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The Journal of African History / Volume 55 / Issue 03 / November 2014, pp 371 - 400
DOI: 10.1017/S002185371400036X, Published online: 22 September 2014

Journal of African History, 55 (2014), pp. 371–400.
doi:10.1017/S002185371400036X

METROPOLITAN BLUEPRINTS OF COLONIAL TAXATION? LESSONS FROM FISCAL CAPACITY BUILDING IN BRITISH AND FRENCH AFRICA, *c.* 1880–1940*

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Abstract
The historical and social science literature is divided about the importance of metropolitan blueprints of colonial rule for the development of colonial states. We exploit historical records of colonial state finances to explore the importance of metropolitan identity on the comparative development of fiscal institutions in British and French Africa. Taxes constituted the financial backbone of the colonial state and were vital to the state building efforts of colonial governments. A quantitative comparative perspective shows that pragmatic responses to varying local conditions can easily be mistaken for specific metropolitan blueprints of colonial governance and that under comparable local circumstances the French and British operated in remarkably similar ways.

Key Words
Colonial administration, governance, money, quantitative sources, taxation, trade.

In the last decade, a vast cross-disciplinary literature in history, economics, and political science has developed that aims to understand the role of so-called 'colonial legacies' on long-term African economic development. To reach shared conclusions this literature faces two methodological challenges. First, the absence of a counterfactual makes it hard to assess the precise impact of past colonial interventions on present-day outcomes:

* We are grateful to Daron Acemoglu, Julius Agbor, Ralph Austen, Gareth Austin, Rachel Jean Baptiste, Jeremy Baskes, Catherine Boone, Anne Booth, Stephen Broadberry, Morten Jerven, Leigh Gardner, Jonathan Glassman, Regina Grafe, Joseph Inikori, Patrick Manning, Joel Mokyr, Alexander Moradi, Claudia Rei, Yannay Spitzer, Hendrik Spruyt, Helen Tilley, and three anonymous referees of the *JAH*. We are grateful for the financial support of the Program of African Studies and the Buffett Center for International Comparative Studies at Northwestern University, the Economic History Association, the European Research Council under the European Community's Seventh Framework Programme (ERC Grant Agreement no. 313114) as part of the project 'Is Poverty Destiny? A New Empirical Foundation for Long-Term African Welfare Analysis' and the Netherlands Organisation for Scientific Research for the project 'Is Poverty Destiny? Exploring Long Term Changes in African Living Standards in Global Perspective' (NWO VIDI Grant no. 016.124.307). Authors' email: ewout.frankema@wur.nl and MarlousVan2015@u.northwestern.edu

how a society *would have fared* without colonial intervention remains unobserved. Second, it remains difficult to disentangle the development effects of colonial interventions from the impact of precolonial histories, local endowment structures, and indigenous social, political, and economic agency. After all, colonial policies were shaped by the *interaction* between metropolitan imperial agendas on the one hand and local conditions and responses setting the constraints to these agendas on the other hand.

The purpose of this study is to better understand the dynamics of this interaction. By comparing fiscal capacity building efforts in British and French Africa from *c.* 1880 to 1940 we aim to shed light on a long debated question: to what extent can one detect a distinctively 'French' and 'British' approach to colonial state formation in Africa? Fiscal development offers an excellent lens to study comparative processes of colonial state formation. Loans and aid from the metropolitan government helped to finance the colonial state building effort, but these were limited in size, especially before 1940, and certainly meant to be temporary.[1] Both the French and the British strove to make their colonies fiscally independent as quickly as possible to limit the burden of empire-building on domestic taxpayers. The pace of colonial state expansion, therefore, depended critically on the development of a local tax base.

There were generally high constraints on raising revenue in sub-Saharan Africa (Africa hereafter). Colonial state boundaries usually did not align with precolonial political boundaries and included a patchwork of local systems of surplus production and extraction. Revenues from trade were relatively small compared to other world regions. Land ownership was not formally registered in ways that could be readily adopted by European colonial governments for taxing subsistence farm output, if they had the manpower to do so in the first place.[2] Indigenous taxes based on slavery were a source of economic extraction which colonial powers in the post-abolition era could not directly tap into, although they did turn a blind eye to its practices to support export sector growth.[3] Finally, the lion's share of precolonial surplus extraction was in-kind, while newborn colonial governments needed monetary revenues to pay the salaries of an expanding administrative staff, which generally comprised between a half to two-thirds of annual government budgets before 1940.[4]

Comparative accounts of British and French colonial rule in Africa have largely focused on observable differences in institutional design, such as the establishment of systems of indirect rule and common law in the British dependencies as opposed to direct rule and

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1 O. Accominotti, M. Flandreau, and R. Rezzik, 'The spread of empire: Clio and the measurement of colonial borrowing costs', *Economic History Review*, 64:2 (2011), 385–407.

2 For a discussion, see F. Cooper, *Africa since 1940: The Past of the Present* (Cambridge, MA, 2002); and J. Herbst, *States and Power in Africa: Comparative Lessons in Authority and Control* (Princeton, NJ, 2000).

3 G. Austin, *Labour, Land and Capital in Ghana: From Slavery to Free Labour in Asante, 1807–1956* (Rochester, NY, 2005).

4 E. Frankema, 'Colonial taxation and government spending in British Africa, 1880–1940: maximizing revenue or minimizing effort?', *Explorations in Economic History*, 48:1 (2011), 136–49; L. Gardner, Taxing Colonial Africa: The Political Economy of British Imperialism (Oxford, 2012).

civil law in the French dependencies.[5] Others have contrasted liberal British policies regarding missionary schooling to restrictive systems of state education in French dependencies.[6] Emphasizing 'metropolitan blueprints' of colonial rule has a long tradition indeed.[7]

Yet, when it comes to the fiscal underpinnings of African colonial states we know surprisingly little about the comparative aspects of 'French' and 'British' approaches.[8] Given the vital importance of taxation for African (colonial) state development, it would be very valuable to further explore this topic and there are comparatively good historical sources to support such an endeavor. This study is the first to our knowledge that exploits historical records of colonial state finances for a *systematic comparison* of taxation in British and French Africa. Volatile pound-franc exchange rates during the interwar era complicate solid cross-imperial comparisons of revenue, but we tackle the currency conversion problem by constructing government purchasing power parities (so-called PPPs, to be explained later) based on the relative wage and salary costs of different types of government staff. We also use the wage and salary data to create series of real government revenue, that is, corrected for price changes over time.

We document four general patterns of fiscal capacity building: (1) the cross-colony variation in *per capita* state revenue was much larger in French Africa than in British Africa; (2) the most important determinant of variation in *per capita* revenue levels, however, was the difference between coastal and landlocked colonies, not between British and French colonies;[9] (3) there was an initial lead in revenue raising ability in British Africa, but the French colonies caught up after the First World War; and (4) there was convergence

5 G. Bertocchi and F. Canova, 'Did colonization matter for growth? An empirical exploration into the historical causes of Africa's underdevelopment', *European Economic Review*, 46:10 (2002), 1851–71; R. M. Grier, 'Colonial legacies and economic growth', Public Choice, 98:3–4 (1999), 317–35; R. La Porta, F. Lopez-de-Silanes, A. Schleifer, and R. Vishny, 'The quality of government', The Journal of Law, Economics, and Organization, 15:1 (1999), 222–79; M. K. Lange, 'British colonial legacies and political development', World Development, 32:6 (2004), 905–22.

6 J. Bolt and D. Bezemer 'Understanding long-run African growth: colonial institutions or colonial education?', *Journal of Development Studies*, 45:1 (2009), 24–54; D. S. Brown, 'Democracy, colonization, and human capital in sub-Saharan Africa', Studies in Comparative International Development, 35:1 (2000), 20–40; D. Cogneau and A. Moradi, 'Borders that divide: education and religion in Ghana and Togo since colonial times', Center for the Study of African Economics Working Paper, University of Oxford, 2011/21; B. W. White, 'Talk about school: education and the colonial project in French and British Africa (1860–1960)', Comparative Education, 32:1 (1996), 9–25.

7 See, for example, the massive volume of Lord W. M. H. Hailey, *An African Survey: A Study of Problems Arising in Africa South of the Sahara* (London, 1938); as well as P. Gifford and W. R. Louis, *France and Britain in Africa: Imperial Rivalry and Colonial Rule* (New Haven, CT, 1971); and F. Sutton, 'Education and the making of modern nations', in J. S. Coleman (ed.), *Education and Political Development*, (Princeton, 1965), 51–74. For a more recent appraisal of British rule in particular, see N. Ferguson, *Empire: The Rise and Demise of the British World Order and the Lessons for Global Power* (New York, 2002).

8 Thandika Mkandawire compares postcolonial African tax systems from a 'colonial legacies' lens, identifying different types of colonial economies as the root cause, but does not find a specific impact of metropolitan identity. See T. Mkandawire, 'On tax efforts and colonial heritage in Africa', *Journal of Development Studies*, 46:10 (2010), 1647–69.

9 In the social science literature, especially when using econometric analysis, the terms 'first order effect' or 'first order determinant' are often used to indicate which 'variable' has the greatest impact on the outcome that is to be explained.

in the source composition of tax revenue both *within* and *across* the French and British African colonies in the period up to 1940.

We use these four general patterns to scrutinize three oft-cited claims about the distinctive nature of British and French rule in Africa: (1) the idea that French rule was more repressive then British rule in terms of revenue extraction and maintaining social order; (2) the idea that the British managed to select territories in Africa that were commercially more viable than others; and (3) the idea that the French organized their administrations in federal structures to enhance political and cultural assimilation. We argue that these claims can be connected when studying colonial state formation through the lens of fiscal capacity building: French rule was more repressive because of the economic constraints posed by commercially less viable territories; the creation of large federations can be considered as a response to that problem by integrating richer coastal territories with vast hinterland areas through fiscal redistribution. High repression and federal redistribution can explain why French colonies caught up in terms of fiscal capacity building with the 'richer' British colonies.

