1 Overview

Stephen A. O'Connell

1. Introduction

In 1999, the African Economic Research Consortium (AERC) 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 (SSA). 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.

The companion synthesis volume (vol. 1) distills the evidence presented here into a unified analytical account of the political economy of economic growth in SSA from 1960 to 2000.[1] I outline that synthesis below, as a guide to the cross-cutting relevance of each of the country studies. But synthesis

Swarthmore College, USA. This chapter was written with financial support from the NSF (Grant SES-0213754) and from a Swarthmore College Lang Faculty Fellowship. I draw liberally here from chapters 1, 2, and 12 of volume 1 (see n. 1). 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.

[1] Ndulu *et al.* (2007). The steering committee of the Growth Project was composed of Benno Ndulu and Stephen O'Connell (co-ordinators); Jean-Paul Azam,

Table 1.1 *Countries in the Growth Project*

Country	Average growth in real GDP *per capita* (1961–2000)	Percentage share in total SSA: Population (1960)	Percentage share in total SSA: GDP (1960)	Ratio of GDP *per capita* to SSA average (1960)	Authors of country study (chapter in vol. 2 in parentheses)
Coastal opportunity (CO) group					
Benin	0.63	1.03	0.82	0.74	Antonin S. Dossou and Jean-Yves Sinzogan, with Sylviane Mensah (22)
Côte d'Ivoire	0.57	1.73	2.06	1.10	Marcel Kouadio Benie (23)
Ghana	−0.21	3.11	1.91	0.57	Ernest Aryeetey and Augustin K. Fosu (9)
Kenya	1.23	3.82	2.20	0.53	Francis F. Mwega and Njuguna S. Ndung'u (10)
Mauritius	3.70	0.30	0.69	2.11	Shyam Nath and Yeti Nisha Madhoo (11)
Mozambique	−0.38	3.42	3.96	1.07	Clara Ana de Sousa and José Sulemane (24)
Senegal	−0.24	1.46	1.98	1.25	Mansour Ndiaye (12)
Tanzania	1.83	4.68	1.32	0.26	Nkunde Mwase and Benno Ndulu (13)
Togo	0.86	0.70	0.46	0.61	Tchabouré Aimé Gogué and Kodjo Evlo (14)
CO group	**0.89**[a]	**20.24**[b]	**15.39**[b]	**0.92**[a]	
Landlocked (LL) opportunity group					
Burkina Faso	1.25	2.12	1.20	0.52	Kimseyinga Savadogo, Siaka Coulibaly, and Coleen A. McCracken (20)
Burundi	0.20	1.35	0.51	0.35	Janvier D. Nkurunziza and Floribert Ngaruko (2)
Chad	−0.72	1.40	1.22	0.80	Jean-Paul Azam and Nadjiounoum Djimtoïngar (3)
Ethiopia[c]	0.41	10.44	4.05	0.36	Alemayehu Geda (4)
Malawi	1.36	1.62	0.50	0.29	Chinyamata Chipeta and Mjedo Mkandawire (5)
Mali	−0.27	1.99	1.46	0.68	Massa Coulibaly and Amadou Diarra (21)

(*cont.*)

Table 1.1 (*cont.*)

Country	Average growth in real GDP *per capita* (1961–2000)	Percentage share in total SSA: Population (1960)	Percentage share in total SSA: GDP (1960)	Ratio of GDP *per capita* to SSA average (1960)	Authors of country study (chapter in vol. 2 in parentheses)
Niger	−1.65	1.46	1.74	1.11	Ousmane Samba Mamadou and Mahaman Sani Yakoubou (6)
Sudan[c,d]	0.75	5.22	3.89	0.69	Ali Abdel Gadir Ali and Ibrahim A. Elbadawi (7)
Uganda	1.40	3.01	1.24	0.38	Louis A. Kasekende and Michael Atingi-Ego (8)
LL group	**0.31**[a]	**28.61**[b]	**15.83**[b]	**0.58**[a]	
Resource-rich (RR) opportunity group					
Botswana	6.33	0.22	0.16	0.67	Gervase S. Maipose and Thapelo C. Matsheka (15)
Cameroon	0.66	2.43	3.03	1.16	Georges Kobou, Dominique Njinkeu, and Bruno Powo Fosso (16)
Congo, Rep.	1.33	0.45	0.15	0.31	Célestin Tsassa and Benjamin Yamb (25)
Guinea	0.02	1.44	2.92	1.88	Sékou F. Doumbouya and Fodé Camara (17)
Namibia	0.62	0.28	0.69	2.24	Tekaligne Godana and John E. Odada (26)
Nigeria	0.32	18.71	14.30	0.71	Milton A. Iyoha and Dickson E. Oriakhi (18)
Sierra Leone	−1.36	1.03	0.82	0.74	Victor A. B. Davies (19)
Zambia	−1.25	1.44	1.24	0.80	Inyambo Mwanawina and James Mulungushi (27)
RR group	**0.83**[a]	**26.00**[b]	**23.31**[b]	**1.06**[a]	
Total	**0.67**[a]	**74.85**[b]	**54.53**[b]	**0.84**[a]	

