



CAPITALISM IN PRE-COLONIAL AFRICA
A REVIEW

African economic history working paper series

No. 27/2016

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ISBN 978-91-981477-9-7

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The African Economic History Network is funded by Riksbankens Jubileumsfond, Sweden

Capitalism in pre-colonial Africa: a review

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To what extent did capitalism come into being in Africa before 1850? If by capitalism we mean the production of goods for exchange by capitalists who combine their own capital and land with labor bought from free workers without land, then the accumulative historical evidence tells us that only to a limited extent had capitalism emerged before 1850, and it was most certainly not the dominant system of production in Africa (Iliffe 1983). This does not mean that there was no production for the market. Nor does it imply that there was no wage labor, or that exchanges of capital did not take place. Finally it does not mean that there was no economic growth in Sub-Saharan Africa before 1850. As will be analyzed here, markets did exist, there were some wage labor and there were means of exchange that facilitated some economic growth, though growth mostly occurred on the extensive margin.²

This chapter examines the long 'pre-colonial' African economic history up to 1850 (Reid 2011). This encompasses the time both before and after the rise and fall of the Atlantic slave trade (and the trans-Saharan and Indian ocean slave trades). The term 'legitimate commerce' denotes the exchange of goods other than slaves, and is usually used to denote

¹ This paper is an early version of the chapter published as 'The Emergence of Capitalism in Africa' in Cambridge History of Capitalism edited by Larry Neal Cambridge University Press, 2014.

² Following Jones (1983), Austin (2008b) and Jerven (2010a) among others, extensive growth is based on expansion of the quantity of inputs in order to increase the quantity of outputs, in contrast to intensive growth. Extensive growth is thus likely to be subject to diminishing returns and is therefore often viewed as having no effect on per-capita income in the long-run.

the period of commerce following the abolition of the slave trade in 1807 (Law 1995). The slave trade is of course crucial to understanding the relationship between external trade and the emergence of capitalism in this period. Moreover, the question of labor coercion is crucial to the question of the emergence of capitalism, as it pertains to labor markets.

However, goods were traded for external and domestic markets both before and alongside the slave trades – so although the issue of slavery remains central to the historiography of this period, this chapter goes well beyond a discussion of the slave trades.

Before setting the stage with some considerations of long term economic growth and the expansion of markets in pre-colonial Africa, it is worth saying a few words about the periodization and regional focus in this chapter. Reflecting the state of the literature on capitalism in Africa this chapter is biased in its coverage in at least two ways. First, more is written about pre-colonial markets, production and exchange in Western Africa, than in the Central, Eastern or Southern Africa. The focus here is on Sub-Saharan Africa, but on balance, more material from West Africa is discussed than from other regions, quite simply because the development of commerce between Europeans and Africans are better documented for this region. The second bias is again shared with some of the literature in that there is a focus on external economic relations. Such a focus is justified because a discussion of capitalism is intimately linked to a discussion of international trade, and here we will fundamentally focus on how the growth of interaction with external markets affected the expansion and function of local markets.

That means that I will only briefly touch upon very early, long term and slow expansion of African societies, the emergence of food producing communities and the impact of metals, or other central developments in African history before roughly 1500. These topics have been well discussed and synthesised elsewhere (Iliffe, 1995, Austen, 1987). I will discuss the basic constraints and possibilities that 'initial conditions' such as geographical and demographic factors had on technological and institutional change in the fourth section of this chapter.

The title chosen here: 'Emergence of African Capitalism' is the same title as the one chosen for the publication of John Iliffe's four essays on capitalism in Africa (1983). In his four essays, Iliffe focused mainly on the period of colonial rule and the question of rural capitalism, then on the choices of development model and ideology in independent Africa in the 20th century. In his brief first essay, he did analyse the state of 'indigenous' capitalism in Africa in the mid-19th century, but the relationship between capitalism and economic history before 1850 was not discussed in any great detail. Thus, this chapter makes two central contributions. First, it focuses on the period before the mid-19th century. Second, it re-emphasises the importance of international markets in interaction with local markets.

This chapter is organized in the following way. First it discusses the extent to which economic growth existed in Africa before 1850. According to most aggregate accounts Africa was stagnant, but recent scholarship shows that there was significant economic expansion in the pre-modern era. While growth occurred particularly on the extensive margin, driven by population increases, Africa also had recurring periods of intensive economic growth with increases in per capita income (Jones 1988, Jerven 2011). In the

second section of the paper the relationship between external trade, exports, and economic growth is analysed. The discussion then moves to the importance of the market as a institution in pre-colonial Africa. Karl Polanyi and others have argued that pre-colonial prices were set not by market forces but by custom or command (1966), but despite North's fear that the claims of substantivism were unfalsifiable (1977), Robin Law and others have documented that markets did exist according to formal definitions (Hopkins 1973, Law 1992, Austin 2005, Latham 1971, 1973). The third section discusses the literature on domestic markets in pre-colonial Africa.

To demonstrate the existence and functions of markets in pre-colonial Africa is not the same as the question of factor markets. Markets for the factors of production: land, labor and capital were constrained in pre-colonial Africa. Such markets form as a response to scarcity (Austin 2009b). With some exceptions, pre-colonial Africa was typically characterised by a relative abundance of land and scarcity of labor. Thus, markets for land were limited, and labor was recruited with coercion – thus the importance of the institution of slavery in pre-colonial Africa. Meanwhile, means of exchange that facilitated long distance trade and enabled savings did exist (Austin 2009b, 38), but a relative absence of intermediation meant that effective markets for credit and capital for third parties did not form. Thus, we discuss to what extent there were institutional constraints on economic development in pre-colonial Africa.

Low population densities, high transport costs and scattered areas where cultivation of economic surpluses was possible were among the factors that constrained state formation and state centralization in pre-colonial Africa (Herbst 2000, Austin 2008 and Iliffe 1995).

The study of the emergence of capitalism in Africa is then linked closely to what extent institutions that governed exchange and production did emerge, and to what extent these were enforcing the “rules of the game” (North 2005). It is beyond doubt that low population densities and geographical factors hampered the growth of markets in pre-colonial Africa. As pointed out already, the corollary is that states and centralized institutions were similarly constrained. A central question then is to what extent institutional shortcomings, such as a lack of a coordinating power to secure property rights either in land for cultivation or in goods for exchange affected the effectiveness of markets and therefore economic growth. The question of institutional constraints will be addressed in fifth section of this paper, but first the record of economic growth in pre-modern Africa needs to be established.