We proceed by discussing the concept of 'endogenous colonial institutions' in the context of the colonial legacies literature in the next section. In the third section, we present a quantitative analysis of comparative *per capita* state revenues and in the fourth section we analyze its source composition. In the fifth section we further elaborate our argument by looking into the different ways in which the French and the British used forced labor as an alternative to raising monetary revenue.

ENDOGENOUS COLONIAL INSTITUTIONS

The social science debate on the comparative legacies of colonial institutional development has intensified since the seminal papers of Daron Acemoglu, Simon Johnson, and James Robinson.[10] Using econometric methods, these studies provided empirical evidence for the idea that the nature of colonial institutions across the world was rooted in differential climatic conditions of European settlement (mainly disease environment), and how these varying geographical contexts correlated to different levels of economic development and institutional quality in the late twentieth century. They argue that in colonies where Europeans settled in larger numbers more 'developmental' institutions were established, whereas in areas with limited settlement institutions were created to facilitate colonial extraction.[11] By emphasizing the role of local conditions for colonial settlement, these papers also nuanced the importance of metropolitan identity for the design of colonial institutions.

Their studies have brought the 'colonial legacies' debate and the importance of colonial history to the attention of a wide audience of social scientists, and, as Hopkins noted in his

10 D. Acemoglu, S. Johnson, and J. Robinson, 'The colonial origins of comparative development: an empirical investigation', *American Economic Review*, 91:5 (2001), 1369–401; D. Acemoglu, S. Johnson, and J. Robinson, 'Reversal of fortune: geography and institutions in the making of the modern world income distribution', Quarterly Journal of Economics, 117:4 (2002), 1231–94.

11 In more recent work Acemoglu and Robinson have changed the pairs 'extractive' and 'developmental' into 'extractive' and 'inclusive' institutions: see D. Acemoglu and J. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (New York, 2012), 73–83.

2009 article on 'the new economic history of Africa', have generated an enormous body of follow-up research.[12] Yet, the 'AJR' papers, as they are called now in the literature, have also received much criticism. Historians have argued that the twofold distinction between 'extractive' and 'developmental' colonial institutions is too simplistic to remain meaningful, that the approach insufficiently accounts for processes of historical change, and that the distinction between settler and nonsettler economies did not really support the hypothesis for Africa, since in African settler colonies extraction was more pervasive than in many of the nonsettler colonies.[13]

What matters for this study is that Acemoglu *et al.* have argued that the colonial state had near absolutist power to create extractive institutions to their liking in nonsettler colonies.[14] In fiscal affairs this concerns the setting of tax *rates* as well as the selection of revenue *sources*. The idea links up with a wider historical literature stressing the role of fiscal policy in underpinning the hegemony and broadcasting the power of the colonial state in Africa.[15] In particular the imposition of native hut, head, and poll taxes have been understood as central tools for a broad range of colonial government policy objectives. Crawford Young, for example, considers the head tax as 'leading the way' in achieving the 'requirements of revenue and hegemony'.[16] Richard Reid attributes the creation of a head tax system to similar objectives, maintaining that the imposition of a capitation tax, 'the most visible, and the most dreaded manifestation of conquest', was not just 'absolutely

12 A. G. Hopkins, 'The new economic history of Africa', *The Journal of African History*, 50:2 (2009), 155–77.

13 For some critical responses in addition to Hopkins', see G. Austin, 'The 'reversal of fortune' thesis and the compression of history: perspectives from African and comparative economic history', *Journal of International Development*, 20:8 (2008), 996–1027; C. Bayly, 'Indigenous and colonial origins of comparative economic development: the case of colonial India and Africa', *Policy Research Working Papers*, 4474 (2008); E. Frankema and M. Van Waijenburg, 'Structural impediments to African growth? new evidence from real wages in British Africa, 1880–1965', *Journal of Economic History*, 72:4 (2012), 895–926; S. Bowden, B. Chiripanhura, and P. Mosley, 'Measuring and explaining poverty in six African countries: a long-period approach', *Journal of International Development*, 20:8 (2008), 1049–79.

14 Acemoglu, Johnson, and Robinson, 'Colonial origins', 1375.

15 The debate on the importance of metropolitan identity for the nature of colonial institutions is not confined to Africa, but also plays an important role in the evaluation of colonial legacies in Spanish and British America and in Asia. The emphasis on colonizer identity as a key determinant of colonial legacies has received substantial criticism over the past 15 years. In a series of studies comparing Spanish and British colonial projects in the Americas, Stanley Engerman and Kenneth Sokoloff point to the role of local geographical factors (such as climate, minerals, location, and soil) and native population densities to explain variations in economic and political development in North and South America: S. L. Engerman and K. L. Sokoloff, 'Factor endowments, institutions, and differential paths of growth among New World economies: a view from economic historians of the United States', in S. Haber (ed.), *How Latin America Fell Behind: Essays on the Economic Histories of Brazil and Mexico, 1800–1914*, (Stanford, CA, 1997), 260–304; and S. L. Engerman and K. L. Sokoloff, 'Colonialism, inequality, and long-run paths of development', *National Bureau of Economic Research Working Paper* No. 11057 (2005). John Elliott's comparative account Spanish and British America shows in detail how institutional development in the spheres of governance, trade, education, and religion was endogenous to the interaction of, and conflict between, metropolitan conceptions and local conditions: J. H. Elliott, *Empires of the Atlantic World: Britain and Spain in America, 1492–1830* (New Haven, CT, 2006). See also J. Mahoney, *Colonialism and Postcolonial Development: Spanish America in Comparative Perspective* (Cambridge, 2010); and A. Booth, 'Night watchmen, extractive, or developmental states? Some evidence from late colonial south-east Asia', *Economic History Review*, 60:2 (2007), 241–66.

16 C. Young, *The African Colonial State in Comparative Perspective* (New Haven, CT, 1994), 129.

fundamental to the functioning of the colonial state', but in many ways even its 'key purpose'.[17] Mahmood Mamdani has interpreted the British African fiscal system as a central touchstone in the state's hegemony imperative – that is, its cultural hegemony imperative. Mamdani sees the tax collection structure as an integral part of the colonial state's 'decentralized despotism' with built-in incentives for corruption and abuse. As such, the fiscal system became one of 'pervasive revenue hunger all along the chain of command', with widespread efforts 'to tax or impose fees on anything that moved'.[18] Other scholars have emphasized how direct taxes were intended to fulfill the objectives of integrating Africans into the money and wage economy and to 'civilize' the colonized subject by instilling them with Victorian bourgeois values as to create a 'governable person'.[19]

However, not all scholars of Africa share the view of the colonial state as a powerful 'crusher of rocks'.[20] Jeffrey Herbst, for example, has pointed out that interpretations of the colonial state as an absolutist apparatus strongly overestimate actual European power and the scope of their hegemonic project. The colonizers, 'whatever their formal theory of rule', he argues, were 'generally unsuccessful in changing cost structures to allow for a systematic expansion of authority into the rural areas'.[21] According to Herbst, low population densities made the borders of precolonial African states fluid because the marginal costs of collecting taxes (coercion, monitoring, logistics) exceeded the potential revenues. Europeans may have fixed African borders on maps, but they did not 'control' the hinterland areas. Ewout Frankema has argued that parts of the fiscal system in British Africa adhered to the logic of minimizing effort, rather than maximizing revenue.[22] Leigh Gardner maintains that the structure of African colonial administrations remained a 'skeleton' and observes that the description of British rule as a 'gimcrack effort by two men and a dog' may not have been too far from reality.[23]

How did French and British colonial governments deal with such constraints? Of course, governance structures in Africa evolved in the context of different imperial aspirations. For France, the incorporation of West Africa meant a logical southward extension of the

17 R. J. Reid, *A History of Modern Africa: 1800 to the Present* (Malden, MA, 2009), 146.

18 M. Mamdani, *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism* (Princeton, NJ, 1996), 56.

19 E. J. Berg, 'The development of a labour force in sub-Saharan Africa', in Z. A. Konczacki and J. M. Konczacki (eds.), *An Economic History of Tropical Africa, Volume I: The Pre-Colonial Period* (London, 1977), 394–412; B. Bush and J. Maltby, 'Taxation in West Africa: transforming the colonial subject into the "governable person"', *Critical Perspectives on Accounting*, 15:1 (2004), 5–34; A. L. Conklin, A Mission to Civilize: The Republican Idea of Empire in France and West Africa, 1895–1930 (Stanford, CA, 1997); L. E. Davis and R. A. Huttenback, Mammon and the Pursuit of Empire: The Economics of British Imperialism (Cambridge, 1988); B. Freund, The Making of Contemporary Africa: The Development of African Society since 1800 (Bloomington, IN, 1984); J. F. Munro, Britain in Tropical Africa, 1880–1960: Economic Relationships and Impact (London, 1984); C. C. Wrigley, 'Aspects of economic history', in A. Roberts (ed.), The Colonial Moment in Africa: Essays on the Movement of Minds and Materials, 1900–1940 (Cambridge, 1992), 77–139; Young, The African Colonial State.

20 The metaphor Crawford Young uses to describe the African colonial state is 'Bula Matari', which means 'he who crushes rocks': Young, *The African Colonial State*, 1.

21 Herbst, *States*, 94.

22 Frankema, 'Colonial taxation'.

23 L. Gardner, 'Decentralization and corruption in historical perspective: evidence from tax collection in British colonial Africa', *Economic History of Developing Regions*, 25:2 (2010), 216.

