

African Growth Recurring: An Economic History Perspective on African Growth Episodes, 1690–2010

Morten Jerven



Simons Papers in Security and Development

No. 4/2010 | June 2010

The Simons Papers in Security and Development are edited and published at the School for International Studies, Simon Fraser University. The papers serve to disseminate research in progress by the School's faculty and associated and visiting scholars. Our aim is to encourage the exchange of ideas and academic debate. Inclusion of a paper in the series should not limit subsequent publication in any other venue. All papers can be downloaded free of charge from our website, www.sfu.ca/internationalstudies.

The series is supported by The Simons Foundation.

Series editor: Jeffrey T. Checkel Managing editor: Martha Snodgrass

Jerven, Morten, African Growth Recurring: An Economic History Perspective on African Growth Episodes, 1690–2010, Simons Papers in Security and Development, No. 4/2010, School for International Studies, Simon Fraser University, Vancouver, June 2010.

ISSN 1922-5725

Copyright remains with the author. Reproduction for other purposes than personal research, whether in hard copy or electronically, requires the consent of the author(s). If cited or quoted, reference should be made to the full name of the author(s), the title, the working paper number and year, and the publisher.

Copyright for this issue: Morten Jerven, mjerven(at)sfu.ca.

School for International Studies Simon Fraser University Suite 7200 - 515 West Hastings Street Vancouver, BC Canada V6B 5K3







African Growth Recurring: An Economic History Perspective on African Growth Episodes, 1690–2010

Simons Papers in Security and Development, No. 4/2010 | June 2010

Abstract:

Africa has not suffered a chronic failure of growth. African growth has been recurring. This paper reviews some growth spurts to substantiate that claim. The proximate cause of low income in Africa is that these spurts have always been followed by a bust. This is a significant reorientation of the central research question—away from a search for the root causes of African underdevelopment and towards explaining causes and effects of growth and decline. The growth spurts are approached as local responses to a global demand for African produced commodities. It is argued here that these supply responses involved more than a reallocation of land and labour; they entailed investment and required institutional change. It is precisely because these periods of rapid economic change and accumulation caused important qualitative changes in how the society and the economy were organized, that they cannot be ignored, as they have tended to be in the search for a root cause of Africa's chronic failure of growth.

About the author:

Morten Jerven is an economic historian (PhD, LSE 2008) and Assistant Professor of International Studies at Simon Fraser University. His current research, funded by the Social Sciences and Humanities Research Council of Canada, aims to assess the quality of growth data in 11 African countries and to construct a reliable basis to evaluate and interpret long term economic change. Jerven has published in *African Affairs*, the *Journal of International Development*, the *Journal of Development Studies* and the *Journal of South African Studies*.

About the publisher:

The School for International Studies (SIS) fosters innovative interdisciplinary research and teaching programs concerned with a range of global issues, but with a particular emphasis on international development, and on global governance and security. The School aims to link theory, practice and engagement with other societies and cultures, while offering students a challenging and multi-faceted learning experience. SIS is located within the Faculty of Arts and Social Sciences at Simon Fraser University. Our website is www.sfu.ca/internationalstudies.



African Growth Recurring: An Economic History Perspective on African Growth Episodes, 1690–2010¹

Despite manifest proof to the contrary the African post-colonial economic performance was summarized as: 'it is clear that Africa has suffered a chronic failure of economic growth. The problem for analysis is to determine its causes'. This stylized fact of permanent stagnation, which rings well with the popular view of the current income distribution of income and growth in the world, embodied in the phrase 'the bottom billion', has provided the impetus for an economic growth literature that investigates the historical causes of persistence of low income in African economies. This search for the historical roots of poverty has created a renewed interest in African economic history, and economists, having agreed some time ago that "institutions matter", are now seemingly forming a new consensus around another truism. This time it's "history matters". This paper certainly agrees with that point of departure, but suggests a different path: investigating economic growth in Africa as a process, rather than as one outcome with one historical root.

The experience of growth among African economies might better be approached as 'growth recurring'. The concept was used by Jones to describe that intensive growth or increasing per capita income did occur at several times and places both outside Europe and before the industrial revolution. His investigation was limited to the Eurasian Continent. According to Jones, economic history can be understood as an ongoing struggle between the

¹ A shorter version of this paper was presented at the launch of Africa International Affairs Programme at the London School of Economics, IDEAS, March 2010. This paper would not have been written without continued critical reflections on the literature through panels and workshops organized on the 'Historical Roots of Poverty' at the African Economic History Workshop 2009 at London School of Economics, at the European Conference for African Studies 2009 in Leipzig and finally at the World Economic History Congress 2009 in Utrecht. I am very grateful to the co-organizers of those panels, Gareth Austin and Alex Moradi and for all the contributions from the other participants. Alvaro Pereira provided valuable comments and references. Any mistakes are mine.

² Collier and Gunning, 'Why has Africa grown slowly?' for a critique see Jerven, 'African Dummy'.

³ Also referred to as 'Africa +' Collier, *Bottom Billion*.

⁴ Acemoglu et al. 'Reversal of Fortune', Acemoglu et al. 'Colonial Origins', Nunn 'Africa's slave trades' and Nunn 'Historical Legacies', for a critique see Jerven 'Relativity of Poverty' and Austin 'Compression of History'.

⁵ Hopkins, 'The New Economic History of Africa'.

⁶ For instance Bardhan, 'Institutions Matter'.

⁷ Nunn, 'Importance of History', Woolcock et al. 'Why does History Matter?', Guinnane et al. 'History matters'.

⁸ Jones, *Growth Recurring*.

propensity for growth and the propensity for rent-seeking. When the propensity for growth is stronger it results in a period of increased per capita incomes. Such episodes have occurred throughout the world, and although most of these periods were not 'growth triumphant', 9 as in the case of European industrialisation or that of late developers in other regions such as East-Asia, they were still important in that they were associated with qualitative changes in how polities were organized and led to significant increases in some kind of economic welfare.

Africa has experienced such growth episodes. This paper will investigate periods of per capita income increases in Africa in pre-colonial, colonial and post-colonial times taking as a starting point the concept of recurring growth. These growth episodes were rooted in trade and the world economy, but growth was only possible due to a reorganization of factors of production, a combination of investment and technological growth which had significant consequences for political economy. The central thesis in this article is that while factors of production could be relocated relatively smoothly and producers were able to change patterns of specialization with temporary social costs, the patterns of boom and bust crucially affected state revenue, and thus necessitated reorientation of the state, a process that often was often slow, costly and associated with conflict.

This paper will make use of some existing scholarly work quantifying such growth episodes through history from the pre-colonial times until today, and evaluate the development outcome of these episodes. It will then reconsider and compare the two post-colonial growth episodes: 1950–1975 and 1995–2009. The IMF now predicts a fall in GDP per capita for African economies in 2010, marking the end of a period of sustained growth since the mid 1990s. This is a good point at which to consider the development effects of this recent period of economic growth. Whether the current global economic slowdown will evolve into a prolonged crisis like that of 1975 to 1995 is too early to tell. This paper offers some tools to analyse these prospects, not currently offered in the African growth literature.

⁹ Easterlin, Growth Triumphant.



Ι

I.1 Root Causes of African Underdevelopment

If one accepts the stylized fact of persistent growth failure in post-colonial Africa and approaches economic growth as a linear concept, the next logical step is, and indeed has been, a search for the root cause of underdevelopment. Low income today must be the result of lack of growth in the past. The 'first generation' of empirical growth literature explained the lack of growth in post-colonial Africa by linking measures of low institutional quality and proxies for growth retarding policies with slow average growth. Lack of openness to trade, state intervention in markets and rent-seeking activities, and other variables were found to correlate with and were argued to be causally related to slow growth in Africa. In 1981, Bates offered a seminal rational choice theory explanation to why these growth retarding policies were adopted in the first place, arguing that African politicians chose policies that served their own interests rather than those favouring economic development. The 'second generation' of growth literature ventured further down this path suggesting that lack of growth and lack of pro-growth policies could be explained by 'initial conditions', using different measures for lack of state legitimacy, lack of social capital and ethnic diversity to explain why African states are incapable of development.

A noted complaint from economic historians to economists' work on African development was that 1960 was conventionally taken as a starting point, as if the period before this point, and therefore African economic history, had no relevance for economic policy today. There has been a definite change of emphasis in the recent years. The seminal contribution here was made by Acemoglu et al., who argued that different patterns of colonization have had a persistent impact on economic growth through institutions. Austin recently suggested that the

¹⁰ For a critique of this logic and a review of different growth patterns, see Pritchett, 'Patterns of economic growth'.

¹¹ Collier and Gunning, 'Explaining African Economic Growth', Jerven, 'African Dummy'.

¹² Barro and Lee 'Losers and winners', Mauro, 'Corruption', Sachs and Warner 'Sources of Slow Growth'. Durlauf et al. 'Growth Econometrics', p 639 report that in cross-country growth regressions, 145 explanatory variables have been found statistically significant, and identifies 43 conceptually different 'theories' of growth as being 'proven' in the literature.

¹³ Bates, States and Markets. For a critique see Leys, Rise and Fall of Development Theory.