Economic growth in pre-colonial Africa

The study of African economic growth is not only constrained by low data quality, but also by low availability of data (Jerven 2013). The study of economic growth is often supported and aided by the availability of a reliable dataset of GDP per capita estimates. Such estimates have only been published regularly by national statistical offices since the Second World War. For most other regions of the world, economic historians have provided historical national accounts, but for the majority of African economies, such estimates are not available before 1950 (Jerven 2012). The Angus Maddison dataset only provides a few single year estimates of GDP per capita for Africa before 1870 (Maddison, 2003).

According to these numbers, which includes North Africa and South Africa, the continent’s

average growth in the pre-colonial period growth was negligible, or indeed negative. The data shows a decline from 472 dollars per capita in year 1, to 420 dollars per capita in 1820, and finally a marginal increase to 500 dollars in 1870.

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. Presumably the decline from year 1 parallels the decline of the Roman Empire in Northern Africa, whereas the marginal increase in the late 19th century is driven by recorded export growth in Western Africa.

These data paint a picture of steady stagnation, but aggregating Africa in this manner does not make much sense. They hide large regional diversity and skip across large periods of time. The slow growth rates may seem incoherent with what is otherwise known of economic and political change taking place during this period. . There were large flows both of factors of production and commodities, both internally and externally, during the Atlantic Slave trade and the cash-crop revolution. Kingdoms rose and fell; colonial empires were established, railways and mines developed and yet the GDP per capita measure barely blinks (Jerven 2011a).

Part of the reason is that these growth ‘data’ are only to a limited extent based on historical evidence. These estimates rely first and foremost on assumptions and projections. Gareth 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 (Austin 2008a, 1002), because "all aggregate figures for the population of pre-colonial sub-Saharan Africa, or its major sub-regions, are 'guesstimates' based on backward projection from colonial census reports" (Austin 2008b, 590).

The lack of reliable population estimates for large parts of historical Africa, and sub-Saharan Africa in particular, thus continues to hamper long-term analyses of African and economic development. Wrigley neatly summed it up 'One thing, perhaps only one thing, is certain about African historical demography. It takes a bold and determined scholar to embark on the study of numbers, and of changes in numbers, in countries where until very recently nobody was even counting, let alone recording the results' (Wrigley 1981). For the pre-colonial period the direct empirical evidence is very thin indeed. Thus, while it is possible to use a demographic lens to discuss general patterns of transformation, expansion and movements of societies and systems of production based on linguistic and demographic evidence (Iliffe 1995), it is very difficult indeed to be specific about rates of economic change in pre-colonial Africa.

A unique quantitative study work based on baptismal records from missionaries in the Kingdom of Kongo exists (Thornton 1977). His finding was that the population in Kongo for the period 1650-1700 was much lower than commonly assumed (ca. 500,000 compared to two million), thus suggesting that the civil wars and slave trades of the 17th and 18th century had a much less disastrous impact on populations than previously thought. The

colonial censuses are in turn widely discredited (Kuczynski, 1937, 1948, 1949), and therefore not used as authoritative benchmarks (Fetter 1987), and while the population in post-colonial states Africa are better recorded, census taking has been very uneven, irregular and incomplete (Jerven 2013, Tabutin and Schoumaker 2004). Thus, while it is the only viable option, backward projections based in both the colonial and post-colonial period remain hazardous.

Recently, Patrick Manning, one of the key participants in the scholarly exchange on the population impact of the slave trade, has boldly rekindled the debate on the African population database, with a re-estimate of the total colonial and pre-colonial population for Africa (Manning 2010). Manning suggests that pre-colonial populations around 1850 may have been 50 percent higher than previously estimated. Even with such bands of error, it seems inescapable that for comparative historical purposes most areas of pre-modern Africa were sparsely populated (Austin 2008b), and that furthermore that factor ratios would imply that the region is most areas was characterized by an abundance of cultivable land in relation to labor (Austin 2009b). But the large margins of error means that it is not possible to use population growth as a direct proxy for estimating the impacts of slave trades and colonial rule, simply because the direction or rate of change in population has been vigorously debated, but it has been difficult to settle these debates with hard facts (Jerven 2013).

Consequently, the study of growth in Africa, particularly during the pre-colonial era, but also during the colonial and to some extent during the post-colonial period, must make use of circumstantial evidence and interpret visible trends in trade, population and taxation to

make conjectures on rates and direction of economic change. The average GDP data presented here, may well be within the reasonable range of guesses one could make for such a long time period, but it is perhaps of greater interest to see what happened to particular polities, states and regions, and also to go beyond quantitative evidence and consider qualitative evidence on economic growth in pre-colonial Africa.

To begin a discussion of economic growth in Africa before 1850, it is useful to distinguish between intensive and extensive economic growth (Jones 1988). Extensive growth is a simple expansion of production by adding more factors of production, which is essentially observed by historians as more people using more land. It is this focus that is applied in John Iliffe's demographic interpretation of Africa's long-term history (1995). The study of modern economic growth focusses on intensive growth. It refers to the process of getting more for the same, and thus is the type of economic growth that is associated with technological change. Such changes therefore also increase living standards, and if properly recorded and measured, could be summarized as sustained increases in GDP per capita (Kuznets 1966).

Agriculture has been and remains the main economic activity, and until the advanced stages of the cash crop revolution starting in the late 19th and running into the 20th century food production was the mainstay of this sector. The archaeological evidence on origins and diffusion of food production is contested, but the origins of the food production in West Africa did not lag far behind centers of origin in the Near East (Hopkins 1973, 29, Iliffe 1995, 12-17), though with different patterns of spread in the savannah and forest regions. The spread of food production from the West African forest is associated with the adoption

or invention (another contested point) of iron-working peoples, specifically Bantu speaking groups (Austen, 1987, 13). Food production with iron tools is thought to have spread with the Bantu migrations from West Africa (about 1000 BC) as far south as contemporary Namibia, as far inland as to borders of contemporary Southern Sudan and eastwards towards the Great Lakes region and beyond towards the Indian Ocean (Iliffe 1995, 17).

As noted, growth occurred mostly on the extensive margin. Relative abundance of land to labor means that economic growth was occurring by putting more land into production.

There were exceptions to this rule (thus affirming a rational choice interpretation).

Intensive agriculture (defined as adding capital to land, chiefly by capitalization of labor), did occur in some places in pre-colonial Africa. With a few geographical exceptions pre-colonial Africa was severely under-populated. The commonly noted exceptions are found in the areas today covered by Ethiopia, Rwanda, and Burundi, where also intensive techniques and technologies, such as the plough was adopted, in addition to locations with particularly good transport access (Austin 2009b). Furthermore, although land was not physically scarce, it could be so in periods for some populations. Disruptions arising from the slave trade meant that at times some groups in West and Central Africa had to turn to intensive production methods (Hawthorne 2001). Similarly, it has been documented that ecological pressures and stress deriving from warfare led to “islands of intensification” at different places and times in African history (Widgren and Sutton 2004).