French presence in North Africa (especially Algeria), as well as an eastward extension of their coastal possessions in the Senegambia. They set out to conquer a vast unified territory, which was envisioned as part of a great French African empire.[24] For the British, South Africa and Egypt were of high strategic importance in controlling the gateways to Asia, but in the larger scheme of British imperialism, Africa was not essential to sustain British industrial power, nor was it essential to safeguard key commercial interests. India and the New World dominions were the focal point of British foreign policy efforts.[25] These different imperial orientations underpinned different metropolitan ideologies of colonial rule in Africa.

Power imbalances played their role too. As the British were at the height of their imperial power in the closing decades of the nineteenth century, they had, in principle, the best military and diplomatic means to pick and choose.[26] Jane Burbank and Frederick Cooper state that the British 'ended up with the plums', while France 'got what it could – much of it arid lands on the edge of the Sahara plus choicer morsels along the coast'.[27] The British had good reasons to be choosier than other European powers, reluctant as they were to spread military and administrative resources too thin. As such, the more densely populated areas with a revealed propensity to engage in commercial relationships and less organized resistance against colonial encroachment were favored.[28] In these areas taxation was easier to organize via customs duties than elsewhere, sparing the costs of implementing more fine-grained structures of direct tax collection in the hinterlands.

French colonial bureaucracies were more deeply involved in local affairs in at least two ways. First, they erected a more hierarchical administrative structure than the British, putting in place a top-down structure of governance layers reaching out to the community level, with a larger number of administrative staff (direct rule). The British, on the other hand, were satisfied with controlling the power of chiefs, rather than interfering directly in local affairs (indirect rule). Second, the French colonial state engaged more intensively in the training of an African elite bureaucracy to strengthen local administrations and develop a rudimentary structure of local and central government representation. The British approach of operating' at arm's length' granted a greater degree of freedom to chiefs,

24 H. L. Wesseling, *Verdeel en Heers: de deling van Afrika, 1880–1914* (Amsterdam, 2003).

25 Davis and Huttenback, *Mammon*; T. Pakenham, *The Scramble for Africa: The White Man's Conquest of the Dark Continent from 1876–1912* (New York, 1991).

26 Some of the outcomes may have less to do with Britain being at the height of its imperial powers and more to do with the fact that Germany (and to a lesser extent France) were more than willing to initiate and sanction claims in tropical Africa before Britain could do anything to stop them. British imperial power in some ways continued to grow, but it had more competitors and so its power relative to its competitors diminished. To the best of our knowledge, it is still an open question whether the British could have secured control over Tanzania *if* they had really wanted lots of territories in sub-Saharan Africa. It seems that the outcome was ultimately determined by Germany wanting Tanzania more.

27 J. Burbank and F. Cooper, *Empires in World History: Power and the Politics of Difference* (Princeton, NJ, 2010), 315.

28 E. Frankema, 'The origins of formal education in sub-Saharan Africa: was British rule more benign?', *European Review of Economic History*, 16:4 (2012), 335–55; E. Green, 'On the size and shape of African states', International Studies Quarterly, 56:2 (2012), 229–44.

with fewer layers of official bureaucracy, and a more cost-efficient organization of their 'gate-keeping states'.[29]

According to Michael Crowder, these different approaches of colonial rule constituted a difference in kind, not in degree.[30] While in the British system, the relationship between political officers and native authorities was advisory, in the French system chiefs were subordinates. The French ideals of *assimilation* and *association* reflected the ambition to instill French political and cultural values, customs, and administrative institutions in the subjected peoples of the overseas territories (*Les Outre-Mer*) with the ultimate objective of their full integration into French society.[31] The British distinction between dominions – containing substantial proportions of white settlers – directly ruled colonies, indirectly ruled colonies and protectorates reveals a more pragmatic approach towards empire building. Dominions enjoyed rights of self-governance that colonies did not have, while protectorates received military protection, but were formally outside the British Commonwealth.

In short, there is no doubt that French and British colonial governance structures differed as a result of different imperial ambitions and approaches, and the relevant question for this study is not whether the British and French employed their own 'style' of colonization or not: they of course did so. The question we address is the degree to which their different policy approaches were decisive for the design and development of colonial tax systems. What we will argue in the remainder of this study is that the pace of colonial state development was critically dependent on varying local constraints to fiscal capacity building. These differences were pervasive and the British and French responses to these varying realities can easily be mistaken for different metropolitan blueprints of colonial taxation. We find that under comparable local circumstances the French and British operated in remarkably similar ways.

RAISING REVENUE IN SCATTERED AFRICAN EMPIRES

To structure our thinking about varying local constraints to fiscal capacity building it is useful to start with a simple comparison of two British African colonies. Figure 1 shows gross public revenue levels *per capita* in the Gold Coast and Nyasaland between 1870 and 1940. These two cases resemble the fiscal development of a rather successful colonial economy (the Gold Coast) and one of the poorest African colonies (Nyasaland). We use these economic disparities to highlight a number of background insights to our overall argument.

First, in areas with a long tradition of coastal European-African trade, which were often concentrated around former slave trade hubs, colonial states were likely to expand earlier and more gradually from the late nineteenth century onwards than in landlocked territories in the interior without such evident trade connections. In areas with long commercial relationships incipient colonial administrations could more easily tap into existing trade flows

29 Cooper, *Africa since 1940*.

30 M. Crowder, 'Indirect rule: French and British style', in R. O. Collins (ed.), *Problems in the History of Colonial Africa, 1860–1960* (Englewood Cliffs, NJ, 1970), 212–14.

31 P. Manning, *Francophone Sub-Saharan Africa, 1880–1985* (Cambridge, 1988); Conklin, *A Mission*.

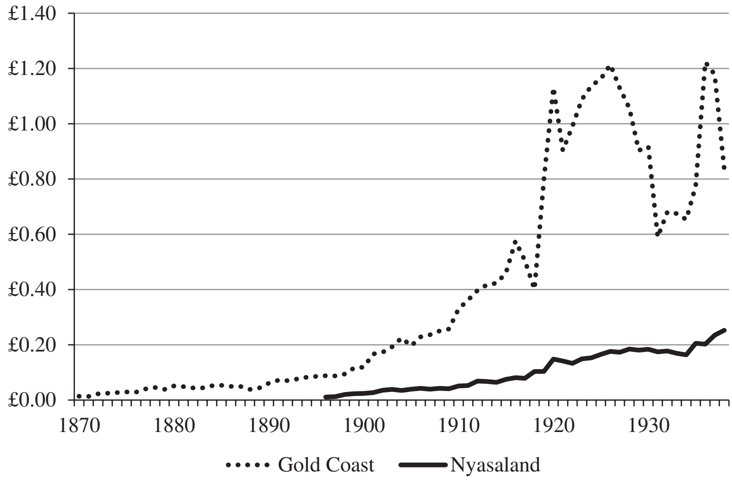

Fig. 1. Gross Public Revenue (GPR) *per capita* in the Gold Coast and Nyasaland, 1870–1940. *Sources: The Gold Coast Colony, Blue Book* (Accra, various issues); *Nyasaland Protectorate, Blue Book* (Zomba, various issues).

to raise revenue for colonial state expansion. Second, in areas such as the Gold Coast, the opportunities to develop a virtuous commerce-state revenue cycle, in which customs duties could be reinvested in export-promoting physical and administrative infrastructures were higher than in colonies where exports remained limited. Third, the budgets of the commercially viable territories were more vulnerable to exogenous world market shocks such as the Great Depression in the 1930s. The data presented in the remainder of this section indicate that these mechanisms operated across British and French Africa and that they explain a considerable part of the variation within and across both empires. There are also some important exceptions to this general trend, which we will highlight in passing.

Our empirical investigation involved four steps. First, we collected archival data on colonial budget accounts for the years 1911, 1920, 1925, 1929, 1934, and 1937. The year 1911 captures the early stages of the French West and Equatorial African federations, which became operative in 1904 and 1910 respectively. The year 1937 is the latest benchmark before the outbreak of the Second World War. The years 1925, 1929, and 1934 offer the possibility to study the effects of the Great Depression on tax revenues and 1920 serves as an early post-First World War benchmark.[32] We let our study begin in 1880 to pick up the earliest developments in colonial state formation, but we mostly deal with these in descriptive terms. We let our study end in 1940, since the Second World War and its aftermath changed the way in which colonies were financed considerably (especially in terms of loans and structural aid).

32 The 1920 benchmark may suffer from potentially distorting effects since the immediate post-First World War era was plagued by high inflation and may have artificially inflated fiscal revenues, without a (fully) equalizing change in the cost-structure of the government. Therefore, the 1920 benchmark should be interpreted with care.

	1911	1920	1925	1929	1934	1937
Government PPP (FA/BA)	31.3	27.6	48.7	94.2	82.3	76.6
Exchange rate Ffr/£	25.1	52.0	101.3	124.0	76.7	122.2
Labor price index FA (1911 = 100)	100.0	99.5	284.8	379.3	363.2	472.8
Labor price index BA (1911 = 100)	100.0	115.9	199.5	128.5	139.2	206.4

Table 1. French-British exchange rates, colonial government PPPs, and related price index of public and private sector labor, 1911–37. *Sources*: see Appendix 1.

Second, we circumvented the potentially distorting effect of exchange rate volatility in the interwar period – when the British and French went on and off the gold standard at different times and prewar parities – by constructing colonial government purchasing power parities. Without going into the technical details (for details on sources, data and calculation procedure we refer to the appendix), the basic idea of this calculation procedure is to compare the relative prices of the specific labor services hired by the colonial government and use these ratios as a substitute for official exchange rates. Official exchange rates were codetermined by macroeconomic shocks and economic relations between Britain and France, but these effects did not necessarily reflect the changing local expenses of colonial governments in Africa.