¹⁴ Englebert, 'Post-Colonial States', Temple, 'Social Capital' and Easterly and Levine 'African Growth Tragedy'.

¹⁵ Hopkins, 'World Bank', Manning, 'The Long run' and Austin, 'Eurocentric'.

¹⁶ Acemoglu et al 'Reversal of Fortune'.

'reversal of fortune' thesis is the most discussed contribution of development economists since Lewis's model of unlimited supply of labour, ¹⁷ while Hopkins declared this recent surge in contributions to the study of long run growth in Africa the 'new economic history of Africa'. 18

The main contenders in the empirical growth literature searching for a root cause of underdevelopment can be organized in three chronological strands: according to whether they emphasise the negative effect of initial conditions particular to Africa's geographical characteristics; or the decisive impact of the slave trade or finally with the effects of the European colonization. ¹⁹ Many of the contributions are variations of the same argument, essentially arguing that a particular historical event or factor endowment led to a particular institutional constellation that has had lasting economic effect. The big question in the literature is that of which of these historical events had the decisive impact and secondly, through which transmission channels it continues to have an effect. A divisive issue is the relative importance of institutions versus geography, or as it was succinctly phrased in debate: 'Institutions rule' versus 'Institutions don't rule'. ²⁰ The common feature of the literature is that it searches for a root cause of African underdevelopment, to explain a static outcome of growth failure. It is argued here that there might be more to learn from investigating economic change and that those lessons call the assumption of path dependence of institutions into question.

I.2 The Political Economy of Episodic Growth in Africa

Specialization towards exports for production is at the heart of the growth episodes to be reviewed subsequently. It is a truism that specialization increases risk, a risk that may or may not be justified by increased returns. Thus, in conventional development economics this is an issue of opportunity costs. That risks are higher in production for a market than in 'subsistence production' is not straightforward. A rational choice perspective would interpret the manifest growth in production for the market as implying that the informal cost-benefit analysis worked

¹⁷ Austin 'Compression of History'.

¹⁸ Hopkins 'The New Economic History of Africa'.

¹⁹ As summarized by Battacharvya 'Root Causes of African Underdevelopment'. The seminal contributions for each respective strand is Sachs and Bloom 'Geography, Demography, and Economic Growth in Africa', Nunn 'Africa's Slave Trade' and Acemoglu et al 'Reversal of Fortune' and 'Colonial Origins'.

20 Rodrik et al. 'Institutions Rule' and Sachs 'Institutions Don't Rule'.



out in favour of specialization. A political economy perspective would take into account the fact that specialization was not an individual decision, but often subject to force in the interplay between individuals and pre-colonial, colonial and post-colonial states. African producers have been able to balance these risks, and sometimes at the expense of the state. States and their rulers have sought to specialize in taxation of production for the market or used its monopoly on certain resources. When the markets for these products have failed, so have the states.

The factor endowment perspective, as endorsed by Sokoloff and Engerman for Latin America, and modified for Africa by Austin, accounting for seasonal and historical changes in these factor allocations, argues that institutions form in response to factor endowments. A related formulation is the staple theory, used by Hopkins to analyze the implications of different export bases, in particular those arising from differences in factor combinations and the returns to scale. The perspective adopted here argues more specifically that the revenue base of the state has been changing dramatically through these recurring periods of growth, and importantly that the character of the state has determined how and whether these revenues were re-invested. Periods of rapid economic change were accompanied by institutional change. It is these dynamics that call the wisdom of a root cause into question.

Cooper, a historian, suggested the characterization of the African state as a 'gatekeeper state', describing the colonial and post-colonial state in Africa as typically relying on taxing exports.²³ Bayart, a political scientist, places the origin of this external dependence further back in time and argues that the slave trade was the first move towards 'extraversion'.²⁴ The dependency theory statement of this argument puts agency firmly with Europe in this transformation,²⁵ in Bayart's version the African elites played the key role. Bayart focuses on the orientation of the domestic political elite; a similar logic is found in natural resource curse theory, where it is argued that the political elite have no incentive to promote favourable institutions when rents are secured through mineral rents.²⁶ Going beyond mineral revenues, Deaton's landmark study of commodity exports prices and African economic growth found no

²¹Sokoloff and Engerman, 'Factor Endowments', 'Austin, 'Resources, techniques, and strategies'.

²² Hopkins, West Africa, p. 125.

²³ Cooper, Africa since 1940.

²⁴ Bayart, 'Africa in the world'.

²⁵ Rodney, *How Europe Underdeveloped Africa?*

²⁶ Auty, Resource Abundance.

clear support for the resource curse thesis. He found that African economies do better when the prices of commodities are high and that they suffer when prices are low.²⁷ Thus the 'paradox of plenty' does not apply in Deaton's view. There are opportunities rather than curses deriving from commodity export and related economic growth.

As will be illustrated in a study of growth episodes in the second section of this paper, these approaches all underestimate the institutional changes and in particular the changes in the role of agency in the process of specialization. To be specific: the specialization in slave trade testifies to the power of African elites and states, and from their perspective it was a means of securing returns through exports in lieu of a land tax. After the closing of the trans-Atlantic slave market growth in 'legitimate commerce' did in some places occur in spite of both of pre-colonial and colonial states. Thus peasants were the leading agent of change in this period. The marketing boards, an institutional innovation by the colonial state, provided the basis for the state to reassert itself, and built the foundation for the post-colonial state. When these revenues were undermined by external markets and internal rent-seeking, structural adjustment and a radicalization of 'extraversion' occurred. The most recent growth episodes have been based predominantly on mineral exports. The internal revenue base of the state has remained limited and taxation through marketing boards has been curtailed.

II

This section examines the picture of African growth according to the available aggregate data sources. Data on African economic growth is not only constrained by low quality, but also by low availability. The main reason that studies of economic growth have been confined to the period after 1960 is that datasets are not generally available for earlier periods. Thus when Artadi and Sala-i-Martin addresses the 'the economic tragedy of the XXth Century' the data marshalled to substantiate the claim is covers only 1960 to 2002. There are data that go further back in time than that. Some colonial statistical offices did produce national account estimates, and as will be reviewed here, official estimates were made for Rhodesia and Nyasaland from 1945

²⁷ Deaton, 'Commodity Prices and Growth'. 38.

²⁸ Jerven, 'Random Growth'.

²⁹ Artadi and Sala-i-Martin, 'The economic tragedy of the XXth Century'.



onwards. In addition some individuals have provided estimates for parts of the colonial period.³⁰ The dataset currently providing the longest time series is made available by Maddison.³¹

Table 1: African and World GDP per Capita, 1 (C.E.) – 1950

	1	1000	1500	1600	1700	1820	1870	1900	1913	1940	1950
Total Africa	472	425	414	422	421	420	500	601	637	813	889
World	467	453	566	596	615	667	871	1,262	1,525	1,958	2,109

Source: Maddison (2009). All values in constant 1990 International Geary-Khamis dollars. Note that the only African countries for which Maddison has individual income estimates for in this period are Algeria, Egypt, Libya, Tunisia and Morocco.

Austin recommends caution when approaching these observations and reminds us that the literal interpretation of the word data is 'things that are given' and that therefore many of the historical income or population estimates used in the literature for African economies should not be considered as data in the strictest sense.³² The underlying primary sources are not always available for Maddison, but presumably the data before 1960 are projections relying on proxy variables such as exports and taxation (annually published national income estimates were generally not published before 1960s).³³ While there is only available annual international comparable GDP per capita 'data' for all African countries between 1950 and 2006, there are observations for the whole continent back to year 1.

The GDP per capita estimates in Table 1 assume that on average 'Africa' was richer than other parts of the world in year 1. This is driven by an estimated higher income in Egypt than elsewhere in the world. The data implies that 'Africa' gradually fell behind the rest of the world due to stagnation in income per capita from year 1000 to 1820. Between 1820 and 1913 income per capita increased in 'Africa', but was falling further behind the world on average as incomes increased more rapidly in other places. Between 1913 and 1950 Africa ceased falling behind the world average, according to the data. In this period the average GDP per capita growth was 1

³⁰ For example by Szereszewski *Economy of Ghana*, Deane, *Colonial Accounting*, Okigbo, *Nigeria National Accounts* and Bigsten, 'Economic Growth in Kenya'.

³¹ Maddison, 'Historical Statistics of the World Economy'.

³² Austin, 'Compression of History' p. 1002.

³³ For a review of early national accounting in Africa see Ady, 'National Accounts in Africa'.

percent. Population growth (using data from the same dataset) is estimated at 1 percent, meaning that the economies in Africa were growing at an average 2 percent in this period.

The general aggregate picture shown in Table 1 does not reflect what is known concerning periods of export growth, state formation and accumulation in parts of Africa. There were large flows both of factors of production and commodities, both internally and externally, during the Atlantic Slave trade and the crash-crop revolution. Kingdoms rose and fell; colonial empires were established, railways and mines developed and yet the GDP per capita measure barely blinks. Indeed, Bloom and Sachs uses an earlier version of the Maddison data to conclude that for the past two centuries, "Africa's poor economic growth has been chronic rather than episodic."³⁴ It will be argued here that it is certain that well documented growth in African markets for currency, labour and goods led to Smithian growth through specialization in some areas.³⁵ Moreover, the Atlantic trade brought with it not only exchange of commodities, but also new technology—for instance, the introduction of new cultigens—which must have led to increased total factor productivity.³⁶ In addition, the economic growth could not have occurred without significant investments in land improvement, planting of perennial crops and transport infrastructure. Finally, there is these growth episodes induced historically documented institutional changes such as a formation of markets in land and labour, the strengthening of states as well as increased living standards.

