other developing regions. Dramatic cases in point include the emergence of new African oil exporters in the 1990s from among the resource-scarce groups, including Chad, Equatorial Guinea, and the Sudan.

\*\*\*Figure 1: Export structure and real GDP per capita by opportunity group

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<sup>11</sup> Ethiopia became politically landlocked with Eritrea's independence in 1994, but this was preceded by three decades of armed conflict with Eritrean forces.

The real GDP charts illustrate three observations analyzed in detail by Collier and O'Connell in volume 1. First, the African landlocked and resource-scarce countries are not only the poorest group on a global basis but also the slowest-growing group: on average, their incomes fall over time.<sup>12</sup> Malawi does best in the African landlocked group over the 1960-2000 period, but at 1.4 percent even Malawi's growth was well below the median long-run growth rate for all developing countries (= 2.3 percent). Second, starting in the early 1980s the relative fortunes of coastal and resource-rich economies differ systematically between SSA and the rest of the developing world. Outside Africa, the coastal economies continue to surge ahead, a phenomenon that is even more dramatic when viewed on a population-weighted basis given the growth accelerations of China and India starting in the mid-1980s. Africa's coastal economies out-perform its resource-rich economies on average after 1980, but the difference is small and the benchmark is one of nearly complete stagnation. The result is that Africa's coastal economies under-perform their global counterparts very dramatically after the early 1980s. Mauritius (population 3.5 million in 1990) provides a dramatic exception, following its adoption of an Asian-style outward-oriented growth strategy starting in the early 1970s. Collier and O'Connell argue that the under-performance of Africa's large coastal economies deprived Africa's landlocked countries of a key engine of growth during much of the 1960-2000 period.<sup>13</sup>

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<sup>12</sup> Our charts show simple averages across countries. Collier and O'Connell do their analysis on a population-weighted basis. The generalizations we are making here are not affected by population weighting, except where noted.

<sup>13</sup> They find that on a global basis, a one percent increase in the growth rate of per capita GDP among contiguous neighbors raises the home country's growth by nearly 4 tenths of a percentage point. Outside of

Finally, these charts convey a stylized fact that influences all broad growth comparisons between SSA and other regions: by comparison with the rest of the developing world, Sub-Saharan Africa is unusually landlocked and resource rich. Table 2 shows the distribution of countries and population by opportunity group for the sample of countries used by Collier and O'Connell (volume 1).<sup>14</sup> To the degree that landlockedness and resource wealth proxy for structurally adverse growth opportunities, the observed growth performance of African countries is partly a consequence of their objectively limited opportunities. Collier and O'Connell find that a full percentage point of the population-weighted growth differential between SSA and other developing regions – 0.96 points out of a total differential of 3.50 – can be traced to the unusually high prevalence of resource wealth and landlockedness in the region.

\*\*\*Table 2: Distribution of countries and population by opportunity group

Before turning to patterns of governance we note a second dimension of geography that is too fluid and contingent to serve as a basis for classifying growth opportunities but that came forcefully to our attention as the country evidence was being developed. As Ndulu and I note in volume 1, the political geography that emerges from our country studies is more often defined on broadly ethno-regional lines than by

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SSA, this spill-over effect is particularly strong for landlocked and resource-scarce economies, because for these economies coastal neighbors represent not just a transport barrier but also an enticing export market.

<sup>14</sup> Figure 1 draws directly from the Penn World Tables 6.1 dataset, which includes a full run of data for only 2 landlocked developing countries outside of SSA, Bolivia and Nepal. Collier and O'Connell expand the dataset slightly using World Bank data on growth rates of constant local currency GDP.

economic sector or urban/rural location. The salience of ethno-regional interests may have deep roots in the region's physical geography and colonial history. Collier (2002) argues that the predominance of subsistence risks and low population density in SSA favored the historical emergence of strong and localized identities based on kinship. The colonial powers then re-posed issues of economic and political management on a larger spatial scale, encouraging the reorganization of collective action around the more fluid and socially-determined categories of tribe and ethnicity. By late in the colonial period, he argues, these "imagined identities" had acquired a powerful salience, often underpinned by a common language and/or religion. When issues of political self-determination came to the fore, ethno-regional political parties were the dominant basis for political competition in many countries.

By global standards, the character of ethnic diversity in African countries is unusual in two respects. First, African countries tend to display an unusually high level of ethno-linguistic fractionalization, as measured by the probability that two randomly chosen individuals speak a different first language. Easterly and Levine (1997) showed that higher degrees of ethno-linguistic fractionalization were associated with slower growth in global samples, largely through a deterioration of the quality of national policy and measures of institutional performance. Subsequent work has produced a more nuanced picture; Rodrik (1999) and Collier (2000) find that fractionalization has deleterious effects only in the absence of democratic institutions, a combination characteristic of much of SSA between the mid-1970s and the early 1990s. Second, however, many African countries display a polarized pattern of sub-national identity consistent with what Collier (2002) calls "ethnic dominance." This is a situation in which

individual groups are large enough either to constitute a permanent majority or to contest for the control of national sovereignty on an ongoing basis. In countries characterized by *ex ante* polarization, sub-national cleavages have often had a strongly geographical dimension, raising fundamental issues of nation-building and culminating in cases like Nigeria, Burundi, Chad and the Sudan in secessionist movements and/or civil war. In these arenas fractionalization *per se* has a protective effect: Collier and Hoeffler (2001) find, for example, that high levels of fractionalization reduce the risk of civil war.

### *Patterns of governance*

Choices constitute the second axis of our synthesis taxonomy. Fiscal deficits, black market premia, and other economic policy outcomes tend to be correlated with growth in global samples, and during the 1990s policy variables played a substantial role in the growth econometrics literature as sources of predicted growth differentials across countries and regions. As Ndulu and O'Connell argue in volume 1, however, the deeper message of that literature is to identify a core set of functions the public sector must perform adequately if sustained growth is to occur. Moreover, the degree to which these functions are performed – in effect, the nature of the governance environment – is often poorly proxied by individual measures of policy or institutional performance. This is in part because institutions vary across countries, so that policy variables that do well at capturing the thrust of policy in one setting may do poorly in another. The rate of inflation, for example, does not provide a useful measure of macroeconomic stability in the African countries of the CFA zone, where exchange rates are were irrevocably fixed

to the French franc until 1994. But policy variables also tend to be endogenous to actual growth performance, so that an adverse macroeconomic shock can produce an apparent deterioration in policy even when policy settings remain broadly unchanged (the black market premium is an example). We needed a way to characterize choices that was robust to institutional variations and plausibly predetermined with respect to growth outcomes.

As described above, the country studies were designed with a view to tracking the major features of the governance environment over time on a country-by-country basis. After an intensive review of the country evidence, the steering committee identified four recurring patterns, each recognizable in terms of the overall thrust of policy as distinct from the setting of individual policy instruments. As outlined by Ndulu and O'Connell,

“[t]hese include control or *regulatory* regimes that severely distort productive activity and reward rent-seeking, regimes of *ethno-regional redistribution* that compromise efficiency in order to generate resource-transfers to sub-national political interests, and regimes of *intertemporal redistribution* that aggressively transfer resources from the future to the present. The fourth [regime], *state breakdown*, refers to situations of civil war or intense political instability in which a government fails to provide security or to project a coherent influence in a substantial portion of the country.” (Ndulu and O'Connell 2006, p. 6).

In a two-stage process, the steering committee compiled an initial judgmental classification of all country/years based on the case-study evidence, and then finalized this classification in consultation with the country teams. Based on the case-study

analysis, the steering committee then extended the classification to 21 additional African countries. The resulting classification is explained in detail in Collier and O'Connell (2006) and covers 47 countries for the period 1960-2005.<sup>15</sup>

The four anti-growth 'syndromes' capture a substantial fraction of the observed variation in policy choice in Africa, both across countries and over time. One or more of the syndromes is present in nearly two thirds of the country-years in our 26-country sample. As indicated in Figure 2, the syndromes show a decided evolution over time, with syndrome-free status eroding rapidly starting in the late 1960s and returning with equal force starting in the late 1980s. Control regimes are the most common by far; their time pattern mirrors the general exposure to syndromes, peaking in the mid-1980s and then falling precipitously during the period of intense economic and political reforms between 1988 and 1994. State breakdown is the only marked exception to the generally hump-shaped distribution of syndromes over time. It worsens during the 1990s in the face of a sharp change in the external aid and security environment (with the collapse of the Soviet Union in 1989) and a wave of economic and political reforms.

\*\*\*Figure 2: The governance environment over time

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<sup>15</sup> The classification was undertaken by Jean-Paul Azam, Robert Bates, Paul Collier, Augustin Fosu, Jan Willem Gunning, Benno Ndulu, Dominique Njinkeu, and Stephen O'Connell. The case-study countries were completed between August and November 2003, in an iterative process involving the country teams. The remainder of Sub-Saharan Africa was completed by the editorial committee in August 2004. A final set of revisions were undertaken by the committee in October 2005.

*Interactions between opportunities and choices*

In Chapter 3 of volume 1, Fosu draws on the case material to provide extended examples of the syndromes and study the dynamics of their adoption and abandonment. We provide some canonical examples in Section 4 below. Here we focus instead on what can be learned from the interaction of syndromes with our opportunity categories.

Table 3 shows the frequencies of each syndrome by opportunity group, and in Table 4 we use probit regressions to control for year effects and check for statistical significance. The most powerful general observation in these tables is the correlation of landlockedness with poor governance. Coastal and especially resource-rich countries are significantly more likely to be syndrome-free than are the landlocked and resource-poor countries. The differences are largest with respect to ethno-regional redistribution and state breakdown. The greater tendency of landlocked countries to choose redistribution over growth is consistent with a simple political economy model in which the political elite sets the level of distortionary taxes so as to achieve its preferred balance between current and future revenues. Redistribution pays off in the short run but undermines growth; given this tradeoff, it is more likely to be chosen if growth opportunities are already limited (Gallup and Sachs 1997). Within the redistributive syndrome, moreover, the landlocked countries are unusually exposed to its most predatory forms. Our system distinguishes adverse ethno-regional redistribution, as practiced during some episodes by northern-dominated governments in Nigeria and Sudan, from acute cases of self-aggrandizement by a narrow political elite, as in Uganda under Idi Amin or Burundi under the Bururi faction. The

landlocked countries are disproportionately exposed to the latter phenomenon. Their disproportionate exposure to state breakdown is consistent with an empirical literature on the incidence of civil war, which finds large effects not just of low income but also of slow growth (Miguel *et al.* 2004, Collier and Hoeffler 2004).