Our PPPs are based on four different categories of personnel expenditure in British West Africa and French West Africa: (1) lower-ranked clerk salaries; (2) African public school teacher salaries; (3) urban unskilled worker day wages, and; (4) skilled construction worker day wages (carpenters). The first two categories reflect the relative costs of hiring government staff, especially in the lower ranks of civil service where most of the personnel expenses were made. The latter two categories reflect the relative costs of government investments in public works, which took another big portion of colonial state expenditure.

Table 1 compares our PPP estimates with the official exchange rate and shows that a PPP-based comparison of *per capita* government revenue will yield very different results from an exchange rate-based comparison. In 1925, for example, the difference between our PPP and the official exchange rate is in the order of 100 per cent. We also used the collected wage and salary data to construct a labor price index, which allowed us to convert nominal series of government revenue into real terms, that is, series expressed in constant 1911 pound sterling (£).

Third, we singled out the individual colony shares in the collective revenues of the federal states (AOF, AEF, and the Kenya-Uganda customs union) to make revenue levels comparable at the colony level. We also excluded budget transfers from or to the metropole.[33] The French colonies were organized along a layer of three to four budgets, depending on

33 Both in British and French Africa, colonies were in principle on their own when it came to their state finances. With the exception of providing a military umbrella under the imperial army, British and French taxpayers were not supposed to pay for empire. The French Ministry of the Colonies budget (*Ministère des Colonies*) relied on metropolitan taxes and its funds were used for military expenses only. This was not very different from the British system, where metropolitan taxpayers supported the expensive British navy, while African colonies cofinanced standing armies in the region.

whether or not the colony was part of a federation. The model used in French West Africa (*l'Afrique Occidentale Française*, hereafter: AOF) was copied in French Equatorial Africa (*l'Afrique Équatoriale Française*, hereafter: AEF) in 1910, and both were derived, in turn, from the model in French Indochina.[34] The AOF and AEF were made up of respectively eight and four colonies which themselves were subdivided into districts (*cercles*) and subdistricts. At the subdistrict level, African chiefs were responsible for collecting taxes and recruiting labor.[35]

The *federal budget* was primarily composed of trade taxes (customs duties) and consumption taxes, which were destined for: (1) the administrative costs at the federal level; (2) the larger public works projects (mainly railroads); and (3) the allocation of subsidies to colonies. The *local budgets* of the individual colonies were mainly based on direct taxes, such as head taxes, property taxes, or other local trading taxes. Finally, there were *annexed budgets* to either the federal or local budgets in which the revenue and expenditures from the railways and major ports were documented.[36]

To compare gross *per capita* public revenue levels on a cross-colony basis we re-allocated the shares of the federal and annexed budget towards the areas of origin (the colonies), thus filtering out the federal effect and creating 'adjusted' budgets for the French federal colonies that include the same components as the British colonial revenue budgets. These transfers were substantial and uneven. In 1925 *ca*. 40 per cent of the Senegalese revenues were transferred to the AOF, whereas Mauritania received 36 per cent of its budget in federal subsidies, without transferring any customs duties or railway receipts. This indicates that the French African federations were redistributive (from rich to poor), although the net-contributors were partly compensated by receiving a larger share of the federal expenditures and also benefitted indirectly from infrastructural investments in the periphery that enhanced trade and labor mobility.[37]

In British Africa, federal structures were used less intensively. The example of the South African Union as a governance model remained limited. The fiscal integration of Uganda and Kenya never went further than a customs union established in 1917 and joined by Tanganyika in 1927. The attempt to force these three countries into a federal structure was only made upon independence and was short-lived. The Central African Federation, consisting of the self-governing dominion of Southern Rhodesia and the British protectorates Northern Rhodesia and Nyasaland was only established in 1953.

Fourth, to avoid potential biases in the *per capita* comparison we used backward projections of population from a revised 1950 benchmark as suggested by Patrick Manning as

34 Conklin, *A Mission.*

35 C. Coquery-Vidrovitch, 'French colonization in Africa to 1920: administration and economic development', in L.H. Gann and P. Duignan (eds.), *Colonialism in Africa, 1870–1914, Volume I: The History and Politics of Colonialism, 1870–1914* (Cambridge, 1969), 165–98; E. Huillery, 'History matters: the long-term impact of colonial public investments in French West Africa', *American Economic Journal – Applied Economics*, 1:2 (2009), 176–215.

36 Note that our GPR *per capita* figures solely consists of 'ordinary' revenue (in other words, regular posts of income) and that extraordinary revenue elements have been excluded.

37 Patrick Manning, for example, estimates that between 1905 and the onset of the First World War, the federation absorbed more than half of Dahomey's GNP through such redistributive payments. See P. Manning, *Slavery, Colonialism, and Economic Growth in Dahomey, 1640–1960* (Cambridge, 1982).

well as Ewout Frankema and Morten Jerven.[38] This method corrects for the fact that early French African population censuses grossly overstated the number of people in large parts of the AOF and AEF, whereas the early British colonial censuses had a tendency to underestimate populations.[39]

Table 2 shows total Gross Public Revenue (GPR hereafter) per head of the population for the British and French African colonies for all benchmark years in pound sterling (£). It should be noted that the 1920 benchmark might suffer from data biases that overstate the value of gross public revenue. The immediate post-First World War era was plagued by high inflation, which raised the fiscal budget in nominal terms. However, the adaptation of a large part of the cost-structure of the state, namely the salaries of administrative staff, only compensated for this *after* the general price rise. Therefore, the 1920 benchmark should be interpreted with care, as it may reflect a temporary deviation from the long-term trend. Figure 2 groups these GPR *per capita* estimates into four categories for the year 1925, distinguishing by colonial power (British-French) and by geographical location (coastal-landlocked).[40] We note the following.

First, the cross-colony variation in *per capita* government revenue levels in French Africa was larger than in British Africa. Of course, in both empires one can find 'richer' and 'poorer' administrations, but the revenue gap between Senegal and Niger, both part of the AOF, or Gabon and Chad (both part of the AEF), was about a factor five larger in 1925 than the gap between Kenya and Nyasaland that constituted the 'richest' and 'poorest' states in BEA. The coefficients of variation for the four regions are: 1.15 (AOF), 0.72 (AEF), 0.47 (BWA), and 0.52 (BEA).

Second, Figure 2 illustrates that, although the British still generated more government revenue on average in both the coastal and landlocked countries in 1925, the primary distinction in terms of revenue generating capacity is between coastal and landlocked colonies. In 1925, no single landlocked colonial state was capable of raising revenue beyond £0.20, whereas the majority of coastal colonies generated (far) greater revenues. This contrast becomes even more pronounced if we include the data for outliers such as Réunion and Mauritius (two sugar islands) with GPR *per capita* levels of respectively £1.35 and £2.26.[41] We did not find significant differences in terms of *per capita* revenue levels

38 E. Frankema and M. Jerven 'Writing history backwards and sideways: towards a consensus on African population, 1850–present', *Economic History Review*, 67 (2014, forthcoming); P. Manning, 'African population: projections, 1850–1960', in K. Ittmann, D.D. Cordell, and G.H. Maddox (eds.), *The Demographics of Empire: The Colonial Order and the Creation of Knowledge* (Athens, OH, 2010), 245–75. We adjusted population figures for Togo and Cameroon to account for their post-First World War split up.

39 R.R. Kuczynski, *Demographic Survey of the British Colonial Empire, Volumes I and II* (London, 1948–9); D.D. Cordell and J.W. Gregory, 'Labour reservoirs and population: French colonial strategies in Koudougou, Upper Volta, 1914 to 1939', *The Journal of African History*, 23:2 (1982), 205–24; Green, 'On the size'.

40 We chose the year 1925 here to illustrate our findings because it was the first year for which all of our observations are present. As can be derived from the regressions, the stylized fact we set out to illustrate does not differ significantly when selecting another year.

41 A simple OLS and pooled OLS regression reveals that those differences are statistically significant while controlling for other geographical variables. Readers interested in these results are invited to contact the authors.