The most important sources of intensive growth in the pre-modern period were the introduction of new cultigens. Food crops such as cassava, banana and maize made large impacts on productivity when introduced (Austin 2008b, 588). Similarly, crops primarily grown for exports, such as cocoa and tobacco, could be interpreted as growth arising from

introduction of new technologies and investment. As emphasised by Jared Diamond (2005), cultigens travels easier across parallel latitudes, and thus the major innovations here arrived to Africa via external contact over the oceans. The first gains were introduced through the Indian Ocean trade with the imports of Asian rice, Asian yams and what grew to be a very import food crop – the banana-plantain family. This occurred before the Atlantic trade. Crops like maize, cassava, groundnuts were introduced from the Americas over the last five hundred years, and became the most important food crops in contemporary Africa (Austin, 2008b, 607).

Another important stimulant of economic growth is market integration. When markets integrate, specialization takes place, opportunities for expansion arises, and growth occurs as economies of scale make production more efficient. Moreover, an expanded market may allow the use of underutilized factors of production, such as land and labor, to generate new production for the market. Growth arising from production for local and regional markets and even long-distance trade goes back many centuries. Herein lays the primary challenge to Diamond's contention of Africa's geographical disadvantage (2005). Vertical diversification proved very beneficial for early economies, who found opportunities for continued trade between different ecological zones. According to Hopkins, the most important trade routes went along the south and north axis, where for instance the people of the savannah traded livestock, salt, dried fish with people of the forest zones in exchange for kola nuts, slaves, ivory and ironware (Hopkins 1973: 59-60). However, these opportunities were sometimes constrained by the availability of transportation routes.

It is worth re-stressing that it is not as if all agricultural production in the pre-modern era went towards own-production, local markets existed for agricultural goods. In addition markets for handicrafts, textiles, metals and currencies were all widespread and important in the pre-colonial era (Austen 1987). Moreover, the interaction with markets precedes the slave trade and goes beyond the Atlantic trade. Internal markets in Northern and Sub-Saharan Africa were linked by the trans-Saharan trade (Austen 2010). On the Horn, Eastern and Southern Africa caravans linked with the vibrant Indian Ocean trade (Sheriff 1987, Reid 2002). Nevertheless, the main source of economic growth during this period was arguably external trade.

Exports and Economic Growth in Pre-Colonial Africa

Harms, writing on the Zaire Basin in central Africa stressed the vigour of local markets, while emphasising the importance of external trade (1981). Equatorial African society and economy was not static. European traders were only able to come to the coast, and the extent of the trade that has been observed is testament to the existence of the basic institutions necessary for trade and capitalistic behaviour (Harms 1981: 234; Latham 1971, 1973). However, it is still argued that expansion in trade and further investment in production would not have been possible without the existence of an external market. Thus, the emphasis on external factors in this economic transformation is in Harms view still justified.

However, as has been frequently pointed out, until the 19th century only a small part of the territorial gross product entered external trade (Curtin 1975). In a monograph marshalling an impressive amount quantitative evidence to analyse the pre-colonial economic history of Senegambia, *Economic Change in Pre-colonial Africa*, Philip Curtin does not discuss external trade until the final chapter, and only devotes less than ten percent of the pages to this topic. This was a deliberate choice: “External trade usually comes first in writing about African economic history, mainly because the historiography tradition was laid down by Europeans who first saw Africa through the commerce that linked the two societies. This time it has been left till last” (Curtin, 1975 p. 309).

Curtin left the discussion of external trade for last presumably to maintain a perspective in which Senegambian agency is central in the account of historical change, but also because he argues that this is the appropriate order of importance and analysis. According to Curtin, only a small part of territorial gross product entered external trade, and it only makes sense to analyse these trade flows and their relative importance once the domestic conditions for production of export commodities and slave trade have first been discussed in detail. The relative importance of internal markets and external markets in terms of contribution to GDP is hard to pinpoint with much accuracy.

It has been guessed that the export economy only accounted for 15 percent of the total Nigerian economy in 1900 (Helleiner 1966). Similarly, it was suggested that as much as 90 percent of all production remained outside the cash based coastal economies in West Africa in the middle of the 19th century (Flint and McDougall 1987). With these parameters in mind, it is easier to make some judgements about how expansion in external markets made

an impact on exchange and growth in domestic economies. While the growth rates derived from observing external market growth should not be interpreted literally, they do testify to a rapid export growth that may have facilitated further growth in the domestic economy. However, less is known regarding the exact effect and the relative importance for growth of the local economy (Cooper 1993, 91-92).

The basic heuristic device that has been used to analyse this process is the dual economy models from classical economics. The vent-for-surplus model assumes that there was a surplus of factors of production, particularly labor and land, and that the world market provided a vent for these factors (Myint 1958). Thus when we see increased export volumes, the opportunity cost of this growth is zero. The assumption of modern sector growth being an absolute gain to the aggregate economy is also made in the classical dual economy model proposed by Arthur Lewis (1954). The main distinction is that in the Lewis model, land was assumed to be scarce, and marginal productivity of labor in the rural sector was zero. In the vent for surplus model, both land and labor are abundant. In effect, both models assume the opportunity cost of modern sector growth and increased export volumes is zero. Scholarship has in different ways contested these assumptions and by extension the validity of the model applied to Africa, particularly for the colonial period (Austin 2008b).

It has been pointed out that labor was only seasonally abundant and was very scarce in certain periods – particularly in areas outside of the West African forest belt (Tosh 1980). Furthermore, the production of exports involved both innovation and capital; that is, investment in new technologies, and expansion in production was made possible through

labor migration (Berry 1993, Hill 1963). Most importantly, the opportunity costs of engaging in production for exports were not necessarily zero, as they could have an impact on food quality and security, the division of labor, and on local manufacturing (Smith 1976). Though sometimes and some places the assumptions of the vent for surplus model largely holds (Martin 1988), these, and other empirical contributions, remind us that when we see aggregate modern sector growth it is not necessarily equivalent to observing aggregate economic growth.