This paper re-evaluates the long history of economic fluctuations for African economies, and juxtaposes the static aggregate data story with data on four cases of boom and bust. The first is set in pre-colonial and colonial Dahomey and considers the development effects of export booms in slaves and palm oil. The second case is grounded in a quantitative investigation of the cocoa boom in the Gold Coast. In the third case study the copper boom in Northern Rhodesia is examined.³⁷ The fourth and final case is about the diamond based growth in post-colonial Botswana. The last section of the paper considers recurring growth in Africa and evaluates the

³⁴ Bloom and Sachs, 'Geography, Demography and Economic Growth in Africa', p. 2.

³⁵ Hopkins, West Africa.

³⁶ G. Austin, 'Resources, techniques, and strategies' p. 588.

³⁷ Contemporary Benin, Ghana and Zambia respectively.



growth experience in 1995–2009 in comparison with the economic growth in the period from 1950 to 1975.

II.1 Case 1: Slave Trade and Export Growth in Pre-Colonial and Colonial Dahomey

The experience of Dahomey, 1690–1950, could be considered typical for West and Central African coastal states, of which many at this time were deeply integrated in the Atlantic economy. According to Manning, two million slaves were exported from the West African region through the Kingdom of Dahomey between 1640 and 1865.³⁸ Like Asante and Ovo, Dahomey grew from a small state to a major kingdom in this period.³⁹ This pattern was not replicated throughout. Some states chose to disengage from the slave trade, like Benin and Kongo, and in other areas low political concentration prevailed. ⁴⁰ The slave trade had millions of African victims, but it is generally agreed upon that African agents, be it states or networks of merchants, engaged in this trade because they were able to realize sizable economic gains from these economic transactions. 41 Europeans traders generally did not have the means to coerce African leaders to sell slaves. 42 This topic is extensively debated and studied, and many scholars have argued that the slave trade had lasting negative economic effects. The direct effect of lost manpower and the persistence of low labour concentrations in Sub-Saharan Africa figure prominently. Inikori argues that "the transformation of the Gold Coast into a major exporter of captives to the Americas retarded the developing inter-regional specialization and the growing commercialization of agriculture." ⁴³ It has further been suggested that the persistence of poverty in Africa was caused by the slave trade either through negative effects on state formation, or social capital such as trust. 44 The latter work tends to understate the economic motivations for

³⁸ Manning, Slavery, Colonialism and Economic Growth.

³⁹ Austin, 'Compression of History' p. 1005.

⁴⁰ Klein, 'Decentralized Societies'.

⁴¹ Northrup, *Africa's Discovery*, p. 56.

⁴² Thornton, Making of the Atlantic World.

⁴³ Inikori, 'Africa and globalization'.

⁴⁴ Nunn, 'Africa's slave trades'.

states engaging in the slave trade, and has not explicitly dealt with the implications of short term gain versus long term effects. 45

Table 2: Income and Growth, Benin 1800 – 1950

	Real National Income Growth	Per Capita Domestic Product (1913, GB pounds)
1800s-1840s	1.1	1.5
1840s-1860s	3.4	1.9
1860s–1890s	2.7	3.4
1890s–1910s	1.7	5.8
1910s–1930s	2.8	6.7
1930s-1950s	0.1	9.5

Source: Manning (1982). The data for national income growth are proxied by import purchasing power, and the per capita income is estimated by assuming that the per capita export revenue multiplied by seven equals per capita domestic product. We should not accept these data as 'facts', but they are an indication of the rate of change, and of the economic resources at the state's disposal. By comparison, according to the Governor of Southern Rhodesia, the per capita purchasing power in Jamaica and Zimbabwe in 1933 was 30 and 70 shillings respectively. 46

The data span from the end of the slave trade and into the period of 'legitimate commerce'. A central thesis, suggested by Hopkins, is that the closing of the Atlantic slave trade market meant stagnation and loss of power for centralized states as fiscal capacity disappeared; this is referred to as the 'crisis of adaptation'. It did not always mean the end of slavery as a mode of production, as documented by Lovejoy and Hogendorn: "At the time of the colonial conquest (1897–1903), the Sokoto Caliphate had a huge slave population, certainly in excess of 1 million and perhaps more than 2.5 million people". Furthermore, in some areas such as Dahomey, the ban of the slave trade actually led to an intensification of trade in slaves in the middle of the 19th century.

⁴⁵ Austin, 'Resources, techniques, and strategies'.

⁴⁶ Bowden et al. 'Measuring and Explaining Poverty', p. 1054.

⁴⁷ Hopkins, *An economic history of West Africa*, ch.4.

⁴⁸ Lovejoy and Hogendorn, *Slow death for slavery*, p. 1.

⁴⁹ Flint and McDougall, 'West Africa'.



Manning's estimates reproduced in Table 2 provide a suggestive quantitative study of effects of the slave trade in Dahomey. It is estimated that during the height of the slave trade the per capita export revenue in Dahomey was comparable to that of Great Britain. This probably led to a rapid increase of GDP per capita, while total GDP might have declined because of the loss of manpower. In the longer run this kind of economic growth was not sustainable. The economic specialization in slave trading suggests that, from the point of view of the states, the return on slave exports was superior to the return on labour that could be captured in other domestic production. The profitable slave business thus facilitated the growth of stronger states. Imports of money and other commodities further spurred exchange and growth in the domestic economy for some actors. When the slave trade ended in the 19th century, this undermined the fiscal basis of Dahomey as well as other West African states.

The end of the slave trade opened up new economic opportunities. It paved the way for what has been called the period of 'legitimate commerce' and what is also referred to as the 'cash-crop revolution' in Sub-Saharan Africa. This was largely a peasant response, though some crops were produced at plantations. Some of these were worked by slaves like the ones involved in palm production in the Sokoto Caliphate as referred to above. The cocoa boom was a different matter and involved African peasants, or capitalists as Hill calls them. The growth in Dahomey recorded in Table 2 was underpinned by palm oil and palm kernel exports. The growth rates are proxies and should not be interpreted literally, but testify to a rapid export growth that further facilitated growth in the domestic economy. Less is known regarding the effect and the relative importance of the local economy. Helleiner, in his study of the Nigerian economy, reasoned that the export economy only accounted for 15 percent of the total economy in 1900. For 19th century West Africa, Flint and McDougall suggested that as much as 90 percent of all production remained outside the cash based coastal economies. If we take Manning's data seriously it would mean a tripling in GDP per capita during a half a century of export based

⁵⁰ Manning, Slavery, Colonialism and Economic Growth p 3.

⁵¹ Manning, Slavery, Colonialism and Economic Growth p 4.

⁵² Manning, Slavery, Colonialism and Economic Growth p 12.

⁵³ Austin, 'Compression of History' p. 1005.

⁵⁴ Law, 'Legitimate' Commerce.

⁵⁵ Hill, Rural Capitalism.

⁵⁶ Cooper, 'Africa and the World Economy' p. 91-92.

⁵⁷ Helleiner, *Peasant Agriculture*, p. 7.

⁵⁸ Flint and McDougall, 'West Africa', p. 398.

growth. According to Manning, the French colonial rulers taxed the exports but the impact of the colonial authorities on economic organization was modest.⁵⁹ There was some fiscal drain of the export revenues (estimated at 3 percent of domestic product) but it was the Depression and the Second World War that finally undermined economic growth, and Benin has yet to experience sustained growth again apart from a very short period in the 1980s.

The example of growth from pre-colonial and colonial Dahomey, with export booms first in slaves and second in palm oil and kernels, shows that the external market can function as a 'vent for surplus'. ⁶⁰ However, it was not simply a reallocation of previously idle resources, labour and land. ⁶¹ The case further shows that reliance on external export markets cannot be sustained indefinitely. The end of the slave trade led to a crisis for African states, but created an opportunity for African peasants. How that opportunity was seized and how it contributed to growth and development is best examined in the case of cocoa in Ghana.

II.2 Case 2: Cocoa Production and Export Growth in Colonial Ghana

The cocoa boom originated in the colony of Gold Coast, but spread to other areas, for instance Ivory Coast and Nigeria, where peasants responded to the earning potential arising from an external market demand for this new cash crop. In his study of the Ghanian economy from the end of the slave trade until independence Austin writes that "much of the rise in rural output should be attributed to higher productivity" and that the expansion of production also no doubt "involved a vast increase in the quantities of resources employed within the rural economy". ⁶² This increase in production of cocoa was only made possible by a vast increase "in the stock of capital in the form of cocoa trees". ⁶³ So in pre-colonial (Asante) and colonial (Gold Coast) Ghana there was both intensive and extensive growth, based first on the export and production of kola nuts, gold, timber and rubber ('legitimate commerce') and then from the very end of the 19th century and based on cocoa production (the 'cash-crop revolution').