	1911	1920	1925	1929	1934	1937
FRENCH AFRICA						
Fr. West Afrca (AOF)						
Côte d'Ivoire	0.11	0.35	0.36	0.51	0.21	0.23
Dahomey/Benin	0.25	0.40	0.37	0.38	0.27	0.26
Guinée	0.25	0.42	0.25	0.25	0.24	0.22
Haute Volta/Burkina Faso	n.a.	0.06	0.05	0.08	n.a.	n.a.
Mauritanie	0.07	0.19	0.10	0.13	0.16	0.05
Niger	0.03	0.08	0.05	0.08	0.10	0.07
Sénégal	0.32	0.83	1.08	0.96	0.63	0.82
Soudan	0.12	0.30	0.21	0.24	0.18	0.17
regional av. (non weighted)	*0.16*	*0.33*	*0.31*	*0.33*	*0.25*	*0.26*
regional av. (pop. weighted)	*0.16*	*0.27*	*0.30*	*0.33*	*0.25*	*0.35*
Co. variation	*0.65*	*1.07*	*1.16*	*1.56*	*0.81*	*0.88*
Fr. Equatorial Africa (AEF)						
Congo	0.24	0.32	0.18	0.30	0.44	n.a.
Gabon	0.21	0.22	0.20	0.51	0.60	n.a.
Oubangui-Chari	0.04	0.07	0.05	0.11	0.12	n.a.
Tchad	0.02	0.07	0.04	0.04	0.05	n.a.
regional av. (non weighted)	*0.13*	*0.17*	*0.12*	*0.24*	*0.30*	*n.a.*
regional av. (pop. weighted)	*0.07*	*0.12*	*0.08*	*0.14*	*0.18*	*n.a.*
Co. variation	*0.92*	*0.73*	*0.73*	*0.87*	*0.86*	*n.a.*
Fr. Africa other						
Cameroun	n.a.	0.19	0.11	0.16	0.14	0.11
Madagascar	0.28	0.51	0.35	0.49	0.49	0.42
Somaliland	0.59	1.54	0.86	1.45	1.29	1.24
Togo	n.a.	n.a.	0.30	0.23	0.26	0.17
Réunion	0.34	1.73	1.35	1.39	1.53	1.33
BRITISH AFRICA						
Br. West Africa (BWA)						
Gambia	0.49	0.84	0.54	0.68	0.52	0.57
Gold Coast	0.36	0.68	0.65	0.55	0.36	0.43
Nigeria	0.18	0.20	0.17	0.15	0.10	0.15
Sierra Leone	0.40	0.53	0.41	0.27	0.22	0.31
regional av. (non weighted)	*0.36*	*0.56*	*0.44*	*0.41*	*0.30*	*0.36*
regional av. (pop. weighted)	*0.21*	*0.40*	*0.25*	*0.22*	*0.14*	*0.20*
Co. variation	*0.37*	*0.49*	*0.47*	*0.59*	*0.60*	*0.48*
Br. East Africa (BEA)						
Bechuanaland	0.26	0.31	0.22	0.20	0.20	0.26
Kenya	0.14	0.60	0.36	0.34	0.25	0.34
Northern Rhodesia	0.07	0.10	0.13	0.24	0.24	0.24
Nyasaland	0.05	0.09	0.09	0.11	0.09	0.11
Uganda	0.06	0.13	0.24	0.28	0.21	0.22
Tanganyika	n.a.	n.a.	0.17	0.22	0.16	0.15
regional av. (non weighted)	*0.12*	*0.25*	*0.20*	*0.23*	*0.19*	*0.22*
regional av. (pop. weighted)	*0.11*	*0.34*	*0.22*	*0.25*	*0.19*	*0.22*
Co. variation	*0.74*	*0.88*	*0.52*	*0.38*	*0.33*	*0.38*
British Africa other						
Mauritius	2.15	3.38	2.26	1.60	1.71	1.36

Table 2. Gross Public Revenue *per capita* in BA and FA Africa for six benchmark years (in 1911 £).

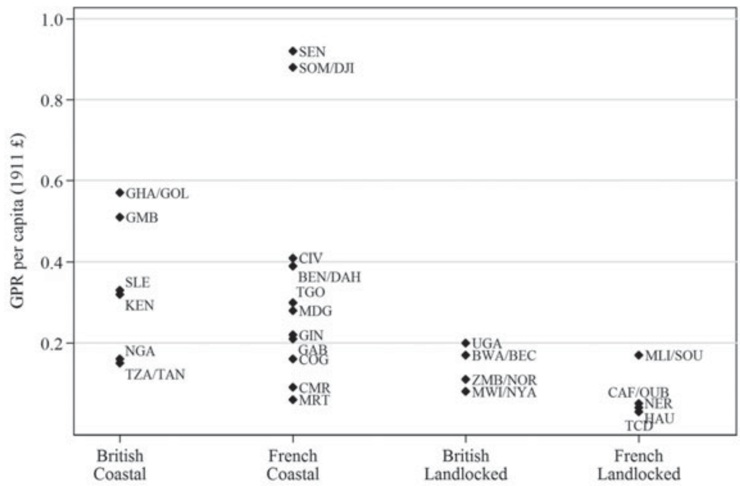

Fig. 2. GPR *per capita* in BA and FA landlocked and coastal colonies in 1925 (in 1911 £). *Notes*: The label of the observations is their current three-digit country code. In cases where the colonial name differed from the current name, both have been used. For convenience sake, the codes are: BEN/DAH = Benin/Dahomey; BWA/BEC = Botswana/Bechuanaland; CAF/OUB = Central African Republic/Oubangui-Chari; CMR = Fr. Cameroun; CIV = Côte d'Ivoire; COG = Fr. Congo; DJI/SOM = Djibouti/Fr. Somaliland; GAB = Gabon; GHA/GOL = Ghana/Gold Coast; GIN = Guinée; GMB = Gambia; BFA/HAU = Burkina Faso/Haute Volta; KEN = Kenya; MDG = Madagascar; MLI/SOU = Mali/French Soudan; MRT = Mauritanie; MUS = Mauritius; MWI/NYA = Malawi/Nyasaland; NER = Niger; NGA = Nigeria; REU = Réunion; SEN = Sénégal; SLE = Sierra Leone; SOM = Br. Somaliland; TCD = Tchad; TGO = Togoland; TZA/TAN = Tanzania/Tanganyika; UGA = Uganda; and ZMB/NOR = Zambia/Northern Rhodesia.

between the African settler colonies (in particular Kenya and Southern Rhodesia) and the nonsettler colonies.

Third, a large part of the initial variation between the British and French African regions faded away over time as *per capita* public revenue levels tended to converge. This is not that surprising if one considers that, although the partition of Africa occurred in a relatively narrow period of time, the actual pace and mode with which these territories were integrated into the British and French African empires differed considerably. For instance, the transition to legitimate commerce in much of West Africa had created a very different starting point for colonial intervention than in East Africa, where commerce remained dominated by exports of slaves and ivory up to the point of European conquest.[42] Around 1900, British West African trade with Europe was, in *per capita* terms, more than ten times as large as British East African trade.[43] Similarly, parts of French West Africa, and Senegal in particular, where colonial ties originated from the 1850s onwards, were much better integrated in the Atlantic economy than most of its Equatorial counterparts.

The relatively low tax yields in the French hinterland areas, such as Niger, Chad, the French Soudan and Haute Volta, were compensated with higher revenues from the richer coastal colonies such as Senegal, Côte d'Ivoire, and Gabon. By the 1930s, French revenue

42 D. Eltis and L. C. Jennings, 'Trade between Western Africa and the Atlantic world in the pre-colonial era', *American Historical Review*, 93:4 (1988), 936–59.
43 Frankema and Van Waijenburg, 'Structural impediments', 916.

levels were comparable with those in British Africa as a whole. Part of this catching up effort, however, should be attributed to the economic depression of the early 1930s, which eroded the customs revenues in the commercial colonies that had increased so rapidly during the 1920s. The colonial administrations of the AEF were the only ones that managed to raise GPR *per capita* during the 1930s. With the exception of Tchad, all budgets more than doubled between 1925 and 1934. In part, this rapid catch-up followed from the large-scale expansion of timber exports, known as the 'okoumé rush', and the greater administrative capacity to collect direct taxes.[44] Additionally, the completion of the Congo-Ocean railway in 1934 strengthened the integration of the hinterlands into the imperial economy.

DIRECT AND INDIRECT TAXES

By probing into the source composition of African colonial taxes we add two more findings. To begin with, the extent to which various British and French colonial administrations relied on direct or indirect taxes varied largely, but there was a strong negative correlation between *per capita* GPR and the proportion of direct taxes, *independent of metropolitan identity*.

Direct taxes in Africa consisted of taxes that were directly levied on persons, households, huts, cattle, or land, although the latter were rare. Apart from being a potential cause of resistance, direct taxes were also relatively inefficient as it required considerable administrative effort to monitor and collect them. Both the French and the British African authorities had to rely upon native chiefs for the collection of direct taxes. In the early colonial years, the commission rate was up to 20 per cent in the French African colonies.[45] According to Sara Berry, the strategy of outsourcing tax collection to native chiefs served a dual purpose. Not only was it a means to cut costs, it was also an effective way to integrate existing local power structures into the administrative framework of the new state. As such, she argues, nearly all of the colonial administrations practiced at least some form of indirect rule, regardless whether they had 'articulated it as their philosophy of imperial governance'.[46]

Customs duties were collected at a central point of entry or exit, and were fairly easy to monitor and enforce. Smuggling and other forms of tax evasion were problematic, but the overall administrative burden was far lower, especially in the absence of solid physical infrastructures and well-oiled bureaucracies. In general, imports were more heavily taxed than exports, so that the burden of taxation fell partly on European manufacturers exporting to Africa and partly on that particular group of Africans that possessed sufficient cash to consume imported European commodities. These were usually not the poorest strata of society and certainly not the subsistence farmers in the hinterlands who produced,

44 C. J. Gray, *Colonial Rule and Crisis in Equatorial Africa: Southern Gabon, c. 1850–1940* (Rochester, NY, 2002).

45 Evidently, this number, which has been derived from the colonial statistical yearbooks, is only a lower bound estimate of how much chiefs could possibly (legally or illegally) earn through their position. See R. Van Zwanenberg and A. King, *An Economic History of Kenya and Uganda, 1800–1970* (London, 1975); Gardner, 'Decentralization'.

46 S. Berry, *No Condition is Permanent: The Social Dynamics of Agrarian Change in Sub-Saharan Africa* (Madison, WI, 1993), 25.