To illustrate the importance of external markets, let us turn to the experience of pre-colonial Dahomey. The Kingdom could be considered typical for West and Central African coastal states, many of which were deeply integrated in the Atlantic economy at this time. According to Manning, two million slaves were exported from the West African region through the Kingdom of Dahomey between 1640 and 1865 (Manning 1982). Like Asante and Oyo, Dahomey grew from a small state to a major kingdom in this period (Austin 2008a, 1005). This pattern was not replicated throughout West Africa, however. Some states chose to disengage from the slave trade, like Benin and Kongo, and in other areas low political concentration prevailed (Klein 2001). 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 (Northrup 2002, 56; Behrendt et al. 2012). Europeans traders generally did not have the means to coerce African leaders to sell slaves (Thornton 1992). 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 labor 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” (Inikori 2007, 84). 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 (Nunn 2008). The latter work tends to understate the economic motivations for states engaging in the slave trade, and has not explicitly dealt with the implications of short term gain versus long term effects (Austin 2008b).

The data presented by Patrick Manning span from the end of the slave trade and into the period of ‘legitimate commerce’. A central thesis, suggested by A. G. 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’ (1973). It did not always mean the end of slavery as a mode of production, as documented by Paul Lovejoy and Jan 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”(1993,1). 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 (Flint and McDougall 1987).

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 (Manning 1982, 3). 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 (Manning 1982, 4). 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 labor that could be captured in other domestic production (Manning 1982, 12). 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 (Austin 2008b, 1005).

Table 2: Income and Growth, Dahomey 1800 – 1950

	Real National Income Growth avg. annual percent	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.

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', referring to the expansion of trade between 1807 and colonization (Law 1995). Hopkins (1973) suggested that a "crisis of adaptation" occurred as trade shifted from slave to legitimate trade. To what extent this

important change in external trade constituted a "crisis of adaptation" for African rulers has been a central historiographical question. The thesis was that the shift undermined ruler's control over the income from trade and thus that the ending of the slave trade resulted in economic and political upheaval and dislocation that ultimately resulted in European intervention and colonization. Hopkins' view has not been universally accepted. It is recognized that changes did occur as a result of the shift from slave to legitimate commerce, but that institutions adapted (Law 1995), and that therefore that the transition to legitimate trade constituted more of an evolutionary, than a revolutionary process.

The term 'cash-crop revolution' refers to the colonial period. 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 at the end of the 19th century was a different matter and involved African peasants. Polly Hill argues that they should rather be called 'capitalists' (Hill 1963). Her insight was land and particularly trees in cocoa farming, should be considered considering capital assets. The growth in Dahomey recorded in Table 2 was underpinned by palm oil and palm kernel exports. If we take Manning's data seriously it would mean a tripling in GDP per capita during a half a century of export based growth (Manning 1982, 17).

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'. However, as has been pointed out it was not simply a reallocation of previously idle resources, labor and land, but the evidence reviewed here points further to

the existence of a functioning and expanding domestic market in interaction with the world market. The slaves that were exported were often procured in internal markets (which could be considered factor markets), and slave prices changed in response to supply and demand (Lovejoy and Richardson 1995). Moreover, the organization of the slave trade meant that an elaborate system of credit was developed (Lovejoy and Richardson 1999, Austin 2005, Latham 1973). The extent and impact of this spurt of growth observed in response to external forces in Dahomey must of course be moderated by an appreciation of the drain on labor supply – thus the growth had negative externalities for other activities and more importantly for other surrounding areas that supplied the slaves.

The presence of markets in pre-colonial Africa

As Austin reminds us, six decades ago it was generally assumed that no markets besides for slaves for export across the Atlantic and Sahara existed in pre-colonial Africa (2009b, 23). However, research to date has established that while they emerged, “the forms of property, and some of the other institutions with or within factor markets operated were different from those which spring to mind in European history, such as regular wage labor, land titling and financial intermediation” (2009b, 24). So while markets and the institutions that governed them were distinct, it has been amply demonstrated, from the pioneering work of Dike (1956), Latham (1971), and Hopkins (1973) that the operation of these markets can be explained and analyzed in terms of market economics.

This broke with perspectives from orthodox Marxists who generally posited that economic rational behaviour was specific to capitalist societies. The classic statement of the substantivist position was provided by Karl Polanyi, who also made an empirical contribution with a study of the aforementioned Kingdom of Dahomey (1966). In *Markets in Africa*, Bohannon and Dalton used three categories to classify societies. First there were marketless societies, then there were societies in which markets did exist, but remained peripheral, and finally there were market economies. Bohannon and Dalton applied the two first categories to African societies. Substantivism inspired and provoked historical research on markets in Africa for years after (Good 1973). The question was not only an empirical one, as in this chapter where it concerns whether a market economy had emerged or not in pre-colonial Africa, it also had great methodological significance. If markets were peripheral, and not fundamental, then production decisions, choice of techniques and institutional design could not have been explained with reference to rational choice or more generally market behaviour.

Already a decade later, Hopkins (1973, 52) could state that “[Bohannon and Dalton’s] claim that peripheral markets do not influence market is at variance with the evidence. The extent to which market activity failed to mobilise the factors of production fully is better explained in terms of economics (technological limitations and constraints on demand) than in terms of social controls based on anti-capitalist values”. Hopkins argued that although some markets were periodical rather than continuous, this was explained by the seasonal volume of traded goods and local purchasing power. Seasonality did not mean that these markets functioned with different motivations (Hopkins 1973, 53-55). Contrary to claims put forward by Hodder (1965), local markets had not arisen simply because of

long-distance trade. Local markets served local exchange needs, and were further stimulated by long-distance trade, not only in West Africa. Gray and Birmingham (1970) established that the same pattern was observable in Central and Eastern Africa. Thus, Hopkins could draw the conclusion that the “indigenous distributive system was not made redundant by the ‘impact of modern capitalism’. On the contrary, the skill, efficiency and adaptability of local trades assisted the rapid expansion of internal trade during the colonial era”.

The most explicit tests of substantivist propositions were conducted later (Lovejoy 1982, Law 1992), and focussed on the claims of ‘ports of trade’ and ‘price-fixing’. Lovejoy investigated the validity of the concept of ‘ports of trade’ for 19th century Kano, and Salaga, two important commercial centers in the Sokoto Caliphate and the Asante Kingdom respectively. Whereas, Polanyi’s model of administrated trade held that prices would be fixed and not regulated by supply and demand (which he specifically argued also applied to caravan trading), Lovejoy found that while there was a separation between local markets and long-distance exchange so that the markets were not fully integrated, the price structure was not fixed in the way that Polanyi thought (Lovejoy 1982, 277).