Notes: [a]Average for category; [b]Total for category; [c]LL since 1994; [d]Included in LL for analytical purposes. The comparisons are *vis-à-vis* all forty-two 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 of volume 1 as resource-rich for more than half of the 1960–2000 period.

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

Table 1.1 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.[2] I outline that methodology in section 2, 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, I 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. I close this chapter in section 5 with a brief substantive introduction to the individual country studies, and make some final observations in section 6.

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 (1999b) organized their survey of African growth experience around the growing complementarity between cross-country regression evidence and the microeconomic evidence on African economies.

Olusanya Ajakaiye, Robert Bates, Paul Collier, Shantayanan Devarajan, Augustin Fosu, Jan Willem Gunning, Dominique Njinkeu, and Chukwuma Soludo. T. Ademola Oyejide collaborated in developing the project's methodology, and Chukwuma Soludo served as co-ordinator during the initial phase of the project.

[2] 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).

Within the Growth Project, this complementarity became a central feature of the case study methodology. By the late 1990s, as Collier and Gunning (1999b) observed, the growth literature had virtually eliminated the "African dummy variable," which had typically soaked up between 1 and 2 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.[3] 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 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 the 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 forty 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; and some sense can be gained of the net underlying influence of Kenya's institutions. Country analysis can then come into its own, marshaling the detailed country- and period-specific

[3] 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.

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.[4] 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 (TFP), a broad measure of country-level technological progress. Regression-based decompositions (using five-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 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 1999b), 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).

[4] See Ndulu and O'Connell (2000, 2003).

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 in particular 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.[5] On the opportunity dimension, the global

[5] In chapter 1, vol. 1, Ndulu and O'Connell (2007) survey the growth literature under the broad headings of demography and human resources, geography, and governance. Collier and O'Connell (2007) develop the synthesis taxonomy.

evidence 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 the synthesis volume (vol. 1), we show that the growth opportunities open to coastal, landlocked, and resource-rich countries differ 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 dialog between African governments and the international financial institutions (IFIs) 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 volume 1.

3.1 Growth opportunities

In grouping countries by an analytical geography we are intentionally departing from the conventional division of SSA into East, West, Central, and Southern regions. The conventional approach evokes continuities of physical geography and colonial history, but its over-riding 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 landlocked, low-opportunity economies and coastal, high-opportunity 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.[6] In

[6] 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

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 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 with Mellinger 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 (chapter 1, vol. 1) show that landlockedness exerts a strong and negative indirect impact on predicted growth via these channels.[7]

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

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 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

of own income from this for the thirty 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, $p = 0.88$).

[7] 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.

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, resource-scarce, coastal, 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.[8] A country like Nigeria is therefore classified as coastal, 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 1.1). We place Ethiopia, not politically landlocked until 1994, and the Sudan, with 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.[9]

Figure 1.1 looks at differences in export structure and development level by opportunity group (using the time-invariant classification), for SSA and an aggregate representing "all other developing areas." Figure 1.1 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 figure 1.1 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

[8] Collier and O'Connell (2007; chapter 2, volume 1) define a country as resource-rich in the first year if satisfies the following three conditions, and in all subsequent years (i.e. the classification is irreversible): (1) current rents from energy, minerals and forests exceed 5 percent of gross national income (GNI); (2) a forward moving average of these rents exceeds 10 percent of GNI; (3) the share of primary commodities in exports exceeds 20 percent for at least a five-year period following this initial year.

[9] Ethiopia became politically landlocked with Eritrea's independence in 1994, but this was preceded by three decades of armed conflict with Eritrean forces.