⁵⁹ Manning, Slavery, Colonialism and Economic Growth, p 17.

⁶⁰ Myint, 'Trade and the Underdeveloped countries'.

⁶¹ Smith 'Long-run Structural Change in Nigeria' and Tosh 'The cash-crop revolution'.

⁶² Austin, Labour, Land and Capital in Ghana, p. 432.

⁶³ Ibid.



Table 3: Gold Coast GDP, 1911 constant prices (GB pounds)

	1891	1901	1911
Export Production	872	740	3,612
Private Consumption of Imported Goods	1,595	2,741	4,310
Consumption of Government and Public Services	150	490	635
Gross Capital Formation			
a) buildings and construction	98	837	800
b) equipment	56	287	490
c) cocoa	4	169	1,573
d) net accumulation of species	73	257	560
e) changes in stocks of imported goods	8	17	-3
Traditional Consumption	9,200	10,000	11,100
Imports of Goods and Non-Factor Services			
a) imports of merchandise and non-factor services	-835	-1,870	-3,050
b) net imports of specie	-73	-257	-560
Total (A): including Traditional consumption	11,148	13,411	19,467
Total (B): excluding Traditional consumption	1,948	3,411	8,367
Per capita in GB pounds, Total A	6.8	7.5	9.7
Per capital in GB pounds, Total B	1.2	1.9	4.2

Source: Szereszewski (1965)

Szereszewski's estimates indicate a period of rapid growth. If the assumed stagnation in traditional consumption is not taken into account, GDP per capita more than tripled over two decades, implying a very high growth in the export economy and implying a 6.5 percent per capita growth over the period.

This rapid expansion did facilitate the improvement in living standards and diets. Moradi et al. has associated this growth with marked increases in the mean height of the Ghanaian population born in this period, indicating that the cash crop growth did result in widespread development in Ghana during the colonial period. This cocoa boom and the economic growth in the countries dependent on this crop eventually petered out. In Ghana the end of growth came prematurely due to perverse taxation of the cocoa peasants in Ghana during the 1960s (some of it

⁶⁴ Moradi et al, 'Living standards in Ghana', using similar data and method Moradi, 'Colonial Kenya' finds the same in Kenya.

indirect by allowing the Ghanaian Cedi become grossly overvalued). Growth continued in neighbouring Ivory Coast until the late 1970s when depressed world market prices led to stagnation and decline in cocoa earnings also there. As pointed out by Hopkins, Ivory Coast did have a slow start due to French colonial discriminatory agricultural policies, and did in part grow so quickly because the state suddenly became favourably disposed to cocoa production following independence.⁶⁵

The lesson from this particular period is that growth was rapid and sustained over a long period. Although production was largely taking place in spite of, not because of, the state, it enabled the colonial and the post-colonial state to expand its expenditures. While the increase in financial and other resources caused widespread development according to most indicators we have access to, it also spurred positive institutional change, such as development of markets in capital, land and credit. In Ghana, it would be fair to say that growth was cut short by a rent-seeking propensity of the post-colonial state, but it should also be remembered that the limits of the external market in the end caught up with Ivory Coast in the late 1970s, bringing the collapse of its post-independence growth.

II.3 Case 3: Copper Boom and Mining Growth in Colonial and Post Colonial Zambia

Copper has been produced for at least a millennium in what was Northern Rhodesia, but until the late 1920s the country's development was described as "fitful and speculative". ⁶⁶ The British South African Company, controlling the territory since 1890, was not originally optimistic about copper mining, mainly because of concerns of the high transport costs. In the 1920s Northern Rhodesia became a British colony and the prospects for growth changed. Growth in the electricity and automobile industries radically altered the demand and consequently the price for copper in the world market, thus the high transport costs could be overcome. The Northern Rhodesian copper industry consisted of two major mining groups: Rhodesian Anglo American (RAA) and Rhodesian Selection Trust (RST), the former controlled mainly by South

⁶⁵ Hopkins, West Africa, p. 218-219.

⁶⁶ Butler, Copper Empire, p. 13.



African and the latter by North American capital. Large scale copper production in Northern Rhodesia coincided with the onset of the Depression and the prices for copper, which earlier had been upheld by a producers' cartel, fell sharply from 1929. Production re-started in the 1930s as demand for copper in the world market revived.⁶⁷

According to Roberts, the copper mines of Northern Rhodesia "represent a particularly striking example of the 'leakage' of wealth from an African colony". ⁶⁸After the Second World War Southern Rhodesian politicians lobbied to unite Southern and Northern Rhodesia with Nyasaland in a single Central African State, appealing particularly to the large copper companies and arguing that economics of scale effects would benefit the industry, in particular in energy provision. ⁶⁹ The Federation was formed in 1953 and according to Hall "the Copper belt was the milk cow and Northern Rhodesia suffered a net loss in the years 1953–64 of nearly £ 100 million – the bulk of which was used to develop Southern Rhodesia and the rest to prop up Nyasaland."70 Production, sales and investment in the copper industry increased rapidly in the post WW2 period, benefiting from high prices and a devaluation of the pound. But as Murray, a former commissioner for Zambia, noted, the federation diverted 'money which we could well have invested within our own borders'. ⁷¹ Supporting this point, a commission reporting for the colonial office in 1938 noted that "social services are very backward", but that this "would not be the case if it received a larger proportion of the proceeds of the country's only really important industry, the mining industry."

Certainly, political independence in Zambia "soon led to a marked reduction in the leakage of copper profits abroad", but the process of controlling the revenue was not straightforward.⁷³ The first step was the introduction of an export tax in 1966, instead of the previous royalty system. In 1969 the government took a 51 percent ownership in the mines. In return for equity the companies were given dollar denominated bonds with 8 to 12 year maturities. In 1973 the second and decisive move was taken, when the Zambian government

⁶⁷ Roberts 'Financial History of Copper Mining', 351.

⁶⁸ Roberts 'Financial History of Copper Mining', 347.

⁶⁹ Gann, Government in African States, p, 384.

⁷⁰ Hall, *High Price*, p. 61. Roberts 'Financial History of Copper Mining', p. 354, puts it to 97 million pounds.

⁷¹ Murray, 'Zambia and the Future', p.23.

⁷² CO 145, Northern Rhodesia, p. 347.

⁷³ Roberts 'Financial History of Copper Mining'.

borrowed from international lenders and redeemed the bonds.⁷⁴ These moves were not resisted by the foreign mining companies. "According to H. F. Oppenheimer, one of the great South African mining magnates, the new arrangements provided the companies with liquid funds derived from compensation payments that enabled the corporations to broaden their field of operations elsewhere."⁷⁵

The economist Harvey wrote in 1970: "For the future one can only look to the planned increases in copper production, the promising trend in imports, the large reserves, and keep one's fingers crossed, as ever, concerning the copper price." In retrospect the timing of the Zambian government was very poor; "by 1974 copper (the source of some 98 percent of all Zambia's export earnings) had drastically decreased in value; inflation had caused costs to spiral, and the two great state owned mining concerns were operating at a loss." At the time Shaw noted that the ability of the ruling class to maintain political order in Zambia was related to the production and price of copper, and argued that Zambia was one of the "most dependent economies when measured along the contribution of a single dominant industry."

The data on copper production in Figure 1 tells a story of rapid growth from the 1930s into the 1970s, followed by a long period of decline. Deaton in his study of commodity prices shows that copper prices remained low through the 1970s and 1980s, with an improvement in the 1990s when production also starts recovering. The Central African Statistical Office in Southern Rhodesia published national account statistics in the Monthly Digest of Statistics from 1945 onwards. It gives further support to what the copper statistics already indicate. In current prices, the value of domestic production increased more than 9 times, averaging an annual growth of 29 percent. Expressed in constant prices, using a pound deflator, this represents faster growth than the average of 20 percent GDP growth in the decade from 1945 to 1955—far faster than the 'growth miracle' recorded in post-colonial Botswana.

⁷⁴ Stoever 'Zambia's Copper Industry'.

⁷⁵Gann, Government in African States, p. 186-187.

⁷⁶ Harvey, 'Very Open Economy', p. 57.

⁷⁷ Gann, Government in African States, p. 186.

⁷⁸Shaw, 'Zambia: Dependence' p. 7.

⁷⁹ Deaton, 'Commodity Prices and Growth'.

⁸⁰ Officer, 'Relative Value of a UK Pound Amount'.

Figure 1: Copper Production in Northern Rhodesia (tonnes), 1920–2006

Sources: 1920-1938, *Blue Book* (Rhodesia), 1941–1945, *Economic Statistical Bulletin* (1952) and 1946–2008, International Copper Study Group (Supplied data on request).