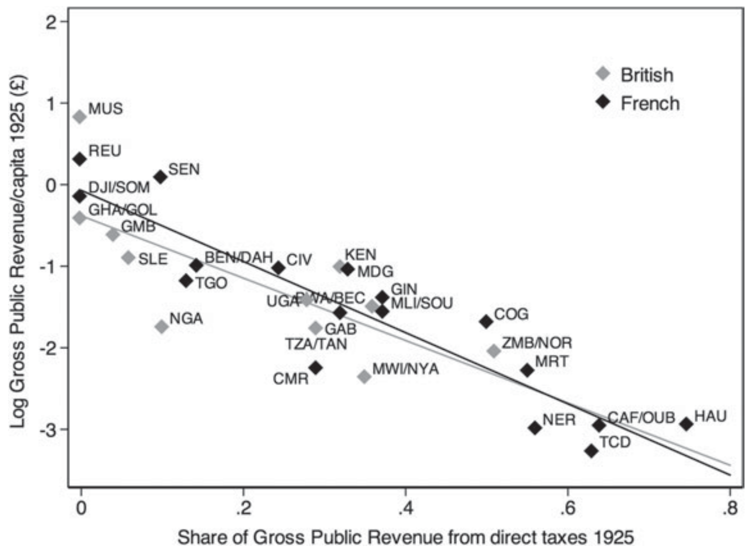

Fig. 3. Gross Public Revenue (GPR)/*capita* (log) vs share GPR from direct taxation in 1925. *Notes*: The labels of the observations are the same as in Fig. 2.

bartered, and consumed largely outside the commercial colonial economy. Part of the resistance against trade taxes was thus voiced by metropolitan businesses and trade companies, rather than by African taxpayers. Export taxes did of course meet with resistance from local farmers or European enterprises controlling mines or plantations.

Figure 3 presents the relationship between *per capita* GPR and the share of direct taxes in total GPR for the 1925 benchmark year. Appendix figures 1a–f show that the observed pattern holds for all benchmark years: in places where the state was able to raise sufficient revenue from taxing trade, governments were happy to drop or minimize direct forms of taxation. No direct native taxes were implemented in the Gold Coast, British and French Somaliland, Réunion, and Mauritius.[47] Southern Nigeria did not have a direct capitation levy until the early 1930s.[48] Although Sierra Leone and the Gambia, both colonies where the government could count on significant trade revenues, did have a flat native tax, the rates of these – unlike the ones in French West Africa – did not change over time.[49]

47 In 1851, a hut tax had been imposed in the Gold Coast, but it was abandoned in 1861 because it was unsuccessful in terms of the revenue it yielded and custom duties soon proved to be a far better alternative.

48 There was a difference between the fiscal strategies in Northern and Southern Nigeria. As pointed out by Bush and Maltby in 'Taxation in West Africa', the Southern part, which was 'far more prosperous and economically active', had no direct taxes until after the First World War. Even when an income tax was imposed in the 1920s, incomes under £30 per year were exempted from this tax. Taking contemporary wage rates into account, which fluctuated between 12 and 17 pence per day in the 1920s, the annual income of an unskilled urban laborer would not exceed £22 per year, assuming a 6-day workweek. It was not until 1937 that the lower income exception was abolished, and that the native income tax thus became applicable to all inhabitants of Southern Nigeria.

49 Our conclusions for British and French Africa are in line with several other recent studies observing similar patterns *within* British Africa. For examples, see Frankema, 'Colonial taxation'; Gardner, *Taxing Colonial Africa*, 24–5; and Mkandawire, 'On tax efforts'.

Colonial governments that did implement direct taxes largely did so out of necessity, as trade taxes simply did not generate enough revenue. In some places, direct taxes still did not raise sufficient state income, necessitating the metropole to step in financially as a last resort; a pattern we observe both in British and French Africa, albeit to differing degrees. Whereas the British did this occasionally in the early years of colonial state formation, and especially in East Africa,[50] the French had to do this repeatedly to accommodate structural deficits. For example, Paris transferred metropolitan grants to the AEF on an annual basis until the 1930s, and which often constituted up to 25–30 per cent of the revenue raised locally. The AOF, in contrast, received nothing. Catherine Coquery-Vidrovitch points out that with a total trade value of 146 million francs for the AEF in 1920, *vis-à-vis* 1.2 billion francs for the AOF, the equatorial federation long remained 'the poor relation among the French colonies'.[51]

Figure 3 suggests that in terms of source composition, there were few systematic differences between the way the British and the French designed their fiscal systems. The scatter plots in the appendix underline this point from a temporal perspective as well: the share of direct taxes declined in virtually all colonies up to 1940, but they did so in a movement along, rather than away from, the fitted line.[52] This is not to say that additional policy objectives – such as the desire to create 'governable subjects', to commodify indigenous labor or to establish political hegemony – did not matter at all for the design of fiscal strategies. Colonial governments at the time certainly articulated and justified their policies in such terms. The words of AOF Government General William Ponty are telling in this respect (1911):

> For the native . . . taxation, far from being the sign of humiliating servitude, is seen rather as proof that he is beginning to rise on the ladder of humanity, that he has entered upon the path of civilization. To ask him to contribute to our common expenses is, so to speak, to elevate him in the social hierarchy.[53]

But our comparative macro-perspective does suggest that these policy objectives first and foremost need to be understood in the context of endogenous African economic and geographical conditions determining the constraints and opportunities to fiscal capacity building.[54] This also implies that we should be careful not to overemphasize the agency of European colonial governments in Africa.

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50 That is Uganda, Kenya, and Nyasaland. In the fiscal year 1909–10, *c.* 26 per cent of the total fiscal budget of the Kenyan government was supplied by a metropolitan grant. The British East Africa Protectorate, *Blue Book* (Nairobi, 1909–10). For a broader discussion of British efforts to build self-sufficient states in Africa, see Gardner, *Taxing Colonial Africa*, 17–30.

51 C. Coquery-Vidrovitch, 'Economic development in French West Africa,' in J. Konczacki and Z. A. Konczacki (eds.), *An Economic History of Tropical Africa, Volume Two: The Colonial Period* (London, 1977), 190.

52 It should be noted that the temporal trend we observe of a decreasing reliance on direct taxes should not be extrapolated to the post-Second World War period, as the colonial tax systems underwent a series of reforms during the early postwar and postcolonial eras, and income taxes and graduated poll taxes started to play a greater role in this period. We have not included the post-Second World War era into our analysis, as space constraints do not allow for an encompassing discussion of these reforms. Additionally, there is an analytical reason for this exclusion, as the widespread and systematic existence of colonial development subsidies structurally changed the conditions of fiscal capacity building.

53 Quote taken from Conklin, *A Mission*, 144.

54 Despite there maybe being something counterintuitive about our argument of identifying local agency from such a general level, our framework highlights a trend that can only be distilled at the macrolevel.

	1911			1925			1937		
	min (fr.)	max (fr.)	# tax rates	min (fr.)	max (fr.)	# tax rates	min (fr.)	max (fr.)	# tax rates
French Africa									
Côte d'Ivoire	0.5	4.5	n.a.	5	22	n.a.	8	50	26
Dahomey	0.25	2.25	n.a.	0.75	15	9	5	23	8
Guinée	3	3	1	5	12	7	12	21	12
Haute Volta	n.a.	n.a.	n.a.	2	5	7	n.a.	n.a.	n.a.
Mauritanie	n.a.	n.a.	n.a.	11	11	1	20	20	1
Niger	0.25	4.5	n.a.	1	6	n.a.	1	10.5	15
Sénégal	3	4	4	5	15	7	10	25	9
Soudan	0.25	4.5	n.a.	3	12	15	9	30	30
Cameroun	n.a.	n.a.	n.a.	1	15	8	2	30	24
Togo	n.a.	n.a.	n.a.	5	55	11	14	175	11
Madagascar	10	30	4	15	35	3	n.a.	n.a.	n.a.
Fr. Somaliland	X	X	X	X	X	X	X	X	X
Réunion	X	X	X	X	X	X	X	X	X
	min (£)	max (£)	# tax rates	min (£)	max (£)	# tax rates	min (£)	max (£)	# tax rates
British Africa									
Gambia	0.2	0.2		0.2	0.2		0.25	0.25	
Gold Coast	X	X	X	X	X	X	X	X	X
(S.) Nigeria	X	X	X	X	X	X	0.25	0.25	1
Sierra Leone	0.25	0.25	1	0.25	0.25	1	0.25	0.25	1
Bechuanaland	1	1	1	1	1	1	1	1	1
Kenya	0.2	0.2	1	0.3	1	7	0.6	0.6	1
N. Rhodesia	n.a.	n.a.	n.a.	0.38	0.5	2	0.3	0.5	4
Nyasaland	0.15	0.3	n.a.	0.3	0.3	1	0.3	0.3	1
Tanganyika	n.a.	n.a.	n.a.	0.1	0.6	5	0.15	0.6	9
Uganda	0.25	0.75	n.a.	0.25	0.75	4	0.35	1.05	8
Mauritius	X	X	X	X	X	X	X	X	X

Table 3. Official minimum and maximum native tax rates in 1911, 1925, and 1937. *Notes*: Taxes rates for French Equatorial Africa were not systematically reported in our sources.

That colonial fiscal policies were greatly dependent on local conditions is also reflected *within* colonies. Table 3 shows the official minimum and maximum tax rates for each colony, and the total number of different tax rates that were applied there.[55] All of the maximum rates apply to the main cities, whereas the lower rates were set for the poorest rural hinterlands. Two British-French differences stand out. First, the gaps between minimum and maximum rates were considerably larger in French than in British Africa. In Togo, for example, the minimum-maximum tax rate ratio was around 1:11 in 1925, and in Dahomey (Benin) we even observe a ratio of 1:20. In British Africa, the largest gap that can be observed is 1:4 in Tanganyika in 1937.

55 Note that some tax rates were applied multiple times, so that this captures only the total number of *different* tax rates in circulation rather than the number of districts or subgroups that had their own tax rates. The former offers a better reflection of the 'fine-grained' nature of the direct tax system.