Polanyi had specifically argued that Dahomey was not a market economy, and rather that the state administered trade in order to maintain traditional structures, and not for profit (1966). Again, the key testable proposition was price stability, or that prices were not responding to supply and demand. Law’s careful study of prices and currency markets in Dahomey from the 17th century till to 19th century clearly demonstrated that prices changed, in both local and European markets. His study showed that the local currency of

cowry shells experienced great price inflation, caused by excessive European imports of cowries in the 19th century. Even more striking, Law's study revealed that while prices for foodstuffs were increasing during this period, wages collected by local porters were kept stable and thus real wages were falling. State intervention thus did not keep the market from operating, and neither did the state intervene to change wages with respect to a notion of equity as Polanyi would have us expect (1992). In sum, markets did exist. The term 'subsistence economy' has been proven to be a misnomer, even food crops were exchanged on local markets, higher end consumer goods were exchanged in regional trade, and these markets linked with, and benefitted from external market growth.

Factor Markets in pre-colonial Africa

While there were markets with responsive prices in pre-colonial Africa, a full-fledged capitalist market system implies factor markets for labor, land, and capital as well as markets for final consumption goods and services. As Iliffe reviews, in the mid 19th century there existed a capitalistic sector of exchange. It is particularly well documented in the savannah region of West Africa, which was well linked with in trade with Northern Africa (Iliffe 1983:5). The merchants of the savannah used imported currencies of silver and cowrie shells (Johnson 1970), and systems of credit and commercial papers were also in use to facilitate long distance trade across the Sahara (Iliffe 1983:5).

However, this capitalistic sector of exchange existed alongside a production sector that still in the 19th century could be characterised as predominantly pre-capitalist. A true proletariat, according to the orthodox definition, exists only when the labor is alienated

from the means of production. Marxist scholarship in the 1970s searched for the African mode of production', and sought to explain whether Africans states predominantly relied on feudal, tributary, slave or other modes of production (Freund 1985). Tracing the emergence of capitalism in pre-colonial Africa has tended to focus on the prevalence of wage labor and whether this was a characteristic component of production.

The relative abundance of land to labor explains the prevalence of slavery in pre-colonial Africa. Consistent with the Nieboer's (1900) hypothesis as formalized by Domar (1970), where land is abundant and labor and capital are scarce, long-term hiring of free labor is absent because the wage rate would be too high for employers to accept, and coercion, specifically slavery emerges as the dominant form of labor (Austin 2009b). Only where urban centers formed, wage labor appeared, especially when crafts production was associated with it. The most prominent example of this is the textile production and cloth dyeing in Kano, Nigeria (Shea 1975).). In East and Central Africa, however, wage labor in crafts production was not common (Iliffe 1983). There were some examples of wage labor in crafts production, and where capitalism had most clearly emerged in pre-colonial Africa, it was in relation to trade. Some of this trade was linked to external trade, but equally important was long- and shorter-distance trade within the continent.

Agricultural production would normally rely on family labor. Larger estates in West and East Africa existed, but these made use of slave labor. Use of slaves was widespread, particularly in the vicinity of trading centers (Iliffe 1983:6). Much of the hired labor in this period was related to long-distance trade. In order to move the goods for trade, porters were hired. This was prominent in the trans-Saharan trade—in the trade caravans

connecting West and Central Africa with the Atlantic coast, as well as in the Swahili-organized trade caravans in East Africa (Rockel 2006). Caravans also employed full-time porters. Slaves also formed an integral part of this activity because the trade in other goods coincided with the slave trade. Slaves could carry commodities and be sold at arrival. Agricultural production would normally rely on family labor. Larger estates in West and East Africa existed, but these made use of slave labor. Use of slaves was widespread, particularly in the vicinity of trading centers (Iliffe 1983:6). Bundy documents an anomaly on the African continent in the 19th century South Africa, where African capitalist farmers emerged in response to the market demand created by the European settlements at the Cape (1979). As in the case of the previously discussed commercial cocoa production and palm oil in West Africa, these are movements towards rural capitalism that belongs to the latter half of the 19th century.

Rural capitalism emerged in West Africa with the shift from the slave trade to legitimate trade on the Atlantic coast (Austin 2009a). This shift preceded colonial rule. Before and under colonial rule there was an expansion in production of primary products for exports. This could be considered rural capitalism, not because of its reliance on wage labor—although that also was featured—but rather because it entailed the investment of borrowed or saved capital for expansion in production for a market (Hill 1963). New land was bought and cleared, and investments were made in perennial crops. This expansion was characteristic in West Africa in the production of cocoa, but it also occurred simultaneously in other crops (for example, coffee, cotton, tobacco, palm products, kola nuts, and groundnuts) and in other areas (South, Central, and East Africa). In the latter half

of the 19th century, as factor ratios changed, and land became scarcer, property rights did develop (Austin 2007).

However, before the cash-crop revolution that occurred in the late 19th century and continued into the 20th century, cultivable land was relatively abundant in pre-colonial Africa, and consequently it is hard to find any evidence of a market in cultivation rights (Austin 2009b, 33-34). It has been documented that land was available for rent, though not for purchase, for immigrant farmers (Austin 2005). Generally, rents for land was the exception, and natural rents could be captured from controlling specific natural resources, such as gold, or access to grazing lands in arid regions (Johnson 1976, Austin 2009b, 34).

As already touched upon, lack of financial intermediaries meant that credit was not widely available, and when it was, interest was high (Austin 2009b, 35-36). A lack of market in land also meant that it could not be mortgaged, but credit or security could be taken in the form of pawns or hostages. Lovejoy and Richardson has documented how this system keeping hostages facilitated the slave trade in at Calabar and Bonny (Lovejoy and Richardson, 1999 and 2004). This meant that European traders could extend credit to slave merchants at the coast. Hostages were kept as security, and slavers could venture inland to purchase and procure slaves.

Constraints: Factor Endowments, Technology and Institutions

It was tempting, on the basis of the data presented in the first section on economic growth to dismiss Africa's economic past as a chronic growth failure. Indeed, this may also seemingly make sense judging by Africa's relative poverty today. The link between

economic growth and income made in the economic growth literature is fairly straightforward: low income today must be a result of a lack of income growth in the past. If one accepts a linear understanding of economic growth, the next logical step from this stylized fact of a chronic growth failure is, and has been, to concentrate research on explaining the persistence of low incomes in African economies. By making almost exclusive use of statistics that show average growth over time, the literature has not explained periods of growth and stagnation, and by extension, since most poor economies have displayed slow growth on average, explaining slow growth has been conflated with explaining low income (Jerven 2010b).