Table 4: National Income at Factor Cost, Northern Rhodesia 1945-1962, £Million

	1945	1946	1947	1948	1949	1950	1951	1952	1953
Gross Domestic Economy	15.4	18.1	27.8	34	43.9	58.5	85.9	96.8	112.2
			10=1		40.50	10.50	40.50	10.11	10.55
	1954	1955	1956	1957	1958	1959	1960	1961	1962
Gross Domestic Economy	150.5	177.4	195.6	161.2	144.7	201.6	218.5	200.9	198.2

Source: Central Statistical Office, Monthly Digest of Statistics (1951, 1962 and 1964)

In Zambia, economic growth accelerated and decelerated in accordance with external market opportunities. Because of the colonial political economy, during the mining boom the mineral rents were only in part invested in the Zambian economy. In the decade after independence, while world market prices were high and rents from the mines available, domestic investments were made in industrial diversification, infrastructure and human capital. Most of these investments had to be reversed in the 1970s, 1980s and 1990s when the copper market was depressed.⁸¹ The prolonged crisis led to severe indebtedness, predatory rent-seeking and considerable political unrest, but never outright violent contest for the state.

⁸¹ Collier and Bates, 'Zambia'.

II.4 Case 4: Diamond-Led Growth in Botswana, 1973–2009

Botswana has received considerable attention because of its rapid economic growth in the post-colonial period. Its growth rate has by some measures surpassed that of any country in the world since the 1960s. 82 The country has figured widely as the exceptional African growth success story, in marked contrast to the "African growth tragedy". 83 In the literature on African growth Botswana is frequently cited as the 'exception that proves the rule' by scholars who argue that African economies are capable of rapid economic growth as long as the institutional framework and development policies are right. Botswana has confirmed that African economies can perform well, despite the potential of being caught in various 'development traps', such as the natural resource trap' or its landlocked position. Botswana's citizens have decisively escaped membership in what Collier calls the 'bottom billion' thanks to a few decades of rapid growth "when it achieved the world fastest growth rate". 84 In the growth literature, 'there is almost complete consensus that Botswana achieved rapid growth because it managed to adopt good policies'.85

The De Beers Botswana Mining Company (Debswana) was established in 1969 in order to develop the Orapa diamond mine, the second largest kimberlitic pipe in the world at the time.86 In 1975 a second pipe was discovered at Orapa in 1975. According to Jefferis, De Beers recovered its original investment in Orapa within less than two years. In 1977 the largest diamond discovery came at Jwaneng and development of the mining complex cost over USD250 million, including the infrastructure of the new town. Production commenced in 1982 (Jefferis 1987: 301). 87 The original 1970 agreement between Debswana and the government provided a royalty based on production levels, taxation on profits and a free 15 percent equity share for the government. "Full details of the new agreement have never been disclosed, but it is reputed to be one of the best mineral exploitation contracts in the world" from the perspective of Botswana. 88

⁸² For a discussion of the rate of growth in Botswana, see Jerven 'African Growth Miracle'.

⁸³ Easterly and Levine, 'Africa's Growth Tragedy: Policies and Ethnic Divisions', Quarterly Journal of Economics, 112:4, (1997) pp. 1203-50. The phrase 'an African miracle' was first attributed to Botswana by Samatar and has been much quoted since. Collier, Bottom Billion, p. 50.

⁸⁵ Acemoglu et al, 'African Success Story'.

⁸⁶ Second only to the Williamson pipe in Tanzania.

⁸⁷ Jefferis 'Botswana and Diamond-Dependent Development', p. 301.

⁸⁸ Jefferis 'Botswana and Diamond-Dependent Development', p. 304.



De Beers runs the Central Selling Organisation (CSO) marketing cartel, which controls about 80 percent of the world's supply of rough diamonds. This means that as a commodity, the price level of diamonds is relatively stable, and the selling price is much higher than the production cost due to monopoly profits. The CSO has been able to control supply through a buffer stock arrangement that has been judged to be "by far the world's most successful commodity buffer stock arrangement." The CSO represents a durable producer cartel, exactly what primary producers have strived to achieve but never succeeded in establishing on a permanent basis.

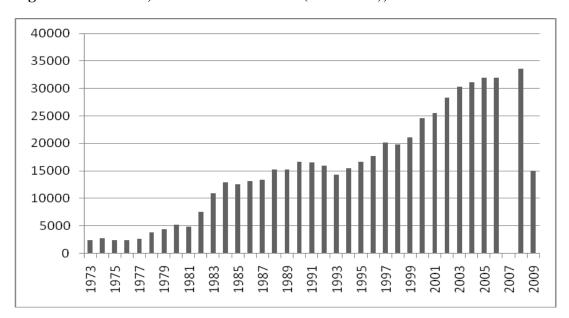


Figure 2: Botswana, Diamond Production (000 carats), 1973–2009

Sources: 1973-1998, Botswana, *Statistical Bulletin* (1982, 1985, 1993, 1999), 1998–2003, Botswana, *Statistical Yearbook* (2003) and 2004–2009 (Debswana Online Data). Data for 2007 missing.

By the mid 1990s Botswana had become the largest diamond producer in the world, giving it a significant power when bargaining royalty contracts. ⁹⁰ In tune with diamond output, growth has stagnated in Botswana since the mid 1990s. As a response to failing demand connected with the global economic slowdown, the diamond mines shut down operations in

⁸⁹ Jefferis 'Botswana and Diamond-Dependent Development', p. 307.

⁹⁰ Jefferis 'Botswana and Diamond-Dependent Development', p. 306.

summer 2009.⁹¹ As is shown in Figure 2, output in 2009 will be half of that in 2008 as a result of the midyear shut-down.

While Botswana is well known as the 'African growth miracle', the previous three cases show that rapid growth over a period of two or three decades is not as exceptional in an African context as commonly assumed. The current events in Botswana's diamond industry are raising the possibility of retrogression also in Botswana. It has been pointed out that one of sources of political stability and democracy in the country is the availability of mineral rents. ⁹² These rents have been invested in infrastructure and human capital, but the economy remains undiversified and heavily dependent on import; thus its future growth depends on the demand for diamonds. Some scholars have further questioned the Botswana development miracle, pointing to the increased inequalities in income and the limited gains made apart from accrued diamond earnings. ⁹³

Booms and busts in African economic history both leave lasting effects. Growth in the pre-colonial period, based on the slave trade, was definitely unsustainable in the long term—but the rents from this growth were captured by elites and in some cases it facilitated the temporary strengthening of states and their fiscal capacity. Conversely, although the end of the Atlantic slave trade in the 19th century weakened those states dependent on the trade, it induced another period of growth based on agricultural production.

The growth of export crop production in the 19th century did entail large improvements in GDP per capita which were enjoyed by the peasant population, sometimes directly. The opportunity to capture rents from this growth in exports was eventually seized by the colonial state through the formation of marketing boards. These revenues facilitated the emergence of the developmental state in the late colonial period and until structural adjustment. In many cases states engaged in predatory rent-seeking, letting producer prices drop to small fraction of world market prices. Inflation and overvalued currencies contributed strongly to this trend. In some states, elites did not favour heavy taxation of export crops. Nevertheless, both regimes favouring

⁹¹ Cramer et al. 'Africa and the Credit Crunch'.

⁹² Jerven 'African Growth Miracle' and Acemoglu et al. 'African Success Story'.

⁹³ Good, Diamonds, Dispossession & Democracy and Hillbom, 'Diamonds or Development?'.



crop production and those biased against it failed, and both types underwent structural adjustment in the 1980s.

The mining booms in Botswana and Zambia testify to the power of external markets to spur rapid increases in GDP per capita, which lead to qualitative changes in these economies as well. Both countries experienced urbanization and increase in formal employment. The vulnerability associated with mining dependence is well illustrated by the case of Zambia. The infrastructural investment and human capital investments ceased, and the initial improvements eventually reversed in the 1970s, 1980s and 1990s when copper prices remained low, and external dependence only increased with its external debts. During colonial rule the Northern Rhodesian state received very limited share of the copper revenues. At independence, the imperative was to secure access to these revenues, but they soon dwindled as copper prices fell.

Botswana experienced uninterrupted per capita growth, and although it was associated with high income inequality, development was manifested in particular with the advances made in education. Botswana is also the best candidate to exemplify stable democratic rule in Africa. The availability of economic rents was central to this peace and stability. Botswana's 'good governance' that these rents were not squandered (although the favourable contract signed with De Beers gave them little opportunity or benefit in doing so). Public investments were increasingly made in the 1980s and 1990s, but Botswana's economy remains diamond dependent and has not diversified.

Easterlin characterizes 'modern economic growth' as an increase in living standards and a process that has upset the balance of political power. ⁹⁴ African recurring growth has not led to the same levels of living standards as are currently enjoyed elsewhere, nevertheless the growth episodes reviewed here have been associated with large gains being made in living standards. The studies of Dahomey, Gold Coast, Northern Rhodesia and Botswana also demonstrate that these economic growth episodes have spurred political and institutional change. It would be a mistake to interpret African economic history as if modern economic growth had not touched the African continent.

⁹⁴ Easterlin, *Growth Triumphant*, p. 1.