Second, the coastal and resource-scarce economies, whose growth opportunities are best illustrated by Mauritius and the outward-oriented Asian exporters of manufactured goods, are in fact the most strongly exposed to regulatory regimes. From a normative viewpoint this result is extraordinary. Returning to the Gallup and Sachs (1999) framework, the economic costs of tight controls on production and trade are greatest in this group, precisely because growth opportunities are both favorable and sensitive to policy. The global evidence suggests that an alternative combining core infrastructural services with market-based incentives is likely to spur diversification into the higher-opportunity areas of labor-intensive manufacturing and services. Bates (2006) identifies three driving forces behind control regimes in Africa, each of which appears to apply with particular force to the coastal and resource-scarce economies. The first is ideology. Bates (2006) and Ndulu (2006) stress the widespread influence of Fabian socialism, and in a few cases of revolutionary Marxism, in encouraging a dominant state presence in the economy. While this operated worldwide and independently of opportunity structure, it was used to justify particularly sharp market distortions in Africa's coastal economies, where trade offered not only the dominant source of revenue but also an opportunity to make the transfer of colonial assets and the repudiation of colonial patterns a matter of national development strategy (Ake 1996). The second explanation lies in the rent-generating nature of controls and the tendency of narrow but

well-organized interests to capture national policy in the absence of broad electoral competition (Bates 1981). Independently of opportunity structure, the rents created by control regimes produce a set of vested interests that come to oppose the removal of controls. But among the coastal economies, nascent import-competing and urban rent-seeking interests – small-scale industrialists, an educated civil service, labor unions – were in place already at independence; their presence may have added an interest-based impetus to the original adoption of controls. Finally, regional wealth inequalities may have encouraged the adoption and maintenance of control regimes. While the coastal and resource-scarce group is not disproportionately exposed to such inequalities, those that exist tend to separate a trade-based and relatively high-income coastal region from a relatively poorer interior (a theme developed by Azam 2006).<sup>16</sup> Bates (2006) finds that in countries characterized by large regional wealth disparities, controls were more likely to be imposed when the President or national executive originated from the poorer regions. In the coastal and resource-scarce economies, intervention in markets would have provided a mechanism for diverting resources from the coastal regions to the interior.

Ideology began to lose its impetus within Africa during the economic crisis of the late 1970s and early 1980s, and with the collapse of the Soviet Union in 1989 the idea of an African socialism virtually evaporated as context for policy. But controls had by then acquired their own impetus as a political equilibrium. Collier *et al.* (2006) argue that the market-based reform programs that got underway starting in the mid-1980s ultimately

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<sup>16</sup> Azam (2006) focuses mainly on West Africa. Bates (1989) argues that in East Africa, where mountain regions support high-value cash crops, it is altitude more than proximity to the coast that separates rich and poor regions.

required a parallel process of political reforms. By enfranchising a wide electorate, political reforms could potentially break a political equilibrium in favor of continued controls.

\*\*\*Table 3: Incidence of syndromes by opportunity group, controlling for year effects

We turn last to the intertemporal redistribution syndrome. The ‘resource curse’ literature emphasizes the exposure of natural resource exporters to public spending booms that undermine the efficiency of investment and leave a legacy of external debt and fiscal imbalances. On a population-weighted basis, resource-rich countries experience the highest exposure to this pattern, including most notably Nigeria which displays it from 1970 to 1987. But unsustainable spending can also be supported by what Nkurunziza and Ngaruko (chapter 2) call the ‘rents to sovereignty’ – aid, foreign borrowing, or revenues from the taxation of export crops like coffee in Burundi. On a population-unweighted basis – taking country/years as observations – landlocked countries were as likely to succumb to intertemporal redistribution as were the resource-rich countries.

#### **4. Lessons from the synthesis**

Figure 3 juxtaposes the diversity of Africa’s growth experience with the central puzzle any assessment of the region’s experience must confront. Dots show long-run growth rates, with countries arranged in declining order from left to right. The range of long-run

outcomes is wide – from Botswana's 6.3 percent per annum to the Democratic Republic of Congo's -3.3 percent (Liberia, not shown, grew at -3.5 percent). There is also substantial diversity within countries, as indicated by the upper and lower labels, which show the fastest and slowest 10-year growth period for each country: well over half of the countries of SSA have achieved an average growth rate exceeding the global median of 2.3 percent for at least a decade, and many have grown twice as fast. But the dominant long-run pattern, by far, is one of stagnation and divergence relative to the rest of the developing world. Rapid growth, when it did occur, was very seldom sustained. Over the full 1960-2000 period, SSA lost its initial income advantage vis-à-vis South Asia and fell further behind the regions that were already richer in 1960. A few small countries did well, but the collective population of the 5 African countries that exceeded the global median long-run growth rate (the dashed line) was fewer than 5 million people in 2000.

\*\*\*Figure 3. Country-level growth performance in SSA, 1960-2000.

Cross-country growth accounting comparisons reveal that slow capital accumulation and slow growth in total factor productivity have been roughly equal contributors to the region's growth performance, each accounting for about half of the long-run growth differential relative to other developing regions (Table 5). While these calculations do not resolve causality, the quantitative importance of lagging productivity is striking. A growing productivity shortfall points to aspects of the incentive environment that affect the deployment of existing assets, the allocation of available investment resources, and the incentives for acquiring technological capability. Evidence

on capital flight suggests further that a substantial portion of saving effort is diverted abroad in many African countries (Collier, Hoeffler, and Pattillo 2001), whether in search of higher *ex ante* returns or to avoid detection of illegal activity.

\*\*\*Table 5: Growth accounting by region

The central message of the growth project is that securing the core functions of market-friendly governance – Ndulu and O'Connell (2006) contrast the anti-growth syndromes with Adam Smith's famous trilogy of 'peace, easy taxes, and a tolerable administration of justice' – is critically important for long-run growth. Collier and O'Connell (2006) show that syndrome-free status was worth roughly 2 percentage points of predicted annual growth 1960 and 2000, an amount equivalent to more than half of the population-weighted growth differential between Sub-Saharan Africa and other developing regions after accounting for differences in opportunity structure. Viewed differently, maintaining syndrome-free status was virtually a *sufficient* condition for avoiding episodes of economic collapse and virtually a *necessary* condition for achieving rapid growth on a sustained basis (see also Fosu and O'Connell 2006).

With their focus on core functions, the syndromes highlight what Collier and Gunning (1999a) call 'errors of commission' – choices that actively undermined the quality of governance and the prospects for long-run growth, in favor of the stated or unstated objectives of the political elite. We find evidence of such errors in two thirds of the country-years in the post-independence period and demonstrate that the prevalence of these patterns provides a powerful account of Africa's overall growth shortfall (Collier and O'Connell 2006). The bulk of the synthesis volume is devoted to understanding the

political and institutional origins of these patterns: why they emerged, why they persisted, and how some countries managed to avoid them. The single deepest task of growth strategy, the evidence implies, is to provide the core functions of market-friendly governance in the short run while strengthening the institutional capacity for securing them on a continuing basis.

In fully a third of the country/years after independence, however, governments steered clear of recognizable anti-growth patterns. This is in sharp contrast to the pejorative thrust of much of the African political economy literature. Yet while growth collapse was rare in such cases, truly rapid growth (e.g., at a sustained rate of 5 percent or more) was also rare. Figure 4, from Collier and O'Connell (2006), conveys this point by showing the estimated impact of syndrome-free status at various quantiles of the conditional distribution of annual growth rates. At each quantile we model the growth rate as a linear function of opportunity group and economic shocks; the upper quantiles contain observations of rapid growth conditional on these variables, and the lower quantiles, slow growth. At the conditional median, the impact of syndrome-free status is consistent with standard regression estimates (which model the conditional mean rather than the median): an extra 2 percent of growth. At the lower quantiles, the impact is even larger. But in the highest quantiles, where growth is rapid for unobserved reasons, the presence or absence of syndromes makes considerably less difference. Over the 1960-2000 period, syndrome-free status allowed but did not guarantee sustained rapid growth.

One reason for this 'necessity but not sufficiency' result is the distinction between achieving syndrome-free status and securing it over time. Focusing on regulatory controls, Collier and O'Connell (2006) show that among the coastal economies, the

degree of export diversification after 1980 is strongly correlated with the duration of reforms. Reforming governments that managed to stay the course were rewarded over time with substantial structural change, a phenomenon that itself tended to support the consolidation of reforms. A similar result holds with respect to state breakdown: post-conflict episodes are by definition free from outright state breakdown, but the risk of renewed conflict is very high and recedes only over time (Collier and Hoeffler 2004).

A second critically important reason for the spread of outcomes conditional on syndrome-free status is that growth opportunities differ. The global evidence implies that sustained rapid growth will be more difficult to achieve for the landlocked, low-opportunity countries than for their coastal or resource-rich neighbors, and for politically polarized societies than for those in which aspects of national identity coexist with local or regional ties.

But even geographically-based growth opportunities are not irrevocable, and this points to a third and final set of considerations. Chapters 1 and 12 of volume 1 widen the analysis to accommodate 'errors of omission' – failures to intervene in a purposive manner to overcome locational disadvantages and other critical constraints to rapid growth. Ndulu and O'Connell (chapter 1) focus on public infrastructure investment and human resource development; Collier *et al.* (chapter 12) focus on opportunity-specific interventions and the political institutions required to support them.

\*\*\*Figure 4: Growth impact of avoiding syndromes at alternative quantiles

Ndulu (2004) draws on the growth literature to motivate public investments geared to reducing the unusually high cost of development in SSA. Consistent with our analytical geography, the costs associated with low population density, sparse networks of navigable waterways, long overland distances, and a multiplicity of national borders point to national and regional transport infrastructure as a key element in long-term growth strategy.

Ndulu and O'Connell argue that the contribution of human resources to Africa's growth is poised to be considerably larger in the region's second 40 years of independence than it was in the first. The cross-country growth literature provides modest support for this argument: educational attainments and (until the early 1990s) life expectancies grew more rapidly than incomes did over the period, gradually strengthening the initial conditions for subsequent growth. The broad move to syndrome-free status meanwhile began to improve the *ex ante* social efficiency of private investments in secondary education and job experience, as the lure of remunerative public sector employment was replaced, by the late 1980s in most countries, by more uncertain prospects based in the private sector. Evidence from outside of Africa suggests that bursts of rapid investment and growth have in a number of cases been preceded by a cumulative increase in the ratio of human to physical capital (Hayami 2001, Berthelemy 2006) – a finding that, if generally valid, may help explain the weak performance of educational variables in panel growth econometrics. Citing such threshold effects, Ndulu and O'Connell argue that

“the steady advance of educational attainment in Africa may have brought the region closer to supporting the rapid expansion of new and more education-intensive activities in the manufacturing and services sector.” (Ndulu and O'Connell 2006, p. 75)

Demographic developments present a more complicated picture, with opposing tendencies presented by the HIV/AIDS epidemic and the beginnings of a fertility transition. These developments have qualitatively similar implications for population growth but sharply divergent implications for overall economic growth, via their impacts on age dependency ratios and the incentives for human capital investment. African fertility rates were comparable to those in the rest of the developing world in 1960 but then stagnated before beginning a slow decline starting in the early 1980s. Outside of SSA, fertility was cut in half between 1960 and 2000, falling by over 3 births as compared to roughly 1 in SSA. Dependency ratios began to fall sharply outside of SSA by the early 1970s, while in SSA they continued to rise until the early 1990s. Dependency ratios did begin to fall in SSA during the 1990s, however. Progress in containing HIV/AIDS can help secure a major demographic dividend from Africa's entry into the final stage of the demographic transition.

Collier *et al.* (2006) use the ‘opportunities and choices’ framework to develop an integrated analysis of opportunity-specific growth strategies and the political or institutional choices required to implement them. We focus here on a few highlights.