This 'compression of history' (Austin 2008a) has biased the evaluation of the underlying growth constraints in Africa. Specifically, such analysis has tended to overstate the extent to which African economies were trapped by growth hindering institutions (Acemoglu, Johnson and Robinson 2001, 2002 and Acemoglu and Robinson 2010, 2012). While growth in pre-colonial Africa was not triumphant, there were growth episodes. These were mainly rooted in trade and the world economy, but this growth was only possible due to a reorganization of factors of production, a combination of investment and technological growth that in turn also led to institutional change. The growth episodes raise questions about the extent to which pre-colonial institutions were growth inhibiting, and furthermore raise the issue to what extent, whether initial conditions, such as geographical factors and factor endowments, were indeed shackling economic growth in pre-colonial Africa.

It is of course important to note that geography should not be solely considered as an 'initial condition'. Resources condition changes partly because of human responses to them. So that for instance as Austin (2008b) has argued, the fact that Africa exported slaves should not be considered exogenous institutional change, it was a response to the resources and techniques available, as well as to overseas demand.

If one accepts in a rational choice interpretation of history then also the choice of technology, defined as innovation rather than invention, was typically conditioned by the environment. An illustrative example is the wheel, for only in places where there were draught animals and a landscape that allowed the building of wide roads did it emerge as an important new technology. The wheel was well known, but not adopted in West Africa (Law 1980). The implication is that the rationality of choices regarding technology, institutions or production techniques is dependent on the conditions under which these choices were made. In his economic history of pre-colonial West Africa, Antony Hopkins noted that "comparing the natural resources and climates of different parts of the world in order to draw conclusions about whether they stimulated or retarded the economic progress of particular societies is a tempting but unprofitable exercise—rather like trying to decide if life is more difficult for penguins in the Antarctic or camels in the Sahara" (1973, 13-14). Issues such as the choice of production techniques and the level of investment in physical and human capital need to be evaluated within specific environments and local conditions, a discussion that will be extended in the fourth section of the paper. To begin with the question of interest here is not whether capitalism failed or succeeded, but rather to trace its incomplete emergence before 1850, thus a different approach to economic growth, markets and institutions is required.

Jack Goody made the point that the crucial difference between Africa and Eurasia does not lie in the absence or presence of markets, and furthermore, a recurring theme here, the concept of non-monetary economics is not applicable to pre-colonial Africa. In his evaluation of the mercantile system, parts of Africa were not dissimilar to Western Europe in the same period (Goody 1971; 22-24). In his comparative study of Feudalism, Goody argues that the crucial difference was that of the plough. Without the plough and livestock no system of tribute similar to that of feudal systems in Europe developed. In turn this explains the lack of centralized states in pre-colonial Africa. These states were not able to withstand colonization in the late 19th century. Again, Ethiopia is the exception that confirms the rule, as the Ethiopian army was able to defeat the Italian forces at Adwa in 1896.

Daron Acemoglu and James Robinson ask why farmers in the pre-colonial kingdom of Kongo in Sub-Saharan Africa did not adopt the plough. Their answer is because of the institutions or that “they lacked any incentives to do so” (Acemoglu and Robinson 2012, 61). More specifically, Acemoglu and Robinson argue that it was the fear of expropriation of crops, output and manpower by an absolutist king that took away incentives for productive investment. The slave trade, colonial rule, and the post-colonial regime of Mobuto all contrived to keep this region poor, and therefore, “The interaction of economic and political institutions five hundred years ago is still relevant for understanding why the modern state of Congo is still miserably poor today” (p. 90).

This rather general statement does undoubtedly have some truth in it, but it is generally conceded that the political institutions were not the primary factor explaining the slow or

lack of adaptation of the plow in Sub-Saharan Africa. In the tropical forest zone, including the Congo Basin, the prevalence of trypanosomiasis made it impossible to keep cattle, and thus, a plow was not efficient (Hopkins 1973). Furthermore, in many places land was relatively abundant, and therefore, investment in land was discouraged, not by excessive state intervention but by the abundance of land (Austin 2008a). Finally, as many colonial administrators would later find out, the plow is not universally desirable. In tropical soils fertility is shallow, and therefore, the plow increases the risk of soil erosion.

In sum, factor endowments did have an impact on institutional development in pre-colonial Africa, and the evidence supports the view that when factor ratios changed, and there were returns for states or other agents to provide property rights in land, labor or to provide capital for exchange and production, institutional changes did occur. The institution of slavery, and the slave trade was definitely a response to factor ratios. While some states were able to internalize positive returns from the slave trade, the overall impact on African economic development was probably to slow down population growth, though we do not have the evidence to measure this effect accurately. What we do know is that the slave trade and the trade in legitimate goods that preceded, co-existed with and followed was only made possible by functioning domestic markets, and were founded on well-established trade routes and networks. Institutional innovations facilitated this trade.

Conclusion

If by capitalism we mean the production of goods for exchange by capitalists who combine their own capital and land with labor bought from free workers without land, then capitalism had not emerged before 1850. While it was not the dominant system of production in Africa as per the orthodox definition, as has been documented here, this does not mean that there were no markets or economic growth according to formal definitions. Goods markets did exist, whereas factor markets were limited. As seen in other places in world economic history, slavery was not incompatible with economic growth. Slaves were used in domestic production, facilitated long-distance trade across the continent, and were central in the trades with other regions of the world. Africa was integrated with the rest of the world economy through the Indian Ocean, the Mediterranean, the Atlantic trade and the trans-Saharan trade – a flow of ideas, goods and people for centuries. The expansion of external contacts from sporadic contacts that led to established trading posts eventually led to formal colonization of the majority of the continent by European powers in the late 19th century.

References

- Acemoglu, Daron, Simon Johnson, and James A. Robinson (2001), "The Colonial Origins of Comparative Development: An Empirical Investigation," *The American Economic Review*, 91:5, pp. 1369-1401.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson (2002), "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution," *The Quarterly Journal of Economics*, 117:4, pp. 1231-1294.
- Acemoglu, Daron and James A. Robinson (2010), "Why is Africa Poor?" *Economic History of Developing Regions*, 25:1, pp. 21-50.
- Acemoglu, Daron and James A. Robinson (2012), *Why nations fail: the origins of power, prosperity, and poverty*, New York: Crown Publishers.
- Austen, Ralph A. (2010), *Trans-Saharan Africa in world history*, New York: Oxford University Press.
- Austen, Ralph A. (1987), *African economic history : internal development and external dependency*. London : James Currey ; Portsmouth (N.H.) : Heinemann, 1987.
- Austin, Gareth (2008b), "Resources, Techniques, and Strategies south of the Sahara: Revising the Factor Endowments Perspective on African Economic Development, 1500- 2000," *The Economic History Review*, 61:3, pp. 587-624.
- Austin, Gareth (2008a), "The 'Reversal of Fortune' thesis and the Compression of History: Perspectives from African and Comparative Economic History," *Journal of International Development*, 20:8, pp. 996-1027.