III

What can we generalize from African growth episodes between 1950 and today? Different methods have been used to identify and define periods of sustained growth or growth accelerations. ⁹⁵ In this exercise growth is classified as 'sustained' if the 9 year moving averages of GDP per capita growth are 3 percent or higher, which is a quite strict criterion, comparatively. The average annual GDP per capita growth in the world according to the same dataset over the same period was 2 percent. ⁹⁶

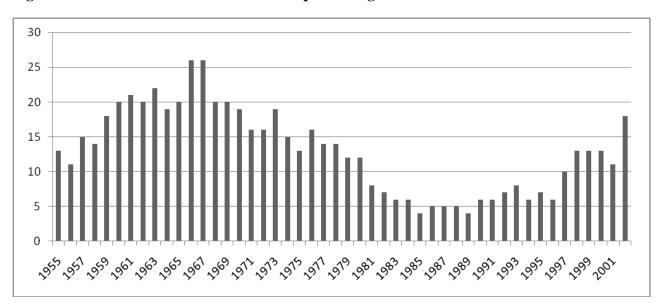


Figure 3: Number of African Countries Experiencing Sustained Growth 1950-2006

Source: Maddison (2009). To some extent the findings here can be conditioned by the use of the Maddison dataset as compared to using World Development Indicators or Penn World Tables. Ideally, one should have used the primary source—the official national account files—but as of yet those are not collected. A study of the quality of the post-colonial growth evidence found that most of the errors in the data are eliminated if one averages growth over periods longer than 5 years, and that there were fewer erroneous growth fluctuations in the Maddison dataset as compared to the Penn World Tables and the World Development Indicators. The full list of countries and the observations of sustained growth by country is given in the appendix, Of course, when 9 year moving averages are calculated, the data set only covers 1955 to 2002.

The interpretation of Figure 3 is straightforward. Many countries experienced high growth towards the end of the colonial period. When most African economies regained their

⁹⁵ Berthelemy and Soderling 2001, Hausman et. al. 2004.

⁹⁶ Maddison 2009.

⁹⁷ Jerven, 'Random Growth'.



independence the prevalence of sustained growth in Africa increased. In 1967–1968 half of Africa's economies were in the middle of a decade of sustained rapid growth. This trend of more countries joining a path of growth was reversed in the beginning of the 1970s, and following the second oil shock, 1979–1981, there was only a handful of countries that achieved sustained growth in the 1980s. The improvement was slight until very recently. A quarter of African economies have been experiencing sustained growth since 1998.

Between 1985 and 1989 among the few countries that experienced sustained growth were Mauritius and Botswana, which are widely recognized as the African growth miracles. Less recognized in the literature are Cape Verde, Equatorial Guinea, Lesotho and the Seychelles, but given their past growth and current relative position in terms of GDP per capita, they do deserve the same kind of attention given to the Mauritius and Botswana 'miracles'. Elberia and Chad also experienced a 4 year period of sustained growth in the late 1980s.

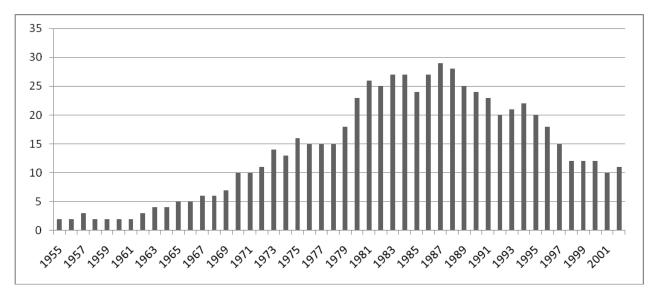


Figure 4: Number of African Countries Experiencing Sustained Growth Failure

The phenomenon of failed growth has received far more attention in the economic literature on African development. Here sustained growth failure is defined as occurring when the 9 year moving average of real GDP per capita growth is less than zero percent, that is an overall and lasting deterioration in income per capita. Figure 4 shows the occurrence of growth

⁹⁸ Jerven, 'Relativity of Poverty'.

failure in Africa each year between 1955 and 2002. Until the 1980s a sustained growth failure was the exception in Africa. Between the 1950 and 1960s only Benin, Tanzania and Morocco experienced sustained periods of stagnation and negative growth. In the 1960s also Chad and the Central African Republic were stagnating, and this group of ill performers (Tanzania and Morocco improved on their performance) was joined by Senegal, Niger and Somalia in the late 1960s and the early 1970s. A sudden spike in the list of ill performers occurred in the late 1970s. Thereafter, in the 1980s and early 1990s the failure of growth became the rule rather than the exception.

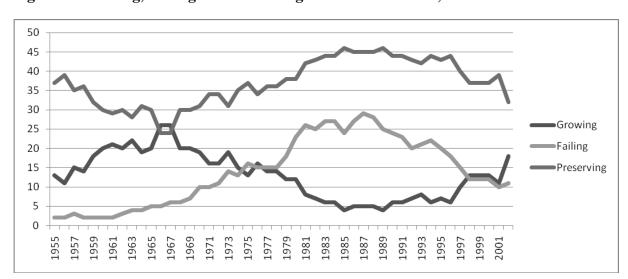


Figure 5: Growing, Failing and Preserving African Economies, 1950–2006

Figure 5 fills in the missing part of the picture painted in the previous figures. While some economies were growing and others were failing, a number of economies were growing in a modest fashion, making progress albeit slowly. This also brings evidence to support that economic growth and development was widespread in the 1950s, 1960s and 1970s, and growth failure the exception. It further suggests that growth following Structural Adjustment was the exception rather than the rule. Finally, it is evident that the recent African growth episode has been less widely shared than the boom in the earlier period.



IV

The global economic downturn in the 1980s hit Africa harder than other continents. A combination of the depressed demand in external markets and elites turning to predatory rent seeking made sure that growth did fail in the majority of African economies between 1975 and 1995, when growth failure became more normal than sustained growth. It is now widely recognized that the economic downturn also led to political disorder and state failure. ⁹⁹ The economic literature on civil war and conflict has recognized that both low income and economic shocks are correlated—and therefore possible causing, or at least increasing the probability of, civil war and conflict. ¹⁰⁰

Does the most recent downturn suggest a similar failure? There is reason to hope that the current economic crisis might be less deep and prolonged because the majority of African states are now pursuing orthodox market policies. There are fewer opportunities for predatory rent seeking. It is not yet clear whether African economies will be in position to soften the downturn for large parts of the population. The period of economic contraction in the 1980s was met by fiscal austerity as prescribed in structural adjustment policy programmes. In strict contradiction with previous austerity reforms IMF recently suggested the use of counter-cyclical fiscal policy to 'weather the storm' this time. ¹⁰¹ The first thing that suffers in an externally induced economic crisis in export oriented economies is its fiscal capacity. A recurring theme has been the state's vulnerability to economic shocks. Rather than being counter-cyclical, fiscal policy and state intervention have been expanding with economic growth. To engage in fiscal expansive policy this time African states would have to depend on external funds.

Vantage point is always important, and the current slowdown puts recent publications such as "Africa at a Turning Point?" and "Africa's Turn?" in a less favourable light. ¹⁰² The authors of these publications suggested that Africa might be about to embark on its long awaited sustained growth path. Collier, writing when conditions looked rosier for African economies,

⁹⁹ Bates When Things Fell Apart.

¹⁰⁰ Miguel and Blattman, 'Civil War'.

¹⁰¹ IMF, Weathering the storm.

¹⁰² Miguel, Africa's Turn? and Go and Page Africa at a Turning Point?

suggested that one source of growth was that Africa was 'learning from mistakes'. ¹⁰³ What lessons should be taken from the current slowdown? The most recent period of economic growth did not entail the large improvements in human development as was the case in 1950–1975. ¹⁰⁴ It has furthermore not been associated with much industrial growth. The former may indicate that the growth has not 'trickled down' while the latter indicates that we will not see the crisis resulting in a deindustrialisation, though some investments in mineral extraction are now being recalled. ¹⁰⁵ It is also evident that with an adjustment to the market only economies that have enjoyed comparative advantage in natural resources have really experienced growth in this period; and growth was wider spread and on a broader economic basis in agriculture and manufacturing. The recent period of growth was not matched by an expansion of the state. The fiscal capacity of the state were not been diversified away from exports, but specialized towards them as most states accepted their comparative advantage in natural resource exports.

The basis of recurring growth in African has always been strong external demand. Growth has not been triumphant and the end of growth periods has ended with a combination of predatory rent-seeking and depressed external markets. The recent boom was one-sided, based on external market demand for natural resources. The good news is that the boom was associated with orthodox macroeconomic management. Africa enters today's crisis with a smaller debt burden, and with a smaller propensity for rent seeking than in the past. The bad news is that African economies are as dependent on external forces as ever. Economic growth will not return until external demand revives. It has been suggested that fiscal policy might lighten the recession domestically in Africa, but the fiscal basis of African states does not allow this without recourse to external financing. History will be repeating itself. When the world market demand returns and natural resource rents are again available, growth will return. The dependency of African economies on export volumes and prices makes their development path one of recurring growth.

This paper has faced a limitation that all similar efforts must face: a severe paucity of data on the period before 1960. We lack basic data on population, yields, and prices, both for consumers and for those supplying factor markets. Without such data, we cannot estimate total

¹⁰³ Collier in Miguel, Africa's Turn? p. 111.

¹⁰⁴ Sender, 'Limits of Current Consensus'.