Resource-rich countries face the simplest challenge, if not the easiest. Their task is to spend public money effectively. Political democracy can contribute to this end, but

the evidence suggests a sharp distinction between two of the leading attributes of democracy, public scrutiny and electoral accountability. Under conditions of low income and ethnic diversity, electoral accountability provides little bulwark against the misuse of commodity rents. Public scrutiny, in contrast, is essential to the successful management of resource rents. This can be supplied via a free press, quasi-independent mechanisms of project evaluation, and other mechanisms for enhancing the transparency of public management.

Coastal and resource-scarce countries have the Asian model to emulate; their task is to create an effective platform for export diversification. Maintaining syndrome-free status will provide a critical enabling environment for private investment in new activities. But success in bringing costs down to world levels may also require a 'big push' approach to improvements in infrastructure and public services, with individual infrastructure projects evaluated in light of an overall strategy of export promotion. Meanwhile the costs of late arrival imply that establishing a foothold in industrial-country markets is almost certainly more difficult now than it would have been in the early 1980s, due to the agglomeration benefits that have accrued to successful Asian exporters into these markets. Collier *et al.* (2006) argue that temporary trade preferences can help address this situation, but only if existing frameworks (Europe's Everything but Arms initiative and the Africa Growth and Opportunity Act in the USA) are extended to middle-income African countries and modified to adopt looser rules of origin (both), wider participation criteria (Everything but Arms) and longer horizons (AGOA).

The landlocked and resource-scarce countries pose the deepest structural challenges. One reason is that they depend on their coastal neighbors for local export

markets and for transport access to world markets. This gives these countries an intense interest both in the overall prosperity of their coastal neighbors and in the quality of their transport infrastructure. As Collier *et al.* (2006) point out, the relationship is largely a non-reciprocal one: holding security aside, Kenya's governance environment (and its transport network) matters more for Uganda than Uganda's does for Kenya. This makes the landlocked group a natural lobby for regional integration initiatives in both the transport and trade arenas. Regional customs unions should be outward-oriented and, crucially, not bound by their own internal rules of origin, if they are to serve the interests of the landlocked countries. They should seek low external tariffs so as to avoid the costly diversion of import trade from low-cost global suppliers to highly protected coastal industries.

The landlocked and resource-scarce group differs from the others, however, in lacking a single dominant strategy for moving to middle-income status. Particularly where coastal labor markets do not offer reliable and remunerative options for temporary labor exports, foreign aid will be critical in raising agricultural productivity and building the infrastructure and human resource base for diversification into nontraditional export areas. Collier *et al.* (2006) emphasize that landlocked countries do not need to be air-locked and e-locked: high-quality airport and telecommunications services may allow these countries to exploit seasonal, time-of-day, and language advantages in delivering agricultural and e-service exports to industrial-country markets. Large aid flows have a critical ongoing role to play in these countries given their narrow resource base and high cost of development; this places a high premium on institutional innovations that increase absorptive capacity by integrating donor financing into the domestic budgetary process.

## 5. The country studies

We turn briefly now to some highlights of the country studies, focusing on the political economy of policy and the interactions between geography and governance.<sup>17</sup> Further references to the country evidence appear throughout the synthesis volume. In chapter 3 of volume 1, Fosu draws on the country studies to provide extended illustrations of the policy syndromes.

### *Landlocked and resource-scarce economies*

Of the three opportunity groups, the landlocked and resource-scarce group is the least thoroughly studied in the economics literature. The work of Jeffrey Sachs and co-authors have brought to prominence the unusually high cost of development in this group, a phenomenon illustrated most dramatically in our case studies by the Sahelian economies Burkina Faso, Chad, Mali and Niger (Gallup and Sachs 1999 and Faye, McArthur, Sachs and Snow, 2004). The most striking feature of the landlocked group, however, is its exposure to fundamental weaknesses in governance. The incidence of state breakdown is double that of other opportunity groups, and in many cases the patterns of ethno-regional polarization emphasized by Azam (1995, 2006) play a central role. Growth takes place 'in the shadow of conflict' with incumbent regimes choosing a mixture of repression and redistributive transfers to suppress or buy off opposition. Enlightened leaders seek ways

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<sup>17</sup> Table 1 contains a list of countries and authors.

of investing in national public goods, but a temporarily stable equilibrium may be destroyed by economic shocks, outside intervention, or irregular political succession. The investment environment reflects not just the current settings of policy and the relative weakness of growth opportunities, but also the high *ex ante* risk of conflict and policy reversals.

The forces of geographical opportunity and governance may be mutually reinforcing within the landlocked and resource-scarce group. Remoteness and resource scarcity reduce income, which in turn lowers the opportunity cost of violence and distributional conflict relative to that of production (Hirshleifer 1994). The security environment disarms institutions of restraint and favors the emergence of autocratic leaders. The ability of these leaders to reconcile growth with the retention of political power then drives the growth process – favorably in few cases, like Uganda under Museveni and (arguably) Malawi under Hastings Banda, but more often unfavorably. In the latter cases a narrow political elite chooses private accumulation over the provision of public goods, including costly initiatives capable of addressing geographical constraints; and the circle is complete.

The geography/governance trap is most acute under conditions of *ex ante* ethno-regional polarization. Burundi, Chad, The Sudan, Uganda and Ethiopia provide potent illustrations. In **Burundi**, Belgian colonial policy created a social hierarchy based on perceived ethnicity, with political authority and human capital investment concentrated in the minority Tutsi tribe. The promise of national reconciliation disappeared with the assassination of Burundi's founding leader in 1962 and the accession to power of the Bururi Tutsi faction in 1966. As documented in detail by Nkurunziza and Ngaruko, a

succession of military dictators deployed the instruments of policy and state patronage to repress opposition by the majority and concentrate the 'rents to sovereignty' in the Bururi region. Adam and O'Connell (1999) relate the severity of policy distortions to the narrowness of the ruling elite and the discount rate they apply to future benefits; in the case of Burundi, the patent unsustainability of minority domination generated spectacular distortions of public employment and investment.

**Chad** illustrates a pattern of regional conflict recognized by Arab historian Ibn Khaldun in the 14<sup>th</sup> century and reproduced throughout West and Central Africa. As outlined by Azam and Njimtoinigar, colonial policies reinforced existing tensions between a low-income, pastoral Northern society and a sedentary "useful Chad" (*Chad utile*) in the South characterized by higher levels of productivity and human capital. In the absence of a credible power-sharing arrangement, regional animosities erupted into open civil war twice during the post-independence period. The accession of Idriss Déby to power in the 1990s finally initiated a period of stable rule by the South, in a bargain analyzed in general terms by Azam (2006); the North's interests were guaranteed through the incumbency of a Northern rebel leader as Vice President. The arrangement provided the basis for foreign investment to exploit oil reserves in the South, whose existence had been known since the 1950s. Exploitation of these reserves enhanced growth opportunities but also raised new issues of political coexistence and economic management, as indicated by the experience of resource-rich countries.

In **The Sudan**, the reluctance of the Black and largely Christian/Animist South to submit to political control by the Arab and Muslim North created a state of civil war from the earliest days of independence. By contrast with Chad and some other regionally

polarized countries, Ali and Elbadawi emphasize the highly factionalized nature of Northern rule through much of the post-independence period, a feature that lent a short-term and opportunistic bias to economic policy against a background of consistent Northern domination. Discovery of oil reserves in the South of the country led the North to abrogate a 1972 power-sharing accord that had initiated a period of relative peace and stability. Growth in the late 1990s was based almost solely on oil. Armed conflicts continued in the South and West of the country, reflecting a Northern policy of repressing Southern demands for political and economic autonomy.

Consistent with its analytically landlocked status, temporary labor exports (mainly to Gulf states) have constituted an important source of foreign exchange earnings for the Sudan since the 1970s. The destination of labor remittances provides a sensitive barometer of the policy environment. Ali and Elbadawi document the diversion of remittances into the black market during periods of exchange rate misalignment and their retention abroad, as capital flight, during periods of political instability.

In **Ethiopia**, a revolutionary Marxist regime (the DERG) displaced the slowly modernizing Imperial regime in 1974 and implemented a broad program of state controls. While the attendant market distortions undermined the efficiency of resource allocation, Ethiopia's deep institutional history – with the church, military and civil service all operating at national scale since at least the 18<sup>th</sup> century, and without significant interruption by European colonial powers – provides the background for some striking continuities of policy. Geda cites the maintenance of macroeconomic discipline across widely divergent regimes, as well as the willingness of subsequent regimes to restore the

autonomy of successful state enterprises (like Ethiopian airlines) after initially subjecting these to tight political control.

Ethiopia was of course not politically landlocked for most of the post-1960 period, the result of a 1951 United Nations arrangement that federated Ethiopia with coastal Eritrea, in part to guarantee the former's access to the sea.<sup>18</sup> But although successive Ethiopian governments pushed for full union, this was actively contested by Eritrean forces during a three-decade war that ended with the union's peaceful dissolution in 1993.

**Uganda**, finally, illustrates the growth potential of landlocked countries in the wake of state breakdown. By prioritizing core functions and learning from early policy mistakes, the Museveni government initiated a cumulative process that encouraged the re-deployment of labor and capital to productive activities while creating a cumulatively decisive improvement in the investment environment. Kasekende and Ego document the key features of the Ugandan package, including the establishment of security, the stabilization of high inflation, and the removal of punitive export taxes. An essential feature of the Ugandan experience was the restoration of critical agencies of restraint within the public sector, including the Ministry of Finance, Planning and Economic Development and the Central Bank.

**Burkina Faso**, Chad, **Mali** and **Niger** illustrate the high cost of development in the landlocked economics of the Sahel. Growth is volatile, highly sensitive to fluctuations in rainfall (reflecting the sparsity of irrigation networks) and to the world prices of export

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<sup>18</sup> The Sudan is not politically landlocked either; as discussed earlier we include it here to reflect the realities of a largely interior population.

commodities, particularly cotton and, in Niger, groundnuts. Transport costs to global markets are extremely high, with a large proportion representing the overland costs of transit through coastal neighbors. Burkina Faso's tenuous political status before independence – the country was shared out (as Upper Volta) between neighboring countries before being reconstituted as a separate state – illustrates the financial and political appeal of integrating these weak economies with stronger neighbors. The opposite, of course, happened at independence: the economic zones of French West Africa broke apart and the costs of isolation rose sharply as each state imposed its own structure of taxes and duties. The disintegration of regional markets was reproduced throughout landlocked Africa, with the exception of a few small states that remained tightly integrated with South Africa.<sup>19</sup> Labor exports to more favorable coastal economies continued to generate remittance incomes for the landlocked economies – Savadogo, Coulibaly and McCracken report that some 400,000 Burkinabe worked in the Ghanaian and Ivorian plantations at independence, out of a total population of 3.6 million – but outside of Southern Africa these arrangements proved unreliable, subject to economic contraction and populist repudiation in the host economies.

**Malawi** emerges as a high growth performer after benchmarking for the adverse opportunities of the landlocked and resource-scarce group and the added isolation enforced by the destruction of transport lines through Mozambique during the early

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<sup>19</sup> Botswana, Lesotho, Swaziland and later Namibia retained their membership in the Southern African Customs Union. The policy-driven fragmentation of regional trade markets is well documented and survived many attempts at regional integration; see Oyejide, Elbadawi and Collier (1999). Examples include the breakup of the East Africa Community in 1977, which further isolated Uganda, and the 1963 dissolution of the Federation of Rhodesia and Nyasaland as Zambia and Malawi came to independence.