- Austin, Gareth (2009a), "Cash Crops and Freedom: Export Agriculture and the Decline of Slavery in Colonial West Africa," *International Review of Social History*, 54:1, pp. 1-37.
- Austin, Gareth (2009b), "Factor Markets in Nieboer Conditions: Pre-colonial West Africa, c.1500-c.1900," *Continuity and Change*, 24:1, pp. 23-53.
- Austin, Gareth (2007), 'Labor and land in Ghana, 1874–1939: a shifting ratio and an institutional revolution', *Australian Economic History Review* 47:1, 95–120.
- Austin, Gareth (2005), *Labor, land, and capital in Ghana: from slavery to free labor in Asante, 1807-1956*, Rochester, NY: University of Rochester Press.
- Behrendt, Stephen D., A. J. H. Latham and David Northrup, 2010. Paperback 2012. *The Diary of Antera Duke, an Eighteenth-Century African Slave Trader*, New York: Oxford University Press.
- Berry, Sara (1993), *No condition is permanent: the social dynamics of agrarian change in sub-Saharan Africa*, Madison, WI: University of Wisconsin Press.
- Bundy, Colin (1979), *The rise and fall of the South African peasantry*, Berkeley: University of California Press.
- Cooper, Frederick (1993), "Africa and the World Economy," in *Confronting Historical Paradigms: Peasants, Labor and the Capitalist World System in Africa and Latin America*, edited by F.E Mallon, S.J Stern, A.F Isaacman and W. Roseberry. Madison, WI: University of Wisconsin Press, pp. 84-204.
- Curtin, Philip D. (1969), *The Atlantic slave trade: a census*, Madison, WI: University of Wisconsin Press.

- Curtin, Philip D. (1975), *Economic change in pre-colonial Africa: Senegambia in the era of the slave trade*, Madison, WI: University of Wisconsin Press.
- Diamond, Jared M. (2005) *Guns, germs, and steel : the fates of human societies* New York : W.W. Norton.
- Dike, Onwuka K. (1956), *Trade and politics in the Niger Delta, 1830-1885: an introduction to the economic and political history of Nigeria* ([Repr.] 2011 ed.). Oxford: Clarendon Press.
- Domar, Evsey (1970), "The Causes of Slavery or Serfdom: A Hypothesis," *Journal of Economic History*, 30:1 (March), pp. 18-32.
- Fetter, Bruce (1987), "Decoding and Interpreting African Census Data: Vital Evidence from an Unsavory Witness," *Cahiers d'Études Africaines*, 27:105-106, pp. 83-105.
- Flint, J. E. and McDougall, E. A. (1987), "Economic Change in West Africa in the Nineteenth Century," in *History of West Africa, volume II*, edited by J.F. Ajayi and M. Crowder. New York: Columbia University Press.
- Freund Bill (1984), "Labor and Labor History in Africa: A Review of the Literature," *African Studies Review*, 27:2, pp. 1-58.
- Good, Charles M. (1973), "Markets in Africa: a Review of Research Themes and the Question of Market Origins," *Cahiers d'Études Africaines*, 13:52, pp. 769-780.
- Goody, Jack (1971), *Technology, Tradition, and the State in Africa*, London: Oxford University Press.
- Gray, Richard and David Birmingham (1970), *Pre-Colonial African Trade: essays on trade in Central and Eastern Africa before 1900*, London: Oxford University Press.

- Harms, Robert W. (1981), *River of Wealth, River of Sorrow: the Central Zaire Basin in the era of the Slave and Ivory Trade, 1500-1891*, New Haven: Yale University Press.
- Hawthorne, Walter (2001), "Nourishing a stateless society during the slave trade: the rise of balanta paddy-rice production in Guinea-Bissau," *The Journal of African History*, 42:1, pp 1-24.
- Helleiner, Gerald K. (1966), *Peasant, Agriculture, Government, and Economic Growth in Nigeria*, Homewood, Ill: R.D Irwin.
- Herbst, Jeffrey I. (2000), *States and Power in Africa: Comparative Lessons in Authority and Control*, Princeton, NJ: Princeton University Press.
- Hill, Polly (1963), *The Migrant cocoa-farmers of Southern Ghana: a study in rural capitalism*, Cambridge: Cambridge University Press.
- Hodder, B. W. (1965), "Some Comments on the Origins of Traditional Markets in Africa south of the Sahara," *Transactions of the Institute of British Geographers*, 36, pp. 97-105.
- Hopkins, Anthony G. (1973), *An Economic History of West Africa*, New York: Columbia University Press.
- Iliffe, John (1983), *The Emergence of African Capitalism: the Anstey Memorial Lectures in the University of Kent at Canterbury 10-13 May 1982*, London: Macmillan.
- Iliffe, John (1995), *Africans: the History of a Continent*, Cambridge: Cambridge University Press.
- Inikori, Joseph E. (2007), "Africa and the Globalization Process: Western Africa, 1450-1850," *Journal of Global History*, 2:1, pp. 63-86.

- Jerven, Morten (2010b), "The Relativity of Poverty and Income: How Reliable are African Economic Statistics?" *African Affairs*, 109:434, pp. 77-96.
- Jerven, Morten (2010a), "African growth recurring: An economic history perspective on African growth episodes, 1690-2010," *Economic History of Developing Regions*, 25:2, pp. 127-154.
- Jerven, Morten (2012), "An unlevel playing field: national income estimates and reciprocal comparison in global economic history," *Journal of Global History*, 7:1, pp. 107-128.
- Jerven, Morten (2013), *Poor Numbers. How We Are Misled by African Development Statistics and What to Do about It*. Ithaca, NY: Cornell University Press.
- Johnson, Marion (1970), "The Cowrie Currencies of West Africa Part I," *The Journal of African History*, 11:1, pp. 17-49.
- Johnson, Marion (1976), "The economic foundations of an Islamic theocracy – the case of Masina', *Journal of African History* 17:4, 486.
- Klein, Martin A. (2001), "The Slave Trade and Decentralized Societies," *The Journal of African History*, 42:1, pp. 49-65.
- Kuczynski, Robert R. (1937), *Colonial Population*, London: Oxford University Press.
- Kuczynski, Robert R. (1948), *Demographic Survey of the British Colonial Empire, volume I: West Africa*, London: Oxford University Press.
- Kuczynski, Robert R. (1949), *Demographic Survey of the British Colonial Empire, volume II: East Africa*, London: Oxford University Press.
- Kuznets, Simon S. (1966), *Modern economic growth: rate, structure, and spread*, New Haven: Yale University Press.