¹⁰⁵ Cramer et al. 'Africa and the Credit Crunch'.



factor productivity and thereby secure reliable measures of growth, much less insight into its decomposition. Such analysis is available for the post-independence period, as for instance in the study undertaken by Ndulu et al. ¹⁰⁶ It has been pointed out that this presumed availability of reliable macro data for the post-colonial data is often misleading. ¹⁰⁷ Data on the post-colonial period are worse than commonly thought, and conversely, we know more about the colonial and pre-colonial economic change than what is commonly assumed. A mix of qualitative accounts and careful use of the data that are available gives substance to the analysis of growth episodes in this paper. In terms of quantitative data, there has been a focus on factors on the demand side, but the analyses of the supply side are as important.

This paper has emphasised that the search for a root cause of African underdevelopment is futile, and that it would be asking the wrong question. The modest task of social scientists is to come up with good research questions. There is a crucial difference between approaching the conundrum of African growth by asking why there has been a chronic growth failure and that of asking why African economies have grown and why they have retrogressed. There have been periods of rapid economic change and accumulation, which in turn caused important qualitative changes in how societies and economies were organised. It seems that the study of growth as a recurring process is central to understanding the prospects for sustained growth in Sub-Saharan Africa. While we do know how these periods of growth are related to world economic patterns, initial research on how these patterns change economic power and structure within African economies points to key, yet relatively understudied questions that demand answers. The growth episodes in this study were rooted in trade and the world economy, but this growth was only possible due to a reorganisation of factors of production, a combination of investment and technological growth that had political-economy consequences. There is therefore nothing inherently failed or dysfunctional about African markets, states or geography that inhibits economic growth. What needs further detailed study is what happens to African markets and states during the process of growth as well as decline.

¹⁰⁶ Ndulu et al, Political Economy of Growth.

¹⁰⁷ Jerven, 'Random Growth'.

Appendix: Years of 'Sustained Growth' in African Economies since State Independence

	Years of 'Sustained Growth'	Before 1975	1975– 1994	After 1995	Longest Uninterrupted Period
Algeria	24	16	7	1	1966-1981
Angola	15	10	-	5	1959-1967
Benin	2	-	2	-	1980-1981
Botswana	23	12	18	5	1963-1992
Burkina Faso	7	6	1	-	1955-1958
Burundi	10	9	1	-	1966-1974
Cameroon	8	-	8	-	1977-1984
Cape Verde	20	-	12	8	1977-1987
Central African Republic	-	-	-	-	-
Chad	7	-	4	3	1984-1987
Comoro Islands	10	10	-	-	1958-1967
Congo 'Brazzaville'	13	5	8	-	1976-1983
Côte d'Ivoire	9	9	-	-	1959-1967
Djibouti	1	1	-	-	1969
Egypt	21	7	10	4	1972-1984
Equatorial Guinea	32	13	11	8	1955-1967
Eritrea and Ethiopia	10	9	-	1	1959-1967
Gabon	22	20	2	-	1955-1976
Gambia	11	10	1	-	1961-1965
Ghana	2	1	-	1	1957
Guinea	3	3	-	-	1957-1958
Guinea Bissau	17	17	-	-	1955-1971
Kenya	5	5	-	-	1966-1970
Lesotho	29	15	12	2	1969-1980
Liberia	7	3	4	-	1990-1993
Libya	15	15	-	-	1955-1969
Madagascar	-	-	-	-	-



	Years of 'Sustained Growth'	Before 1975	1975– 1994	After 1995	Longest Uninterrupted Period
Malawi	10	8	2	-	1967-1976
Mali	10	1	3	6	1997-2002
Mauritania	15	14		1	1955-1968
Mauritius	35	10	17	8	1983-2002
Morocco	13	5	6	2	1970-1980
Mozambique	12	6	-	6	1997-2002
Namibia	9	9	-	-	1958-1966
Niger	5	5	-	-	1958-1962
Nigeria	9	9	-	-	1966-1974
Rwanda	16	6	6	4	1969-1974
São Tomé and Principe	11	11	-	-	1958-1968
Senegal	-	-	-	-	-
Seychelles	20	7	12	1	1986-1995
Sierra Leone	6	5	-	1	1965-1967
Somalia	2	2	-	-	1973-1974
South Africa	4	4	-	-	1963-1967
Sudan	11	2	1	8	1995-2002
Swaziland	20	20	-	-	1956-1974
Tanzania	2	1		1	1966
Togo	10	10	-	-	1960-1969
Tunisia	32	16	8	8	1959-1980
Uganda	11	2	3	6	1992-2000
Zaire (Congo Kinshasa)	1	1	-	-	1955
Zambia	8	8	-	-	1960-1963
Zimbabwe	11	11	-	-	1966-1973

Source: Maddison 2009.

References

- Acemoglu, D. and Johnson, S. and John R. A., 'The colonial origins of comparative development: an empirical investigation', American Economic Review, 91 (2001), pp. 1369–1401.
- Acemoglu, D. and Johnson, S. and John R. A., 'Reversal of fortune: geography and institutions in the making of the modern world income distribution', *Quarterly Journal of* Economics, 118 (2002), pp. 1231–1294.
- Acemoglu, D. and Johnson, S. and John R. A., 'An African success story: Botswana' in D. Rodrik, ed., In Search of Prosperity: Analytic Narratives on Economic Growth (Princeton: Princeton University Press, 2003).
- Ady, P., 'Uses of national accounts in Africa' in L. H. Samuels, eds., African Studies in Income and Wealth (Chicago: Quadrangle Books, 1963).
- Artadi, E. V. and Sala-i-Martin, X., 'The economic tragedy of the XXth century: Growth in Africa', NBER Working Paper 9865, July 2003.
- Austin, G., 'Resources, techniques, and strategies South of the Sahara', *Economic History* Review, 61 (2008), pp. 587–624.
- Austin, G., 'The 'Reversal of fortune' thesis and the compression of history: perspectives from African and comparative economic history', Journal of International Development, 20 (2008), pp. 1–32.
- Austin, G., Labour, Land and Capital in Ghana. From Slavery to Free Labour in Asante, 1807– 1956 (Rochester: University of Rochester Press, 2005).
- Auty, R. M., Resource Abundance and Economic Development (Oxford: Oxford University Press, 2001).
- Bardhan, P., 'Institutions matter, but which ones?', Economics of Transition, 13 (2005), pp. 499– 532.
- Barro, R. J. and Lee, J. W., 'Loser and winners in economic growth', NBER Working Paper 4341, April 1993.
- Bates, R. H., Markets and States in Tropical Africa: The Political Basis of Agricultural Policies (Berkeley and Los Angeles, Calif., 1981).
- Bates, R. H. and Collier, P., 'The Politics and Economics of Policy Reform in Zambia", *Journal* of African Economies, 4 (1995), pp. 115–143.
- Bates, R. H., When Things Fell Apart (New York: Cambridge University Press, 2008).



- Battacharyya, S., 'Root causes of African underdevelopment', *Journal of African Economies*, 18 (2009), pp. 745–780.
- Bayart, J. F., 'Africa in the world: A history of extraversion', *African Affairs* 99 (2000), pp. 217–67.
- Berthélemy, J. C. and Soderling, L., 'The role of capital accumulation, adjustment and structural change for economic take-off: empirical evidence from African growth episodes', *World Development*, 29 (2001), pp. 323–343.
- Bigsten, A., 'Welfare and economic growth in Kenya, 1914–76', *World Development*, 14 (1986), pp. 1151–60.
- Bloom, D. E. and Sachs, J. D., 'Geography, demography, and economic growth in Africa', *Brookings Papers on Economic Activity*, 29 (1998), pp. 207–296.
- Bowden, S., Chiripanhura, B. and Mosley, P., 'Measuring and explaining poverty in six African countries: a long period approach', *Journal of International Development*, 20 (2008), pp. 1049–1079.
- Butler, L. J., Copper empire. Mining and the colonial state in Northern Rhodesia, c. 1930–1964 (Basingstoke: Palgrave Macmillan, 2007).
- CO 145, Report of the Commission Appointed to Enquire into the Financial and Economic Position of Northern Rhodesia (London: H.M. Stationery Office, 1938).
- Collier, P., *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It* (New York: Oxford University Press, 2007).
- Collier, P. and Gunning, J. W., 'Explaining African economic performance' *Journal of Economic Literature*, 47 (1999), pp. 64–111, 79.
- Collier, P. and Gunning, J. W., 'Why has Africa grown slowly?', *Journal of Economic Perspectives*, 13 (1999), pp. 1–22, 4.
- Cooper, F., *Africa Since 1940: The past of the present* (New York: Cambridge University Press, 2002).
- Cooper, F., 'Africa and the World Economy' in Cooper, F., Isaacman, A., Mallon, F., Roseberry, W., and Stern, S., *Confronting Historical Paradigms. Peasants, Labour and the Capitalist World System in African and Latin America* (Madison: University of Wisconsin Press, 1993).
- Cramer, C., Johnston, D. and Oya, C., 'Africa and the credit crunch: From crisis to opportunity?' *African Affairs*, 108 (2009), pp. 643–654.
- Deane, P., Colonial Social Accounting (New York: Cambridge University Press, 1953).