1980s. We stress two reasons for this. One is that governance was relatively good – among the landlocked and resource-scarce countries only Malawi, Lesotho and Swaziland maintained syndrome-free status throughout the entire post-independence period. As noted by Chipeta and Mkandawire, President Banda built a political base in export agriculture, drawing members of Parliament and other high government officials into the profitable estate tobacco sector. Second, Malawi's relative success illustrates the influence of coastal neighbors on the character of growth opportunities among landlocked and resource-scarce countries. Here the contrast with Burkina Faso is instructive. Both have benefited from remittance incomes generated by temporary labor migration to coastal neighbors. But Ghana's economy contracted sharply during the 1970s and early 1980s, as did Cote d'Ivoire's for the entire period from 1979 to 1994. By comparison although South African economy stagnated starting in the mid-1970s, that economy nonetheless continued to represent a major regional market for the landlocked states of Southern Africa as well as a high-quality transport option for trade with industrial-country markets. Banda's willingness to continue political and economic relations with the *apartheid* regime generated major benefits including investments in infrastructure, access to the talents of skilled technicians, and continued access to the richest market in SSA.

Burkina Faso and Niger illustrate the endogeneity of vested interests and the influence of these interests on the political and economic reforms that swept the continent between the late 1980s and mid-1990s. Burkina Faso's democratic transition in 1991 came virtually simultaneously with the government's acceptance of structural adjustment reforms. Both followed nearly two decades of acute policy and political instability,

including a brief period of hard economic controls under the agrarian populist military regime of Thomas Sankara. Urban groups had played a supporting role in the removal of corrupt governments by military coup, but neither they nor rural constituency Sankara sought to create exerted serious pressures on the course of policy after the mid-1980s. Structural adjustment reforms therefore confronted few vested interests. The second half of the decade witnessed an unprecedented combination of modest economic growth and political stability. Niger's period of political stability, in contrast, came earlier. As described by Mamadou and Yakoubou, governments used groundnut and then uranium revenues to create alliances with traditional chiefs and buy the support of key interest groups, via free education and guaranteed public-sector employment to secondary-school graduates. Political liberalization occurred as the end of the uranium boom erased the revenue base on which the government had maintained its core functions and satisfied key interests. The 1990s were a decade of state breakdown punctuated by permanent strikes, violent political demonstrations, military coups, and regional rebellions.

#### *Coastal and resource-scarce economies*

By global standards, Africa's coastal and resource-scarce economies suffered the largest gap between opportunities and performance (Collier and O'Connell 2006). **Mauritius** is the only consistent high performer in the group, and the trajectory of this country is instructive. In 1960, future Nobel laureate James Meade submitted a major report to the British colonial government of Mauritius, advocating a turn to import-substituting industrialization. The existing sugar monoculture, he warned, was incapable of

forestalling growing unemployment and social unrest in the face of rapid population growth. Nor did the country's resource endowment favor diversification within agriculture. Meade also rejected a labor-intensive manufactured export drive, citing human capital requirements and the difficulty of securing the inter-ethnic cooperation that would be necessary to integrate sectors typically occupied by different races (Meade 1961). Meade's advice carried the day, and the government implemented a classic import-substitution program that combined sugar taxes with high import tariffs. The outlines of this program were meanwhile being implemented throughout independent Africa, reflecting the post-war sympathy for state intervention, the influence of Fabian socialist ideology on Africa's founding political leaders, prevailing concepts of the agricultural 'surplus' that could be leveraged in favor of industrialization, and in some cases the political salience of urban as opposed to rural political interests (Ndulu 2006, Bates 2006).

Import substitution failed to create significant employment or growth in Mauritius, and in the midst of a renewed employment crisis following independence in 1968, the ruling Labor Party adopted a two-track policy of export promotion. At center stage was the construction of an Asian-style platform for labor-intensive textile exports, an effort supported by massive investment in education throughout the 1970s and 1980s, generous subsidies and duty-free imports for firms operating in the export-processing zone, low minimum wages for women, the maintenance of a competitive exchange rate, and preferential access to industrial-country textile markets. Meanwhile the government joined the Yaounde Convention in 1972, which provided large rents on sugar exports to

Europe; and it continued to selectively protect firms producing for the domestic market. Nath and Madhoo describe the strategy as one of shared growth.

The half-life of import-substituting industrialization was much longer in the rest of coastal Africa, where it became tied up with the nationalization of industry and with macroeconomic imbalances and exchange rate overvaluation. Ghana, Tanzania and Senegal implemented socialist regimes in the 1960s and retained tight economic controls through the mid 1980s. In Kenya and Cote d'Ivoire policy was initially favorable to export agriculture, but sought also to expand the manufacturing sector through import protection; the period of export promotion did not survive the 1970s, falling prey in Cote d'Ivoire to debt problems and exchange rate overvaluation and in Kenya to a political succession that disenfranchised dynamic interests in the export sector. Only in Cote d'Ivoire did the import-substituting path show even temporary promise as a component of growth strategy, but as in Tanzania and Kenya its viability had eroded by the mid-1970s, to be prolonged only temporarily by the tropical beverages boom of 1976-77.

Outside of Mauritius, inward-looking development strategy was displaced by attrition rather than by a decisive adoption of outward orientation. The case evidence suggests that in contrast to Mauritius, the instruments of protection and control in the bulk of coastal Africa facilitated powerful and ultimately relatively narrow combinations of interest between governments and protected entities in the private and state enterprise sectors. The interests most damaged by these regimes – in the agricultural sector and in potential areas of export development – had little recourse within a domestic political sphere that had narrowed sharply during the 1970s: Ndulu and O'Connell (2006) document the replacement of multi-party systems with one-party states throughout

coastal Africa. Commitments to export promotion remained superficial, and trade liberalization was frequently reversed (Oyejide *et al.*, 1999). Exchange controls were dismantled outside of the CFA Zone during the 1980s, removing a substantial barrier to export diversification, but within the CFA countries devaluation was postponed until 1994. Only in the mid- 1990s – in the wake of democratization and two decades after Mauritius made its decisive move to export promotion – could it be said that liberalizing reforms had begun to acquire an irreversible momentum in parts of coastal Africa. Collier and O'Connell (2006) show that the duration of syndrome-free status after 1980 is a powerful predictor of export diversification into manufactures and services.

**Kenya's** favorable coastal opportunities were dogged from the outset by a tribally-based politics that concentrated power in the executive and converted the state sector into a instrument of patronage and exclusion. The promotion of nontraditional exports was never supported politically; under President Kenyatta, policy favored incumbent Kikuyu interests in export agriculture and in a pattern reminiscent of Malawi under Hastings Banda, sought to enfranchise these interests both in the state enterprise sector and in the civil service. His successor, Daniel arap Moi, represented lower-income interests in the food crop sector, and as documented by Mwega and Ndung'u, turned increasingly against export agriculture in the early 1980s. Both leaders maintained an accommodation with politically excluded Kenyans of Indian descent, who dominated international trade but had neither the leverage nor the interest to champion the creation of an effective platform for manufactured exports – a process that could upset a tenuous and reasonably lucrative political equilibrium.

Despite its initial advantages in human capital formation – **Senegal** was the administrative center of French West Africa – and its broad maintenance of democratic institutions, Senegal remained a poorly-diversified groundnut economy through much of the period, suffering the Sahel drought starting in the late 1970s, the oil shocks of the 1970s, and the cumulative effects of CFA franc overvaluation between 1985 and 1994. Ndiaye describes a social structure that gave substantial influence to local Islamic religious leaders as intermediaries between the Dakar government and its rural constituencies; this structure helped to underpin political stability but may also have slowed the economy's diversification into nontraditional exports. The economy was characterized by soft controls through the early 1990s and turned to market-based reforms and outward orientation only with CFA devaluation of 1994.

**Ghana's** trajectory was established early on by President Nkrumah's pointed rejection of the advice of W. Arthur Lewis, who wrote in 1953 that

“The main obstacle to development [in the Gold Coast] is the fact that agricultural productivity per man is stagnant. Very many years will have elapsed before it becomes economical for the government to transfer any large part of its resources towards industrialization and away from the more urgent priorities of agricultural productivity and public services.” (Lewis 1953, paragraph 255, reprinted in Kay 1972, p. 88).

Nkrumah's strategy, by contrast, embraced rapid industrialization and the promotion of a state-run agriculture. His removal by coup in 1966 initiated a period of

political instability, continued economic controls, and policy disarray that lasted nearly two decades. As in Tanzania, Mozambique, and other countries that sought to repudiate market prices as a means for resource allocation, price controls and public marketing agencies ultimately lost their traction as instruments of resource allocation and revenue: by the early 1980s two-thirds of Ghana's cocoa crop was being smuggled to neighboring Cote d'Ivoire. Controls were abandoned by the Rawlings government in the early 1980s; this occurred in the depths of a macroeconomic crisis as the leverage of experience and donor financing finally overwhelmed urban interests that had been weakened by attrition.

*Ex post*, Ghana's policy reversal was decisive and the transformation of its growth experience was remarkable. After 1984 the average annual growth rate of real GDP per capita rose by 2.9 percent and perhaps more revealingly, its standard deviation fell by nearly 90 percent. As Aryeetey and Fosu point out, however, the private investment response to reforms remained very weak at least through the mid-1990s. This is consistent with the tenuous credibility of reforms, against a background of policy instability and perhaps Rawlings' own continued ambiguity regarding their status (Aryeetey 1994). Ghana's experience poses a central issue of growth strategy in coastal Africa: having achieved two decades of political and policy stability, what further steps are required to build an export platform that will attract high levels of investment, including the reentry of flight capital and of professional Ghanaians abroad?

**Cote d'Ivoire** presents a remarkable picture of sustained rapid growth until 1979 followed by equally sustained and rapid decline. The death of founding President Houphouet-Boigny in 1995 set off a succession crisis, ending a long period of political stability and initiating a period of armed rebellion in the North and state breakdown. As

documented by Benie, however, Houghouet's death was preceded by a long period of exchange rate overvaluation, fiscal crisis, and economic decline. The seeds of decline had been sown in Houghouet's turn towards import-substituting industrialization in the early 1970s and his use of commercial borrowing to finance patronage projects and ride out the oil shocks.

Interpretation of the Houghouet era remains contentious. Azam (2006) regards Houghouet as a master of high economic statesmanship, for his inclusion of the low-income North in a national system of state patronage. Against a counterfactual of civil war, 'mere' long-run stagnation may constitute a victory of sorts, and the preservation of political stability during 15 years of outright decline (1980-94) speaks of first-order political skills. But the succession crisis and renewed decline in the late 1990s suggests a much less favorable bargain over the four decades of Houghouet's rule, one in which regional identities were appeased but not disarmed and Houghouet's guarantee was never institutionalized.