A second point of interest is that the French adjusted their tax rates more frequently than the British. In part, this was caused by higher inflation rates in French Africa (see Table 1).[56] But it also reflects a higher degree of precision in French fiscal administration. The British tended to levy head taxes or poll taxes on each adult male, or each hut, house, or yard. In some cases, these were complemented by a 'multiple wives tax' to make taxes somewhat more progressive. The French on the other hand, introduced separate tax rates for men, women, and children above a certain age. The French also levied alternative forms of taxation in large parts of Mauritania, Niger, and French Soudan, such as the *zekkat*, which was a percentage levy on the value of cattle.[57]

Differentiation of tax rates was thus the rule everywhere, but the range of rates and tax instruments was wider in French Africa. A closer look at the 'micro-level' aspects of fiscal capacity building, such as varying district level tax rates and household differentiation, underlines the idea that local conditions shaped colonial tax systems: neither the British nor the French randomly assigned tax rates, their choices were largely guided by African constraints, rather than European policy preferences.

The large variation in the imposition of direct taxes translated into varying tax burdens as well. We can provide some rough estimations of direct tax pressure, by transforming the nominal tax rates into the number of working days required to meet the average rate of taxation, using urban unskilled wage rates. We focus exclusively on the urban areas, as we lack differentiated information on countryside wage rates.[58] Figure 4, depicting a regional average for the AOF, BWA, and BEA, shows that tax pressure for urban unskilled labor in the British areas remained fairly stable over time, but that the levels were much higher in BEA than in BWA, testifying to a very different approach of British colonial governments in the East and the West. Tax pressure in the AOF increased substantially in the course of the colonial period, which partially allowed the French West African colonial states to catch up in terms of GPR per capita levels. But above all figure 4 shows that, despite the higher supposed levels of coercion in French colonies, it took the AOF at least 15 years longer to reach the average rates of direct tax pressure recorded in BEA in 1911.

56 Such rapid tax increases occasionally met great resistance. In Dahomey in 1923, for example, a tax revolt broke out in the city of Porto Novo, after the French had raised the going tax rates by more than 500 per cent for men, 300 per cent for women, and 100 per cent for children to adjust for the postwar inflation. Conklin, *A Mission*, 161.

57 This underlines again that, where possible, colonial governments were happy to shape their fiscal institutions on the basis of existing tax structure, and both the British and the French did so in North Africa. Young, *The African Colonial State*, 124–5.

58 To transform the French tax rates from an individual to a household base, we have made the assumption that an average household existed of a father, a mother, and three to four children – of which one would have been older than ten years and not yet started a family of his or her own. Although there was obviously greater variation in terms of family composition, these assumptions correspond well with demographic survey reports and should thus, on an aggregate level, be a fairly good approximation. Considering tax rates were slightly lower for women and children in the French African colonies, we multiply or divide not by a factor of four (a father, mother, and two children), but by three.

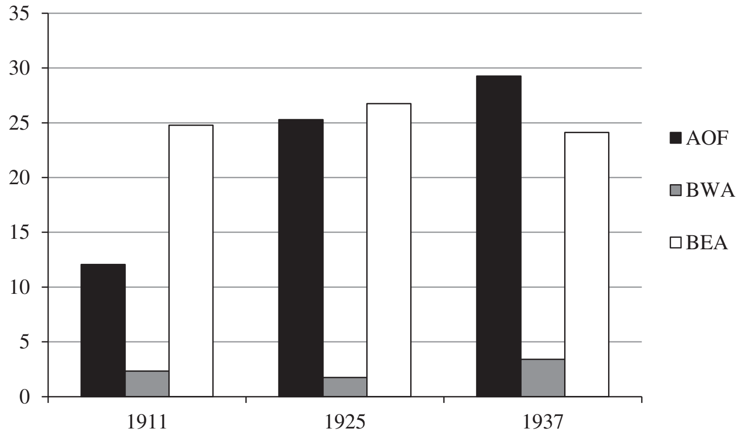

Fig. 4. Number of working days for urban unskilled labor required to meet the annual direct tax obligation in major cities.

FORCED LABOR

One important aspect of the colonial fiscal state that we have set aside so far, and which links up with a discussion about varying tax burdens, are the implicit taxes that were levied in the form of forced labor obligations. Forced labor schemes were pervasive in both French and British Africa, and were deeply rooted in precolonial forms of labor coercion such as slavery, labor pawning, debt bondage, and communal labor services. They were imposed by the colonial state and by 'private agents' – chiefs, creditors – leading to a wide range of different practices regarding the type of work to be performed, the labor conditions, the number of days of work, and the compensation that was to be received in return, if any. It is worthwhile to briefly explore the extent of cross-colonial uniformity and variety in the use and regulation of labor *corvée* services.

Although colonial states justified the implementation of forced labor services as being part of their 'civilizing mission', the forced recruitment of native labor was above all key to solving the 'revenue dilemma' in largely rural and non-monetized African economies.[59] The development of infrastructural networks, as well as the expansion of mining and cash-crop enclaves, required vast numbers of African workers, which were in many places difficult, if not impossible, to recruit via free labor markets.

Regarding the use of labor services by the state it seems safe to conclude that the French organized this practice in a more systematic manner than the British, and that in terms of implicit additional tax income, probably also relied on it to a larger degree. This would explain why the French ignored the growing criticism by international antislavery and pro-labor

59 It is highly likely that in areas that relied more on the implied revenue from forced labor, the colonial perception of Africans needing to be 'disciplined' into becoming productive workers was more strongly articulated. This implies that, ultimately, local material conditions also co-shaped philosophies of colonial state building. We believe this would be an important avenue for further research. For important studies on philosophies of state building, see Young, *The African Colonial State*; and Conklin, *A Mission*.

organizations, by refusing to sign the treaties of the International Labor Organization (ILO) that were aimed at curtailing this practice in the 1930s; treaties that the British did sign.[60]

The *prestations* in French Africa, which became officially regulated in 1912, applied to every African over the age of 15 for a maximum of 12 working days against a fixed daily ration, and were to be carried out on projects within five kilometers of the workers' residence, such as railway construction, road clearing, road maintenance, school building, porterage, and the cultivation of cash-crops. Europeans and the so-called *évolués* were generally officially exempted from this labor tax, or they, together with some of the richer African families, enjoyed the privilege of being able to 'buy-out' their labor obligations.[61] These services were coordinated by district administrators, local chiefs and village heads, and were often poorly supervised.

The British did not introduce an equivalent uniform legal framework for forced labor practices, and took a more pragmatic approach, with widely varying intensities of labor coercion.[62] In the more commercialized areas with well-functioning labor markets, such as in the rapidly expanding cocoa sector in the Gold Coast, forced labor practices were implemented (or maintained) in order to preserve part of the scarce labor supply for public works, especially local infrastructure projects. Workers were recruited by local chiefs and were usually paid for their services in cash or kind. In Uganda, the British adopted the indigenous practice of *kasanvu* (labor tribute) and allowed people to choose: either conduct public work for a fixed number of days, or avoid the tax by cultivating cotton, which allowed the colonial state to capture rents from trade taxes. So both through the threat of forced labor and the actual practice of it, the British tried to enhance state revenue.[63]

In British East Africa, labor migrants from British India also relieved part of the labor demand for large-scale infrastructural projects, such as the construction of the Mombasa-Uganda railway, which involved approximately 30,000 indentured workers.[64] Finally, the British made effective use of large-scale land alienation and the creation of native reserves in Kenya and Southern Rhodesia to raise revenue, enabling European settlers to develop commercial agriculture and enhancing the potential value of trade taxes, and at the same time converting African farmers into wage workers to run the plantations and mines.[65]

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60 B. Fall, *Le travail forcé en Afrique-Occidentale française, 1900–1946* (Paris, 1993); B. Fall, *Social History in French West Africa: Forced Labor, Labor Market, Women and Politics* (Calcutta, 2002); C. B. Ash, 'Forced labor in colonial West Africa', *History Compass*, 4:3 (2006), 402–6; O. Okia, *Communal Labor in Colonial Kenya: The Legitimization of Coercion, 1912–1930* (New York, 2012).

61 The option to buy-out one's labor obligations was expanded to larger groups in the course of the colonial period, and especially in the 1920s. Yet, the additional state income generated from these 'buy-outs' (*rachat des prestations*), suggests that the number of people doing so was negligible. The buy-out rate was in most places roughly the equivalent of the going unskilled native wage rate.

62 K. O. Akurang-Parry, 'Colonial forced labor policies for road-building in Southern Ghana and international anti-forced labor pressures, 1900–1940', *African Economic History*, 28 (2000), 1–25.

63 P. Nayenga, 'Commercial cotton growing in Busoga District, Uganda, 1905–1923', *African Economic History*, 10 (1981), 175–95.

64 C. Wolmar, *Blood, Iron, and Gold: How the Railroads Transformed the World* (New York, 2010).

65 P. Mosley, *The Settler Economies: Studies in the Economic History of Kenya and Southern Rhodesia, 1900–1963* (Cambridge, 1983).

Both the British and the French relied upon the cooperation of native chiefs to recruit the demanded labor, but payments for this service seem to have been more common in British African colonies. The harshest forms of forced labor were adopted in the fiscally least developed areas, where the colonial government's desperate scramble for revenue made it resort to outright repression. Although we lack reliable quantitative evidence for the AEF, the most severe excesses of forced labor regimes seem to have occurred there. The construction of the Congo-Océan railway between 1921 and 1934, for example, was a project that could only be funded by extensive and repeated subsidies from Paris and by coercing more than 127,000 African men to work on its construction without pay other than food rations, killing at least 20,000 men through poor labor and health conditions.[66]

To what extent was the more systematic use of forced labor in French Africa the outcome of a different and more ambitious style of French imperial governance, in which they put more pressure on the indigenous population to finance a heavier colonial state apparatus? We do not have sufficient space to explore this question in detail here, but reasoning by analogy from the observed variation in indirect-direct taxes, one is inclined to believe that the practice of forced labor was more intensive in areas where alternatives were scarce. The challenge of *mise en valeur* was greater in French Africa, and higher degrees of labor coercion would, at least to some extent, redress the grave fiscal imbalances within the colonial federations. In the 1920s, the *prestations* were lowered in Sénégal from ten days of labor service to four under pressure of increasing local resistance against the system. In the AEF they were maintained at a ten days minimum.