- Latham, A.J.H. 1971. Currency, Credit and Capitalism on the Cross River in the Pre-Colonial Era, *Journal of African History*, xii (4) 599-605.
- Latham, A.J.H. 1973. Repr. 1978. Old Calabar 1600-1891. The Impact of the International Economy upon a Traditional Society, Oxford: Clarendon Press.
- Law, Robin (1992), "Posthumous Questions for Karl Polanyi: Price Inflation in Pre-Colonial Dahomey," *The Journal of African History*, 33:3, pp. 387-420.
- Law, Robin, ed. (1995), *From slave trade to "legitimate" commerce: the commercial transition in nineteenth-century West Africa*, Cambridge and New York: Cambridge University Press.
- Law, Robin, (1980), 'Wheeled Transportation in Pre-Colonial West Africa', *Africa*, 50, 249-262.
- Lewis, A. W. (1954), 'Economic development with unlimited supplies of labor', *Manchester School* 20, 139-91.
- Lovejoy, Paul E. (1982), "Polanyi's 'Ports of Trade': Salaga and Kano in the Nineteenth Century," *Canadian Journal of African Studies*, 16:2, pp. 245-277.
- Lovejoy, Paul E. (2000), *Transformations in slavery: a history of slavery in Africa*, Cambridge and New York: Cambridge University Press.
- Lovejoy, Paul E., and Jan S. Hogendorn (1993), *Slow death for slavery: the course of abolition in Northern Nigeria, 1897-1936*, Cambridge and New York: Cambridge University Press.
- Lovejoy, Paul E. and David Richardson (1999), 'Trust, pawnship, and Atlantic history: the institutional foundations of the Old Calabar slave trade', *American Historical Review*

104:2, 33–55.

Lovejoy, Paul E. and David Richardson (1995), 'British abolition and its impact on slave prices along the Atlantic coast of Africa, 1783–1850', *Journal of Economic History* 55:1, 98–119

Lovejoy, Paul E. and David Richardson (2004), '“This horrid hole” : royal authority, Commerce and credit at Bonny 1690–1840', *Journal of African History* 44:3, 363–92.

Maddison, Angus (2007), *Contours of the world economy, 1-2030 AD: essays in macro-economic history*, Oxford and New York: Oxford University Press.

Manning, Patrick (1982), *Slavery, colonialism and economic growth in Dahomey, 1640-1960*, Cambridge: Cambridge University Press.

Manning, Patrick (2010), "African Population. Projections 1850-1960," in *The Demographics of Empire: The Colonial Order and the Creation of Knowledge*, edited by K. Ittman, D. Cordell and G. Maddox. Athens: Ohio University Press, pp.245-275.

Martin, Susan M. (1988), *Palm oil and protest: an economic history of the Ngwa region, south-eastern Nigeria, 1800-1980*, Cambridge; New York: Cambridge University Press.

Miller, Joseph C. (1988), *Way of death: merchant capitalism and the Angolan slave trade, 1730-1830*, Madison, WI: University of Wisconsin Press.

Myint, H. (1958), 'The 'classical' theory of international trade and the underdeveloped countries', *Economic Journal*, vol. 68, pp. 317-337.

Nieboer, Herman Jeremias (1900). *Slavery as an industrial system; ethnological researches*. The Hague: M. Nijhoff.

- North, Douglass C. (1977), "Markets and other Allocation Systems in History: the Challenge of Karl Polanyi," *Journal of European Economic History*, 6, pp. 703-716.
- North, Douglass C. (2005), *Understanding the process of economic change*. Princeton, NJ: Princeton University Press.
- Northrup, David (2002), *Africa's discovery of Europe: 1450 to 1850*, New York: Oxford University Press.
- Northrup, David. (1978), *Trade without rulers : pre-colonial economic development in south-eastern Nigeria*, Oxford : Clarendon Press.
- Nunn, Nathan (2007), "Historical Legacies: A Model Linking Africa's Past to its Current Underdevelopment," *Journal of Development Economics*, 83:1, pp.157-175.
- Nunn, Nathan (2008), "The Long-term Effects of Africa's Slave Trades," *The Quarterly Journal of Economics*, 123:1, pp. 139-176.
- Polanyi, Karl (1966), *Dahomey and the slave trade: an analysis of an archaic economy*, Seattle: University of Washington Press.
- Reid, Richard (2002), *Political power in pre-colonial Buganda: economy, society and warfare in the nineteenth century*, Oxford: James Currey; Kampala: Fountain Publisher; and Athens: Ohio University Press.
- Reid, Richard (2011), "Past and Presentism: The Pre-colonial and the Foreshortening of African History," *The Journal of African History*, 52:2, pp. 135-155.
- Rockel, Stephen J. (2006), *Carriers of culture: labor on the road in nineteenth-century East Africa*, Portsmouth, NH: Heinemann.
- Shea, P. J. (1975), 'Economies of scale and the indigo dyeing industry of pre-colonial Kano',

- Kano Studies*, 1, 2, pp. 55–61..
- Sheriff, Abdul (1987), *Slaves, spices and ivory in Zanzibar: integration of an East African commercial empire into the world economy, 1770-1873*, London: Currey.
- Smith, Sheila (1976), "An Extension of the Vent-for-Surplus Model in Relation to Long-Run Structural Change in Nigeria," *Oxford Economic Papers*, 28:3, pp. 426-446.
- Tabutin, Dominique and Bruno Schoumaker (2004), "The Demography of Sub-Saharan Africa from the 1950s to the 2000s," *Population (English Edition)*, 59:3-4, pp. 447-556.
- Thornton, John (1977), "Demography and history in the Kingdom of Kongo, 1550-1750," *Journal of African History*, 18:4, pp. 507-530.
- Thornton, John (1992), *Africa and Africans in the making of the Atlantic World, 1400-1680*, Cambridge; New York: Cambridge University Press.
- Tosh, John (1980), "The Cash-Crop Revolution in Tropical Africa: An Agricultural Reappraisal," *African Affairs*, 79:314, pp. 79-94.
- Widgren, Mats. "Towards a Historical Geography of Intensive Farming in Eastern Africa." In *In Islands of Intensive Agriculture in Eastern Africa: Past and Present*, edited by Mats Widgren and John E. G. Sutton. London: British Institute in Eastern Africa, 2004.
- Wrigley, C. C. (1981), "Population and history: some innumerate reflexions," in *African Demography, volume II: Proceedings of a seminar held in the Centre of African Studies, University of Edinburgh, 24th and 25th April 1981*. Edinburgh: Centre of African Studies, University of Edinburgh, pp. 17-31.