**Tanzania** illustrates a misfit between ideology and opportunity that was particularly corrosive among Africa's coastal countries, where it undermined the core elements of a pro-growth strategy even where leaders displayed high personal character and commanded broad popular support. President Nyerere sought early on to free Tanzania from Kenyan domination in the East African community and from a dependence on foreign capital and markets. He established a separate currency soon after independence and nationalized the 'commanding heights' of the economy in the Arusha Declaration of 1967. The public sector grew rapidly, subsisting on foreign aid and the coffee boom of 1976-77, while in agriculture Nyerere sought to control both exports and

domestic distribution via price controls and mandatory sales to government marketing boards. As documented by Mwase and Ndulu, a combination of shocks in the late 1970s – including the second OPEC oil price increase and a costly war with the Idi Amin regime in Uganda – revealed the unsustainability of the system. The government responded to balance of payments crisis by tightening its exchange control regime, rationing consumer goods, and running a public-relations campaign against ‘economic saboteurs’ operating in the black market. Output collapsed, with producers starved of imported intermediates in the manufacturing sector and driven into subsistence activity and smuggling in agriculture. To his credit, Nyerere sponsored a protracted domestic debate on exchange rate policy in the early 1980s – a debate won by technocrats whose victory was sealed by Nyerere’s resignation in 1985 and the country’s acceptance of structural adjustment reforms including a maxi-devaluation. Trade and financial reforms and the privatization of state enterprises dominated the subsequent decade, proceeding at a halting but resolute pace and becoming irreversible with the introduction of multi-party elections in 1995.

Nyerere’s more lasting legacy may be Tanzania’s long-standing political stability. Comparing Tanzania with Kenya, Miguel (2004) argues that Nyerere’s deeper commitment to nation-building – expressed in a wide variety of ways, including the adoption of Swahili as the language of primary education and government – succeeded over time in subordinating sub-national identities to national ones, creating a durable social capital that supported higher levels of public goods provision both at the local level and nationally.

**Mozambique's** trajectory was dominated by state controls and conflict following an abrupt transition to independence in the wake of the Portuguese Revolution of 1974. The Marxist-Leninist regime rapidly nationalized industry and adopted widespread economic controls, in a pattern consistent with the coercive practices of Portuguese colonialism but ideologically grounded (as in Tanzania) in a repudiation of markets and private accumulation. President Machel's hard line against the apartheid regime in South Africa ran in sharp contrast to the pragmatically accommodating stances of both Malawi and Botswana, and as Sulemane and de Sousa observe, it cost the country dearly: transport services and labor exports had been major sources of export revenues, and South Africa cut off its imports of both in retaliation for the country's support of the ANC. As the civil war spread in the early 1980s, South-African supported rebels destroyed the major transport lines through Mozambique, further disabling the service economy. By the early 1980s, officially-marketed agricultural output had nearly disappeared and consumer goods were rationed in urban areas, amid widespread black market activity. Economic crisis drove the country to join the Bretton Woods institutions in 1984 and to adopt structural adjustment reforms starting in 1987. Growth awaited the resolution of conflict, which came in 1992, followed in quick succession by democratic elections and major aid inflows.

Among the coastal and resource-poor economies, **Togo's** phosphate resources have given rise to features mainly associated with resource-rich countries. Policy in the 1960s initially followed the conservative and market-oriented principles of the French colonial regime, reflecting the business background of founding President Olympio. Olympio nonetheless sought to assert the country's independence from French influence;

he was replaced in 1963 in SSA's first military coup, widely thought to have been supported by the French government. Popular dissatisfaction produced a second coup in 1967, installing the Northerner Edayema and setting the country on a course of increasingly predatory and repressive autocracy through the end of the century. The phosphate boom of 1973 played a crucial transitional role by financing a rapid expansion of the state enterprise sector and the introduction of widespread economic controls. Gogue documents the concentration of state benefits in favor of the Kabye, an ethnic minority, and the systems of repression employed by Edayema to retain power in the face of popular democratic movements in the 1990s.

**Benin's** growth opportunities have been influenced by its position as a transit point for landlocked countries like Burkina Faso and Niger, but even more so by its long and porous border with Nigeria. Much of Nigeria's trade with coastal West Africa passes through Benin, and for a substantial portion of the 1960-2000 period the port of Conotou provided a major transit point for Nigeria's global trade, both on the export side – Dossou and Sinzogan note that smuggled cocoa amounting to nearly 30 percent of Benin's exports in the early 1970s – and as oil-based spending drove up effective protection rates in Nigeria's import-substituting regime, on the import side. Re-exports of foodstuffs and restricted consumer goods to Nigeria played such a central role during the 1970s and 1980s that Benin's Marxist-Leninist regime (1972-89) not only invested heavily in overland transport between Conotou and the Nigerian border, but also targeted a relatively open tariff regime that would satisfy revenue needs while preserving a strong price differential in favor of the re-export trade. Nigeria's progressive economic liberalization, starting in 1994 and affecting trade incentives both directly, via reduced

effective protection rates, and indirectly, via exchange rate unification and a substantial real depreciation of the naira constituted a major adverse shock to Benin's service sector and its public revenue base early in that country's democratic transition.

### *Resource-rich economies*

While there is nothing inevitable about the 'natural resource curse' – witness Botswana, for decades the fastest-growing economy in the world – the global evidence suggests that resource wealth often induces economic mismanagement. The political economy literature points to two important channels.<sup>20</sup> First, the property rights over resource wealth are worth fighting for. Where resource wealth is geographically concentrated, the contest over its control may raise fundamental issues of sovereignty, pitting regions against one another in a struggle for control of the national government. Secondly, as emphasized by Collier and Gunning (2006), resource rents are an attractive source of revenue for non-representative regimes, absolving them from the need to provide effective public services in return for tax revenues. In effect, resource rents release the government from domestic scrutiny of how it spends its money.

The existence or emergence of large resource rents therefore tends to exacerbate the very institutional weaknesses that must be overcome if rents are to be deployed in the service of economic growth. There is a partial analogy with foreign aid, the resource component of which has similar effects on domestic scrutiny. But aid comes with outside scrutiny by donors and it may be denied outright to a government that acquires

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<sup>20</sup> The 'Dutch disease', mentioned earlier, is a third.

sovereignty illegitimately; these differences are critical to its broadly more favorable growth impact. For the resource-rich economies, of course, commodity rents undermine the scope for external as well domestic scrutiny, by reducing the need for aid. The latter point is apparent in Figure 5, where we use our time-invariant classification to track the main components of import capacity for resource-rich countries and a composite of all others (resource-scarce landlocked and coastal countries), over the 1960-2000 period.<sup>21</sup> Per-capita aid levels are very similar for the resource-rich and non-resource-rich groups in Africa, but by comparison with real exports and the income effect of the terms of trade they are much smaller among the resource-rich countries than the non-resource-rich countries.

Africa's resource-rich economies have grown more slowly than their global counterparts both on an unweighted and on a population-weighted basis (Collier and O'Connell 2006). Figure 5 suggests that commodity price shocks were less favorable for this group, on average, than for its non-African counterparts: terms of trade increases were less dramatic during the 1960s and 1970s, while the cumulative collapse following the late 1970s was comparable in magnitude. But the larger story is in real exports per capita, which rise sharply during the 1960s and 1970s as these economies acquire resource-rich status. Exports then stagnate in real terms through the remainder of the century, suggesting a set of economies subsisting on natural resource exports and undergoing very little structural transformation.

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<sup>21</sup> Commercial borrowing is an important omitted further source of import financing for the non-African sample. In the SSA case, only a few countries including Cote d'Ivoire and Nigeria,

Collier and O'Connell (2006) argue in the synthesis volume that the relative under-performance of Africa's resource-rich economies is associated with the combination of ethnic diversity and political autocracy that characterized these economies during much of the 1960-2000 period. Global evidence implies that this combination is particularly damaging to long-run growth (Collier 2000, Alesina and La Ferrara 2004). Theory relates this observation to the choice between providing public goods and making transfers to special interests: autocracy removes constraints on the use of policy instruments, while ethnic diversity increases the likelihood that the government in power will serve narrow interests. The geography of opportunity is at work here at a deep level; Collier and Hoeffler (2005) find that autocracy is significantly more likely to emerge when resource rents are large than when they are not. These observations suggest a geography-governance trap similar to the one we analyzed among the landlocked and resource-scarce countries.

From this perspective, the democratization of African resource-rich governments during the 1990s is a highly favorable development for growth prospects on the continent and may explain the absence of unsustainable spending episodes among these countries after 1990. Collier and others (chapters 1 and 11 of volume 1) argue that it is public scrutiny rather than electoral accountability *per se* that promotes this effect; the global evidence suggests that electoral accountability alone, in a context of resource wealth, can give rise to populist pressures that undermine resource management.

At independence **Nigeria** was a promising coastal economy with a well-developed export agriculture. It experienced two oil booms in the 1970s. During the first boom the technocrats who controlled economic policy under the military government

were committed to import-substituting industrialization. Accordingly oil wealth was used for investment in large-scale industrial projects, including a massively expensive steel mill which never produced steel. In effect, the oil boom financed a policy experiment, in one of the few cases of public spending driven by a technocratic economic vision rather than by the self-interest of the regime. During the second oil boom, presided over by a civilian government, public investment continued but now more as a source of rents than as an import-substituting policy strategy. Government consumption, financed by external borrowing, rose massively. The ruling clique was well aware that its spending was unsustainable; Collier and Gunning (1999b) argue that the prevailing competitive patronage politics drove those with power into rampant embezzlement. Devaluation and other adjustment measures were postponed for so long that the shock of structural adjustment became associated not with the unsustainable policies that had produced the need for adjustment, but with structural adjustment itself. Unsustainable spending therefore left a costly legacy, in the form of a widely shared hostility towards economic liberalization. Economic reforms were successful against a reasonable counterfactual, but they were not perceived as such: living standards fell rapidly, in the face of falling oil prices and debt repayment. In this sense Nigeria's case is similar to that of Zambia: there too liberalization was greatly hampered by the legacy of the past. Nigeria serves as a spectacular example of the damage resource wealth can do in the absence of institutions for screening government spending proposals, including parliamentary scrutiny.<sup>22</sup>

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<sup>22</sup> We argued above that electoral accountability provides little guarantee against natural resource mismanagement in the absence of scrutiny. Consistent with this argument, the democratically-elected Shagari regime (1979-83) presided over what Collier and Gunning (2006) characterize as Africa's single biggest missed growth opportunity of the post-independence period.

At a deeper level Nigeria illustrates the challenges of natural resource management under conditions of *ex ante* ethno-regional polarization. As emphasized by Iyoha and Oriakhi, Nigeria rushed to independence as an uneasy federation of a militarily powerful but economically weak interior (the North) and two smaller coastal regions each home to a dominant ethnic group. Oil hardened regional political identities, replacing the North's development agenda with one of continued political domination and placing issues of revenue allocation at the center of political competition.

The case of the **Republic of Congo** is somewhat similar. As in Nigeria the oil boom had the effect of relaxing a borrowing constraint. As documented by Tsassa and Yamb, the government responded with substantial and unsustainable borrowing. The proceeds were invested in a heavily regulated non-oil sector, dominated by state enterprises. The results can of course not be attributed entirely to oil wealth (which could have been used quite differently). Rather, oil wealth enabled a government intent on adopting misguided policies to do so on a truly grand scale.