- Deaton, A., 'Commodity prices and growth in Africa', Journal of Economic Perspectives, 13 (1999), pp. 23–40.
- Durlauf S, Johnson P, Temple J., 'Growth econometrics', in *Handbook of Economic Growth*, Aghion P., Durlauf S. (eds) (Amsterdam; Boston: Elsevier, 2005) pp. 555–667.
- Easterlin, R. A., Growth Triumphant: The Twenty-First Century in Historic Perspective (Ann Arbor: University of Michigan Press, 1996).
- Easterly, W. and Levine, R., 'Africa's growth tragedy: policies and ethnic divisions', *Quarterly* Journal of Economics, 112 (1997), pp. 1203-50.
- Easterly W. and Levine, R., 'Tropics, germs and crops: How endowments influence economic development', Journal of Monetary Economics, 50 (2003), pp. 3–39.
- Engerman, S. L. and Sokoloff, K. L., 'Factor endowments, inequality, and paths of development among new world economies', NBER Working Paper 9259, October 2002.
- Englebert, P., 'Pre-Colonial Institutions, Post-Colonial States, and Economic Development in Tropical Africa', *Political Research Quarterly*, 53 (2000), pp. 7–36.
- Flint, J. E. and McDougall, E. A., Economic change in West Africa in the nineteenth century, in J. F. A. Ajayi and M. Crowder, ed., History of West Africa, II (Harlow: Longman, 1987).
- Gann, L. H., 'Malawi, Zambia and Zimbabwe', in P. Duigan and R. H. Jackson, ed., *Politics and* Government in African States (Stanford, California: Hoover Institute Press, 1986).
- Go, D. S. and Page, J., *Africa at a turning point?* (Washington, D.C.: World Bank, 2008).
- Good, K., Diamonds, dispossession & democracy in Botswana (Oxford; James Currey, 2008)
- Guinnane, T. W., Sundstrom, W. A. and Whatley W., History Matters: Essays on Economic Growth, Technology, and Demographic Change (Stanford, California: Stanford University Press, 2004)
- Hall, R., The High Price of Principles (Harmondsworth, England: Penguin Books, 1969).
- Harvey, C., 'The control of inflation in a very open economy: Zambia', Eastern Africa Economic Review, 3 (1971), pp. 40–64.
- Helleiner, G. K., Peasant agriculture, government and economic growth in Nigeria (Homewood, III: R.D. Irwin, 1966).
- Hill, P., Studies in Rural Capitalism in West Africa (Cambridge, England: University Press, 1970).
- Hillbom, E., 'Diamonds or development? A structural assessment of Botswana's forty years of success', Journal of Modern African Studies, 46 (2008), pp. 191–214.



- Hopkins, A. G., 'The New Economic History of Africa', Journal of African History, 50 (2009), pp. 155–77.
- Hopkins, A. G., An Economic History of West Africa (New York: Columbia University Press, 1973).
- Inikori, J. I., 'Africa and the globalization process: Western Africa, 1450–1850', Journal of Global History 2 (2007), pp. 63–86.
- International Monetary Fund (IMF), Regional Economic Outlook: Sub-Saharan Africa Weathering the Storm (Washington DC: International Monetary Fund).
- Jefferis, K., 'Botswana and Diamond-Dependent Development' in W. A. Edge and M. H.
- Lekorwe, eds., Botswana: Politics and Society (Pretoria: Van Schaik Publishers, 1998).
- Jerven, M., 'Accounting for the African growth miracle: the official evidence, Botswana 1965– 1995', Journal of Southern African Studies, 36 (2010c).
- Jerven, M., 'Random growth in Africa? A report on the quality of the growth evidence in East-Central Africa, 1965–1995', Journal of Development Studies, (2010b).
- Jerven, M., 'The relativity of poverty and income: how reliable are African economic statistics?', African Affairs, 109 (2010), pp. 77–96.
- Jerven, M., 'The quest for the African dummy: explaining African post-colonial economic performance revisited', Journal of International Development (2009).
- Jones, E. L., Growth recurring: Economic Change in World History (Oxford: Clarendon Press; New York: Oxford University Press, 1988).
- Klein, M. A., 'The slave trade and decentralized societies', *The Journal of African History*, 42 (2001), pp. 49–65.
- Law, R., From Slave Trade to 'Legitimate' Commerce: The Commercial Transition in Nineteenth Century West Africa (Cambridge, New York: Cambridge University Press, 1995).
- Leys, C., The Rise and Fall of Development Theory (Nairobi: EAEP; Bloomington: Indiana University Press; London J. Currey, 1996).
- Lovejoy, P.E and Hogendorn, J. S., Slow Death for Slavery. The Course of Abolition in Northern Nigeria, 1837–1936 (Cambridge and New York: Cambridge University Press, 1993).
- Maddison, A. (2009) Historical Statistics of the World Economy: 1–2006 AD, (Copyright Angus Maddison, 2009.http://www.ggdc.net/maddison/)
- Manning, P., Slavery, Colonialism and Economic Growth in Dahomey, 1640–1960 (Cambridge and New York: Cambridge University Press, 1982).

- Mauro, P., 'Corruption and growth', *Quarterly Journal of Economics*, 110 (1995), pp. 681–712.
- Miguel, E., Africa's Turn. (Cambridge, Mass.: MIT Press, 2009).
- Miguel, E. and Blattman C., 'Civil War', NBER Working Paper w14801, March 2009.
- Moradi, A., 'Towards an objective account of nutrition and health in colonial Kenya: a study of stature in African army recruits and civilians, 1880–1980', The Journal of Economic History, 69 (2009), pp. 719–754.
- Moradi A, Austin G, Baten J. Exploring the evolution of living standards in Ghana: an anthropometric approach. Paper Presented to the Economic History Society Annual Conference, University of Exeter, UK (2007)
- Murray, P., 'Zambia and the Future', African Affairs, 64 (1965), pp. 17–24, 23.
- Myint, H., 'The 'classical' theory of international trade and the under developed countries', Economic Journal, 68 (1958), pp. 317–337.
- Ndulu, B.J., O Connell S. A., Azam S. A., Bates R. H., Fosu A. K., Gunning J. W. and Njinkeu D. eds. The Political Economic of Growth in Africa 1960–2000 (Cambridge: Cambridge University Press, 2008).
- Northrup, D., Africa's Discovery of Europe 1450–1850 (New York: Oxford University Press, 2002).
- Nunn, N., 'Historical legacies: a model linking Africa's past to its current development', Journal of Development Economics, 83 (2007), pp. 157–175.
- Nunn, N., 'The long-term effects of Africa's slave trades' Quarterly Journal of Economics, 123 (2008), pp. 139–176.
- Nunn, N., 'The importance of history for economic development' NBER working paper. no.14899 (2009)
- Officer, Lawrence H. 'Five Ways to Compute the Relative Value of a UK Pound Amount, 1830 to Present,' Measuring Worth, 2008. URL http://www.measuringworth.com/ukcompare/.
- P. N. C. Okigbo, Nigerian National Accounts, 1950–57, Government Printer, Enugu, Nigeria, 1962.
- Pritchett L., 'Patterns of economic growth: hills, plateaus, mountains, and plains', (Policy Research Working Paper Series Number 1947: The World Bank, 1998).
- Roberts, A. D., 'Notes towards a financial history of copper mining in Northern Rhodesia', Canadian Journal of African Studies, 16 (1982), pp. 347–359.



- Rodrik, D., Subramanian, A. and Trebbi, F., 'Institutions rule: the primacy of institutions over geography and integration in economic development', NBER Working Paper 9305, October 2002.
- Sachs, J. D., 'Institutions don't rule: Direct effects of geography on per capita income', NBER Working Paper 9490, February 2003.
- Sachs, J. D. and Warner, A. M., 'Sources of slow growth in African Economies', *Journal of African Economies*, 6 (1997), pp. 335–376.
- Samatar A.I., An African Miracle: State and Class Leadership and Colonial Legacy in Botswana (Portsmouth, NH: Heineman, 1999).
- Sender, J., 'Africa's economic performance: limitations of the current consensus', *The Journal of Economic Perspectives*, 13 (1999), pp. 89–114).
- Shaw, M., 'Zambia: dependence and underdevelopment', *Canadian Journal of African Studies*, 10 (1976), pp. 3–22.
- Smith S., 'An extension of the vent-for-surplus model in relation to long-run structural change in
- Nigeria', Oxford Economic Papers, 28 (1976), pp. 426–46.
- Stoever, W., 'A business analysis of the partial nationalization of Zambia's copper industry', *Journal of International Business Studies*, 16 (1985), pp. 137–163.
- Szereszewski, R., *Structural Changes in the Economy of Ghana*, 1891–1911 (London: Weidenfeld and Nicolson, 1965).
- Temple, J., 'Initial conditions, social capital, and growth in Africa', *Journal of African Economies*, 7 (1998), pp. 309–347.
- Tosh, J., 'The cash-crop revolution in tropical agriculture: an agricultural reappraisal', *African Affairs*, 79 (1980), pp. 79–94.
- Thornton, J., *Africa and Africans in the Making of the Atlantic* (Cambridge and New York: Cambridge University Press, 1992).
- Walter, R., *How Europe Underdeveloped Africa* (Washington, DC: Howard University Press, 1981).
- Woolcock, M. and Szreter, S. and Rao, V., 'How and why does history matter for development policy?', BWPI Working Paper 68, January 2009.