**Cameroon** started oil exports in the late 1970s and initially this boom was managed remarkably well. This may well have reflected the government's interpretation of what went wrong in other countries during the oil boom of 1973-74. Spending pressures were resisted, in part by keeping the size of the windfall a secret, even to the Ministry of Finance. The Ahidjo government saved a very large fraction of its windfall income and held its savings largely in the form of foreign assets; Cameroon was one of the few oil producers to use foreign assets in this way (Collier and Gunning 1999b). However, upon repatriation these assets were poorly allocated. Kobou, Njinkeu and Fosso note that government spending was increasingly used to subsidize state enterprises

and, after 1985, to maintain cash crop prices in real terms when world prices had declined substantially. In the end oil wealth, and the borrowing it enabled, served mainly to prolong an unsustainable policy stance. At a deeper level, what outlasted Ahidjo (transition occurred in 1982) was not his personal prudence in managing resource rents but his evisceration of institutions of public scrutiny. During the 1980s public corruption emerged as a major and continuing feature of economic management in Cameroon.

In the economic history of **Guinea** the key period is that of economic decline in 1978-84, following the discovery of bauxite in 1973. This reflected a combination of policy choices – Guinea had a highly interventionist socialist regime – and bad luck, in the form of a negative oil shock and a debt servicing crisis. The government then embarked upon unsustainable redistribution, protecting the urban wage earning elite with rice subsidies and public employment guarantees and financing his through heavy taxes on peasant producers. As in Tanzania, however, peasants could shift resources from production of export crops to food crops, and Guinea was not in a position to offset the resulting fall in exports through borrowing. Dombouya and Camara document the resulting economic implosion, in which private agents retreated from the formal economy into subsistence and informal sector activities. This process ended with a military coup in 1984. The ability of peasants to survive while shifting out of export production is a limit on government power which many African regimes have failed to recognize.

In **Zambia** after independence copper wealth came to be seen as a means of financing Kaunda-type socialism. This included pan-territorial pricing, inefficient parastatals, exchange controls, and public ownership of firms. These policy choices (combined with a decline in copper prices) produced stagnation. In the 1990s Zambia

adopted economic reforms. The process proved extraordinarily difficult, as documented by Mwanawina and Mulungushi: reform started with very low copper prices, a huge public debt and an unsustainably large public sector. In addition, the legacy of pan-territorial pricing and other dirigiste interventions in the Kaunda period left the rural economy in a poor state to respond to changing price incentives. Major investments in rural roads and marketing institutions were required to reap the fruits of reform but at the time the country could not afford such investments. In these circumstances it would have been extremely difficult to grow even if macroeconomic reforms had not been mishandled, as in fact they were (leading to hyperinflation and a collapse of investment). A possible interpretation is that the government simply could not deliver what voters had come to expect, given the poor hand it had been dealt by history. As a landlocked economy with copper- and aid-induced Dutch disease, Zambia's opportunities for breaking into manufactured exports were extremely limited.

**Sierra Leone** had excellent opportunities: a coastal location plus mineral wealth and was indeed better placed than landlocked Botswana. In fact Sierra Leone became a case of state collapse in the 1990s, with rapid economic decline. What explains the difference? First, diamond wealth had strong Dutch Disease effects in Sierra Leone, killing food production to the extent that the staple had to be imported. To some extent this reflected restrictive trade policies which made much of domestic production effectively non-tradable. By contrast, no such mechanisms operated in Botswana where borders are so open (and transport costs so low) that in fact all production is tradable. Davies emphasizes a second difference rooted in technology: unlike in Botswana, diamonds in Sierra Leone are alluvial making it extremely difficult for the government to

control resource rents while at the same time making fighting for these rents relatively cheap. Finally, Sierra Leone fell under the influence of Gaddafi who attempted to export the Libyan revolution. While the last two differences may be classified as bad luck for Sierra Leone, the first difference has a clear policy implication.

In **Namibia** a legacy of very high inequality plays a continuing role in limiting investment outside of a diversified non-fuel mining sector that accounts for some 20 percent of GDP. Prior to independence in 1990, this inequality induced expectations of redistribution as apartheid was seen to be coming to an end. However, anticipated redistribution continues to characterize the post-independence period, since white settlers remain in control of much of the economy. The result is that in spite of formal protections of property rights, investors (both domestic and foreign) adopt a wait-and-see attitude, reckoning that inequality cannot be sustained at the present level and that property rights might well be violated when the inevitable change occurs.

**Botswana** started with poor opportunities but succeeded spectacularly. Superficially, this is not surprising. In our taxonomy Botswana remained syndrome free throughout the period. The government was extraordinarily careful in its responses to diamond shocks, effectively treating positive shocks as temporary and negative shocks as permanent, and it imposed rigorous cost-benefit criteria in the allocation of public investment. In both respects the difference with Nigeria is striking: Nigeria borrowed during windfalls while Botswana saved, and Nigeria invested in domestic projects extremely low returns while Botswana limited the pace of investment to its absorptive capacity. But this shifts the question: why did Botswana manage to avoid the mistakes of so many other resource rich countries? There is no single answer. Botswana's leadership

was involved in export agriculture, which limited the appeal of import-substituting industrialization, and unlike Malawi, Kenya, and Cote d'Ivoire, where founding leaders had similar political roots, Botswana foreswore even the instruments of import protection, by retaining its membership of the Southern African Customs Union. Botswana's political elite had acquired a prudent attitude towards the management of economic shocks, first from its experience with livestock and second, before diamonds emerged in the 1970s, with copper; oil producers, in contrast, had little experience with the large and transitory price movements that began in the 1970s. Third, Maipose and Matsheka stress the lack of ethno-regional polarization and the participatory and consensual nature of traditional 'Tswana leadership, features that President Khama and his successor sought to accommodate alongside the institutions of a modern democracy. Finally, Botswana's leaders demonstrated a willingness to learn from what they perceived as the policy errors of other countries, including Zambia's copper policy.

## **6. Final observations**

The decade after 1995 saw a broad revival of growth in Africa, with the median country growing at 1.3 percent in per capita terms and nearly 2 in 5 countries exceeding the developing-country median for 1960-2000 (2.3 percent). In light of experience – recall Figure 3 – the critical question is whether patterns now underway will be sustained and deepened over the long run. Here and in volume 1 we have argued that growth outcomes will be shaped by the interaction of opportunities with choices. With respect to choices, the country evidence places Africa at the cusp of a potentially epochal change. By the

mid-1990s, economic reforms had improved the growth environment across the continent, with nearly two-thirds of countries achieving syndrome-free status. Maintaining this status will open the possibility of truly rapid growth, while protecting countries from the episodal collapses that have undermined sustained progress in the past.

Economic transformation will require strong political leadership, and here too forty years of experience provide a clarity unavailable in previous decades. African leaders began to dismantle domestic agencies of restraint in the late 1960s, citing considerations of development and national unity. But in sharp contrast to experience in much of Asia, political autocracy failed to produce development in Africa. As argued in detail in volume 1, the impact of democratization goes beyond the short-run uncertainties it created starting in the late 1980s and the vigorous resistance it provoked in countries like Niger and Nigeria. By broadening the accountability of political leaders and widening the scope for public scrutiny of policy, these reforms hold the promise of supporting political programs based on national public goods rather than private or regional accumulation.

We have emphasized the importance of regional integration for Africa's landlocked economies. Within our framework of opportunities and choices, however, the scope for regional cooperation is considerably wider. Regional security cooperation is critical to containing armed conflict and limiting its spillover effects. Regional approaches are also appropriate for addressing the under-provision of agricultural research, transport infrastructure, and other cross-national public goods. The investment environment itself is subject to neighborhood effects, providing a rationale for peer review mechanisms such as those being developed by African regional organizations.

While these benefits have long been relevant, the dominant pattern since independence has been one of disintegration rather than integration. Developments in the 1990s were fundamentally favorable to deeper cooperation, including the convergence of policy regimes in favor of outward orientation and private-sector development and the emergence of Africa's largest economy, South Africa, from its long exile within the continent.

Growth opportunities are multi-faceted and country-specific, and most countries display a combination of the features we have associated with landlockedness, coastal location, and resource abundance. The salience of these features, moreover, evolves over time, in response to changes in global technology and trade. In the final decade of our 1960-2000 period, developments in information technology began to erode some of the costs of remoteness; meanwhile the development of export platforms in India and especially China heightened the comparative resource-intensity of Africa's endowment, enhancing the attractiveness of resource-based exports – with their attendant challenges – while creating tough new competition in markets for labor-intensive manufactures and services. Against this evolving background, successful national growth strategies will be those that bring the global evidence and the evidence from Africa's own experience to bear in the particular and changing circumstances of individual countries. In volume 1 we sought to inform that effort by extracting lessons of cross-cutting relevance from the country evidence. Here the country experiences speak for themselves. We commend these studies to scholars and practitioners alike, and particularly to those whose strategic choices will shape the environment for growth in the coming decades.

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**Table 1:** Countries in the Growth project

Country	Average growth in real GDP per capita, 1961-2000	Percentage share in total SSA:		Ratio of GDP per capita to SSA average, 1960	Authors of country study
		Population in 1960	GDP in 1960		
<i>Coastal opportunity group</i>					
Benin	0.63	1.03	0.82	0.74	Antonin. S. Dossou and Jean-Yves Sinzogan with Sylviane Mensah
Cote d'Ivoire	0.57	1.73	2.06	1.10	Marcel Kouadio Benie
Ghana	-0.21	3.11	1.91	0.57	Ernest Aryeetey and Augustin K. Fosu
Kenya	1.23	3.82	2.20	0.53	Francis F. Mwege and Njuguna S. Ndung'u
Mauritius	3.70	0.30	0.69	2.11	Shyam Nath and Yeti Nisha Madhoo
Mozambique	-0.38	3.42	3.96	1.07	Clara Ana de Sousa and José Sulemane
Senegal	-0.24	1.46	1.98	1.25	Mansour Ndiaye and Adama Diaw
Tanzania	1.83	4.68	1.32	0.26	Nkunde Mwase and Benno Ndulu
Togo	0.86	0.70	0.46	0.61	Tchabouré Aimé Gogué and Kodjo Evlo
<b>CO group</b>	<b>0.89*</b>	<b>20.24<sup>†</sup></b>	<b>15.39<sup>†</sup></b>	<b>0.92*</b>	
<i>Landlocked opportunity group</i>					
Burkina Faso	1.25	2.12	1.20	0.52	Kimseyinga Savadogo, Siaka Coulibaly, and Coleen McKracken
Burundi	0.20	1.35	0.51	0.35	Janvier Nkurunziza and Floribert Ngaruko
Chad	-0.72	1.40	1.22	0.80	Nadjiounoum Djimtoingar and Jean-Paul Azam
Ethiopia	0.41	10.44	4.05	0.36	Alemayehu Geda
Malawi	1.36	1.62	0.50	0.29	Chinyamata Chipeta and Mjedo Mkandawire
Mali	-0.27	1.99	1.46	0.68	Massaoly Coulibaly and Amadou Diarra
Niger	-1.65	1.46	1.74	1.11	Ousmane Samba Mamadou and Mahaman Sani Yakoubou
Sudan	0.75	5.22	3.89	0.69	Ali Abdel Gadir Ali and Ibrahim A. Elbadawi
Uganda	1.40	3.01	1.24	0.38	Louis A. Kasekende and Michael Atingi-Ego
<b>LL group</b>	<b>0.31*</b>	<b>28.61<sup>†</sup></b>	<b>15.83<sup>†</sup></b>	<b>0.58*</b>	
<i>Resource-rich opportunity group</i>					
Botswana	6.33	0.22	0.16	0.67	Gervase S. Maipose and Thalepo C. Matsheka
Cameroon	0.66	2.43	3.03	1.16	Georges Kobou, Dominique Njinkeu and Bruno Powo Fosso
Congo, Rep.	1.33	0.45	0.15	0.31	Célestin Tsassa and Benjamin Yamb
Guinea	0.02	1.44	2.92	1.88	Sékou F. Doumbouya and Fodé Camara
Namibia	0.62	0.28	0.69	2.24	Tekaligne Godana and John E. Odada

Nigeria	0.32	18.71	14.30	0.71	Milton A. Iyoha and Dickson E. Oriakhi
Sierra Leone	-1.36	1.03	0.82	0.74	Victor A. B. Davies
Zambia	-1.25	1.44	1.24	0.80	Inyambo Mwanawina and James Mulungushi
<b>RR group</b>	<b>0.83*</b>	<b>26.00<sup>†</sup></b>	<b>23.31<sup>†</sup></b>	<b>1.06*</b>	
<b>Total</b>	<b>0.67*</b>	<b>74.85<sup>†</sup></b>	<b>54.53<sup>†</sup></b>	<b>0.84*</b>	

Note: \* Average for category; <sup>†</sup>Total for category. The comparisons are vis-à-vis all 42 countries in SSA for which we have data on population and real GDP at international prices. The RR group contains all countries classified in Chapter 2 as resource-rich for more than half of the 1960-2000 period.

**Table 2.** Distribution of country/years and person/years by opportunity group (percentage of post-independence sample)

Distribution by	Coastal and resource- scarce	Landlocked and resource- scarce	Resource- Rich	Total
Country years	46.0	29.8	24.2	100
Person years	44.4	31.1	24.5	100

**Notes:** The table uses all observations for 47 African countries, from the year of independence to 2000. The opportunity-group classification is time-varying because coastal or landlocked resource-scarce countries are re-classified as resource-rich starting in the first year they exceed a set of resource-wealth thresholds (see Collier and O'Connell 2006).

**Table 3.** Frequency of syndromes by opportunity group (percentage of country/years displaying syndrome\*)

Syndrome	Coastal and resource-scarce	Landlocked and resource-scarce	Resource-Rich	Total
Regulatory	48.5	45.6	33.8	44.0
Redistributive	23.9	34.9	30.3	28.8
Intertemporal	10.0	7.9	18.5	11.5
State Breakdown	10.7	18.8	13.1	13.7
Syndrome Free	32.2	27.6	46.0	34.2

**Notes:** The opportunity group classification is time-varying (see note to Table 2). For a population-weighted version of this table, see Collier and O'Connell (2006), Table 7.

\*Column sums exceed 100% because countries can exhibit multiple syndromes in a given year.

**Table 4.** Incidence of syndromes by opportunity group, controlling for year effects

Opportunity group	Probit regressions controlling for year effects, for dependent variable:				
	Syndrome-free	Regulatory	Redistributive	Intertemporal	State Breakdown
Coastal	0.170**	0.057	-0.350***	0.127	-0.384***
Resource-Rich	0.602***	-0.356***	-0.185**	0.503***	-0.292***
N	1677	1677	1677	1677	1677
Pseudo R <sup>2</sup>	0.122	0.101	0.039	0.138	0.071
chi <sup>2</sup>	230.66	219.71	72.94	107.81	92.12
Prob>chi <sup>2</sup>	0.000	0.000	0.002	0.000	0.000
<i>Marginal impact of category on probability of syndrome:</i>					
Coastal	0.060**	0.022	-0.117***	0.018	-0.074***
Resource-Rich	0.224***	-0.137***	-0.061**	0.085***	-0.053***
<i>Significance test for equality of coastal and resource-rich coefficients:</i>					
Prob>chi <sup>2</sup>	0.000	0.000	0.046	0.000	0.366
Reject CO=RR?	Yes	Yes	Yes	Yes	No

p<.1; \*\* p<.05; \*\*\* p<.01. The dependent variable is a dummy variable for the occurrence of the syndrome. Coefficients are from probit regressions with year effects included, for 47 SSA countries for all years from independence to 2000. Collier and O'Connell 2006, Table 8, reports a similar table using all years 1960-2000 and weighting by population.

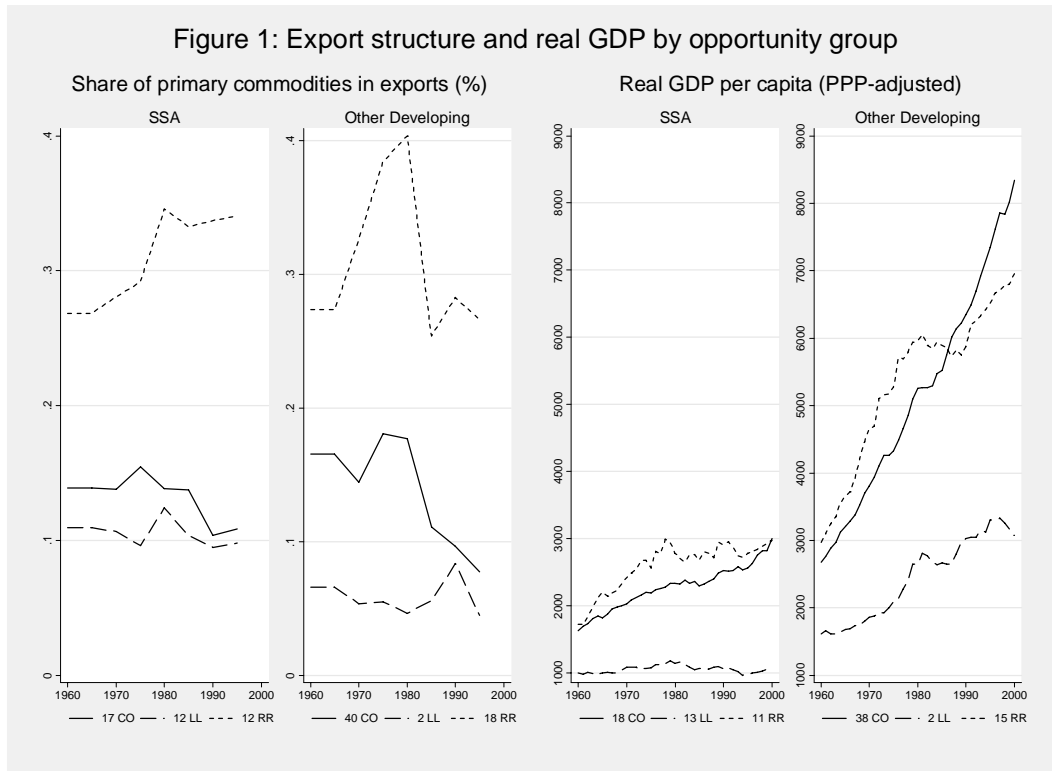
\*Coastal means coastal and resource-scarce. The omitted category is landlocked and resource-scarce.

**Table 5** Regional growth accounting decompositions (annual growth rates except where noted).

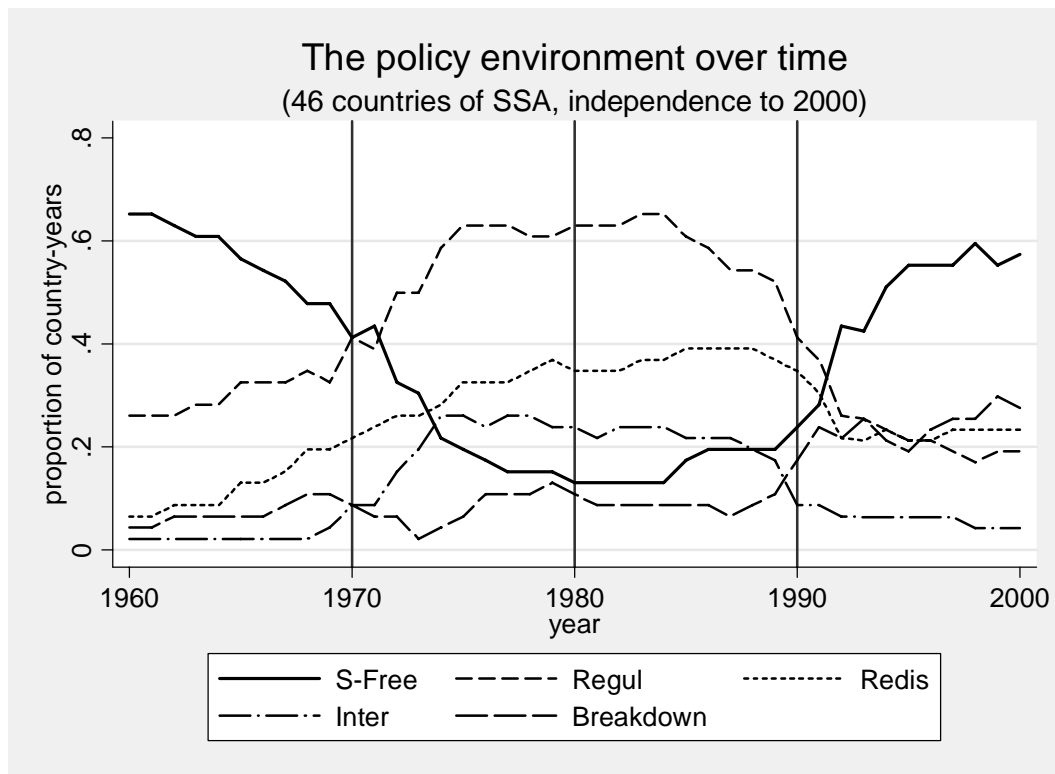
Region	N	Real GDP	Popula- tion	Real GDP per capita	Workers per capita	Contributions of:			
						Real GDP per worker	Growth in physical capital per worker	Growth in education per worker	Residual
<b>SSA</b>	<b>18</b>	<b>3.25</b>	<b>2.70</b>	<b>0.54</b>	<b>-0.07</b>	<b>0.61</b>	<b>0.36</b>	<b>0.25</b>	<b>0.00</b>
<b>Other Developing:</b>									
LAC	21	3.49	2.17	1.32	0.39	0.92	0.41	0.34	0.18
SASIA	4	4.45	2.23	2.22	-0.32	2.54	1.11	0.32	1.11
EAP	7	6.21	2.04	4.17	0.22	3.95	2.11	0.49	1.35
MENAT	9	4.84	2.19	2.65	0.13	2.52	1.19	0.44	0.90
<b>Total</b>	<b>59</b>	<b>4.01</b>	<b>2.32</b>	<b>1.68</b>	<b>0.14</b>	<b>1.54</b>	<b>0.76</b>	<b>0.34</b>	<b>0.43</b>
SSA minus Other Developing		-1.10	0.55	-1.64	-0.31	-1.33	-0.57	-0.13	-0.63

**Source:** Ndulu and O'Connell (2006). Data on real GDP per worker, population, and investment are from the Penn World Tables (PWT6.1) and are in constant PPP-adjusted dollars. The initial capital stock and the contribution of growth in education per worker contribution are from Susan Collins; see Collins and Bosworth (1996). LAC is Latin America and the Caribbean; SASIA is South Asia; EAP is East Asia and the Pacific; MENAT is Middle East, North Africa, and Turkey.

**Figure 1:** Export structure and real GDP by opportunity group



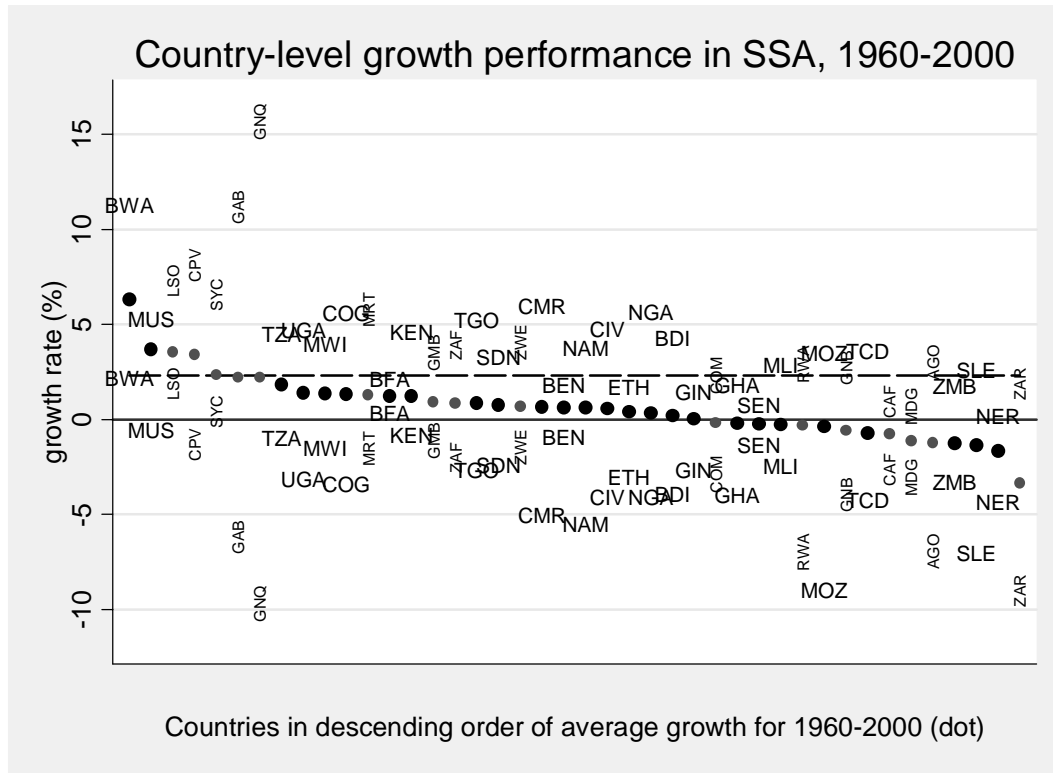
**Sources:** Share of primary commodities in exports from Collier and Hoeffler (2004). Real GDP per capita from PWT 6.1, supplemented with growth rates of constant local currency real GDP per capita from the World Bank.

**Figure 2:** The policy environment over time

**Source:** Collier and O'Connell (2006).

**Notes:** The figure shows the judgmental classification developed by the Growth project's editorial committee based on the country studies and the broader literature. Episodes are characterized as *S-Free* = Syndrome-free; *Regul* = Excessive regulatory controls; *Redis* = Inefficient redistribution; *Inter* = Unsustainable intertemporal redistribution; *Break* = State Breakdown. The full classification appears in Collier and O'Connell (2006), Table A2.

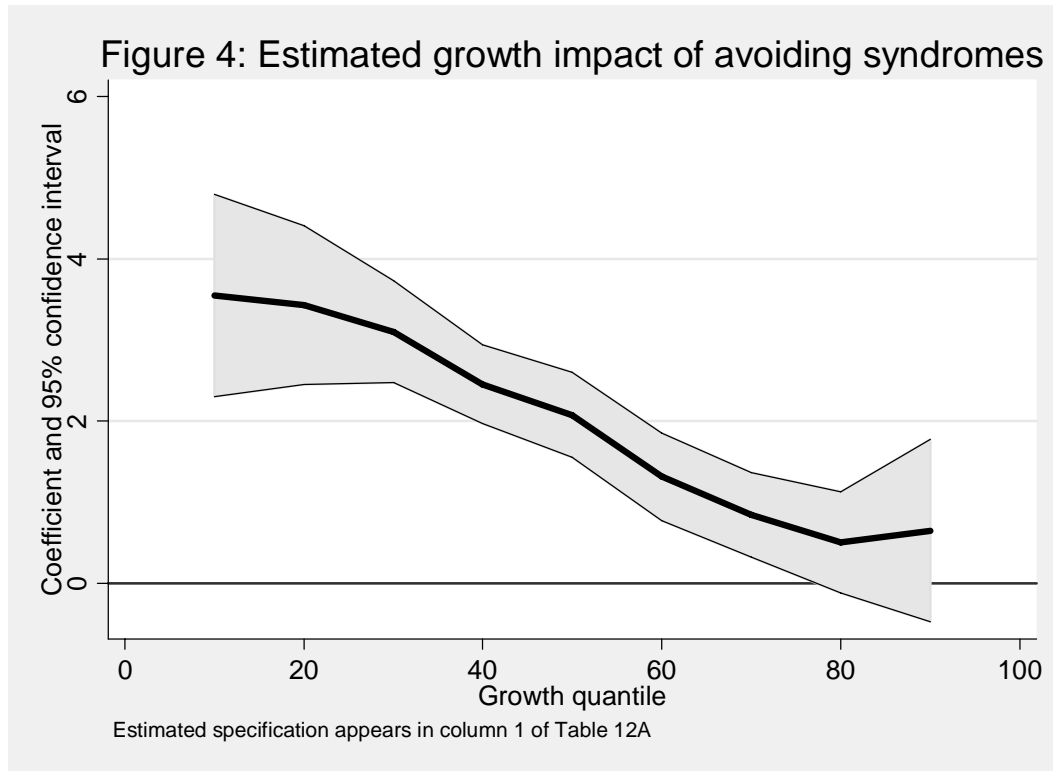
**Figure 3:** Country-level growth performance in SSA, 1960-2000



**Source:** Ndulu and O'Connell (2006).

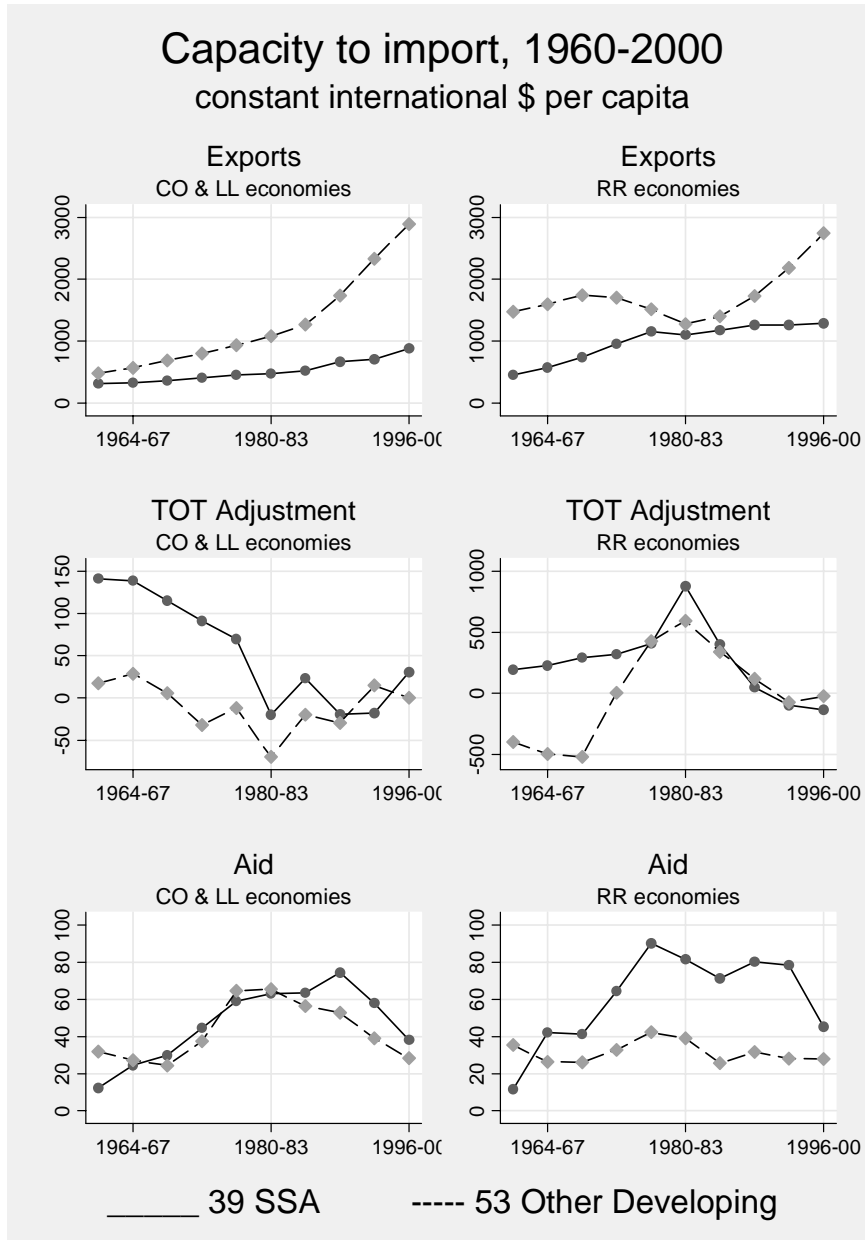
**Notes:** The figure ranks the countries of SSA from left to right, in descending order of the long-run average growth rate of real GDP per capita. Heavy dots indicate the country-specific long-run averages, and the dashed horizontal line shows the global median (2.3 percent). For each country, 3-letter labels indicate the upper and lower extremes of medium-term growth experience, measuring these as the fastest and slowest 10-year moving averages of growth over the course of the sample. Thus for example: Botswana (the left-most country) has the highest long-run growth, at above 6 percent per annum; its fastest 10-year moving average was above 11 percent and its slowest was just below the global mean. Horizontal (vertical) labels and dark (lighter) dots indicate case-study (non-case-study) countries. We exclude Somalia for lack of data and Liberia for scaling purposes (a moving average of its logarithmic growth rate from 1985 to 1995 is -25.7): Liberia's long-run growth is -3.5, slightly below that of the Democratic Republic of Congo (ZAR) at -3.3. Annual growth rates are log differences of real GDP per capita in local currency units from the World Bank, supplemented in a few cases of unavailable World Bank data, by log differences of real GDP per capita in constant international dollars from the Penn World Tables, v. 6.1. For Tanzania, we use the PWT6.1 series, but treat 1988 as a missing observation because the series shows an erroneous massive downward adjustment in that year. The resulting long-run average, with this observation excluded, is close to the average calculated using the Penn World Tables v. 5.6.

**Figure 4:** Estimated growth impact of avoiding syndromes



**Source:** Collier and O'Connell (2006).

**Figure 5:** Capacity to import by opportunity group, 1960-2000.



**Notes:** Exports and the terms of trade adjustment are in constant 1996 international dollars per capita, and are from the Penn World Tables 6.1. Aid in current dollars is from the World Bank, deflated by the USA GDP deflator.