This hypothesis clearly warrants further research and could possibly be informed by an analysis of the Congo Free State (Belgian Congo after 1908). What made the Congo Free State unique from its very inception as a constructed and partly illusory political entity was the stipulation in the Berlin conference treaty that it was free trade zone, where any form of trade taxes was prohibited.[67] The atrocities that were committed in the Congo are widely considered as among the worst scenarios of colonial repression and exploitation. In effect, by ruling out in advance the significant fiscal resources to be derived from trade taxes, the Congo offers something of a limited case for contemplating the implications of a state dependent upon revenue derived exclusively through *prestations*.

CONCLUSION

Despite the different objectives and structures of French and British colonial governance in Africa, the formation of the fiscal state was primarily determined by the opportunities and

66 G. Sautter, 'Notes sur la construction du chemin de fer Congo-Océan (1921–1934)', *Cahiers d'Études Africaines*, 7:26 (1967), 219–99.

67 L. Gardner, 'Fiscal policy in the Belgian Congo in comparative perspective', in E. Frankema and F. Buelens (eds.), *Colonial Exploitation and Economic Development: The Belgian Congo and the Netherlands Indies Compared* (London, 2013), 130–52; P. Clement, 'The land tenure system in the Congo, 1885–1960: actors, motivations, and consequences', in Frankema and Buelens (eds.) *Colonial Exploitation*, 88–108.

constraints set by local commercial and environmental conditions, including African responses to intensifying colonial connections. French and British colonial administrations introduced a wide range of different tax instruments, but the overall logic was broadly similar: substitute direct taxes for indirect taxes whenever possible and use forced labor to enhance trade *and* customs revenues. Our comparative analysis has generated three kinds of evidence underpinning this claim.

First, we found that the most important determinant of *per capita* revenue levels was the location of the colony (coastal or landlocked), independent of it being ruled by a British or French colonial government. That French *per capita* budgets were initially smaller was the outcome of British-French competition, especially in West Africa, in which Britain managed to secure the more prosperous and/or commercially most promising areas.

Second, in terms of the *source composition* of colonial taxes, we found a negative relationship between budget size and direct tax shares that was remarkably strong, remarkably similar across British and French territories and remarkably persistent up to 1940. Although the imposition of direct native taxes has mostly been interpreted as serving a wide range of policy objectives, such as labor commodification, civilizing the native subject and the integration of local power structures, a comparative analysis suggests that this tax instrument was considered to be a second-best alternative in view of lagging custom revenues. The highest direct tax shares were to be found in the least commercialized areas. These were also often, though not always, the areas that were subdued later in time: British East Africa as opposed to British West Africa, and the landlocked areas of French West Africa and French Equatorial Africa as opposed to the coastal French territories.[68]

Third, we found no marked difference in terms of the *temporal development* of colonial state budgets. Infrastructural and agricultural investments that were meant to unlock the economic potential of African hinterland areas increased the potential of revenue collection over time. In the majority of cases tax revenues increased (in nominal and real terms) by enlarging the share of indirect taxes and non-tax revenues (railway receipts mainly). Commercialization thus changed the composition of the fiscal system and it did so both in British and French Africa.

The most important British-French distinction is probably the French preference for federal governance structures. But the federal political system was not just the product of a 'French' blueprint of imperial organization, it can also be regarded as a solution to a fiscal problem: how to integrate vast sparsely settled hinterland areas into a fiscally viable state structure? Colonies such as Niger, Mauritania, Chad, and Oubangui-Chari were heavily supported by an overarching federal governance structure where part of the costs of state formation (defense, administration) was born collectively. The federations of the AOF and the AEF greatly facilitated the process of integrating hinterland areas into the Atlantic economy through the construction of roads and railways. The drawback was that economic centers of gravity such as Sénégal, Côte d'Ivoire and Gabon had to give up

68 Important exceptions to this rule were the British campaign against Sokoto in northern Nigeria between 1900 and 1903 and the Niger delta, which was still being subdued in the early 1900s when most of Uganda and Kenya were already under British control.

part of their control over tax revenues, especially customs duties.[69] The British integrated neighbor territories in federations or customs unions as well, but in a more *ad hoc* fashion. However, *within* these overarching structures, local administrations differentiated tax rates and labor *corvée* services in order to align their tax systems with local political and economic conditions. And whenever British or French administrations could finance the state without imposing direct taxes they chose to do so.

APPENDIX

A1. Construction PPPs

The thinking behind using so-called colonial government purchasing power parities is to express local fiscal revenues in terms of local cost-structures, and more specifically the price of different categories of labor hired by the colonial government. This method is likely to produce a better approximation of the comparative value of fiscal revenues than using the official exchange rates of the British pound and the French franc. These exchange rates were particularly volatile during the *inter bellum* and primarily responded to macroeconomic conditions in the mother countries.

The PPPs were calculated in three steps. First, we took the unweighted average unit wage or salary values of three countries in British Africa (BA: Gold Coast, Gambia, and Sierra Leone) and French Africa (FA: Dahomey, Sénégal, and Côte d'Ivoire) for which there are comparatively good records. The equation for French Africa is:

$$UV_{ij}^{FA} = \frac{\sum_{i=1}^{x=1-n} uv_{ij}^{x^{FA}}}{n}$$

Where x refers to each of the individual colonies, $n = 3$ and UV_{ij} refers to the unit values of the four government expenditure categories i, that is, an indigenous school teacher (low rank), an indigenous clerk (low rank), an unskilled worker in government service (construction worker, gardener, cleaner, messenger, or any other comparable type of job with comparable annual earnings) and a skilled construction worker (carpenters as a rule), in each of the six benchmark years j. For British Africa we did the same.

Second, we matched the wage and salary UVs for each category i and each year j to obtain the French-British unit value ratios:

$$UVR_{ij}^{FABA} = \frac{UV_{ij}^{FA}}{UV_{ij}^{BA}}$$

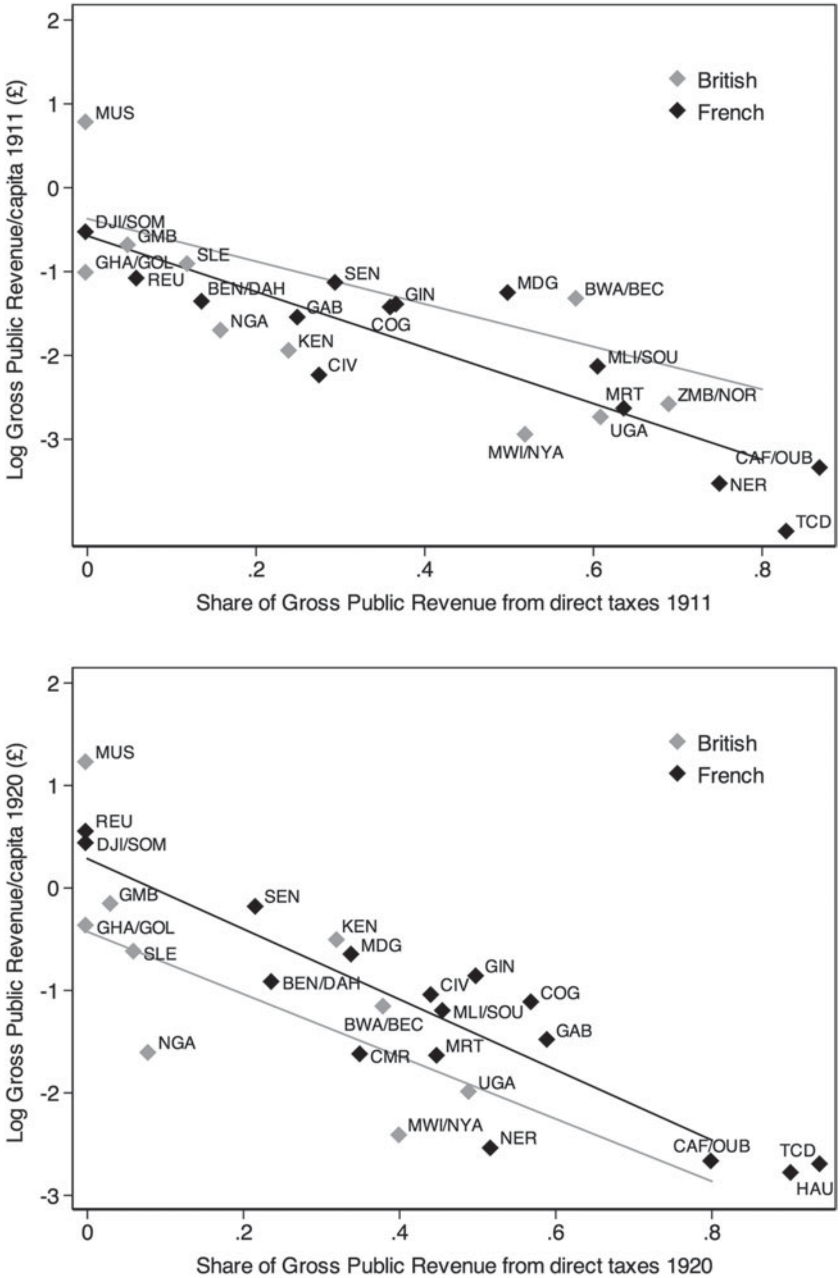
Third, we aggregated the UVRs up to a PPP_j for each year j applying equal weights ($\frac{1}{4}^{th}$) to the four expenditure categories i:

$$PPP_j^{FABA} = \sum_{i=1} UVR_{ij}^{FABA}$$

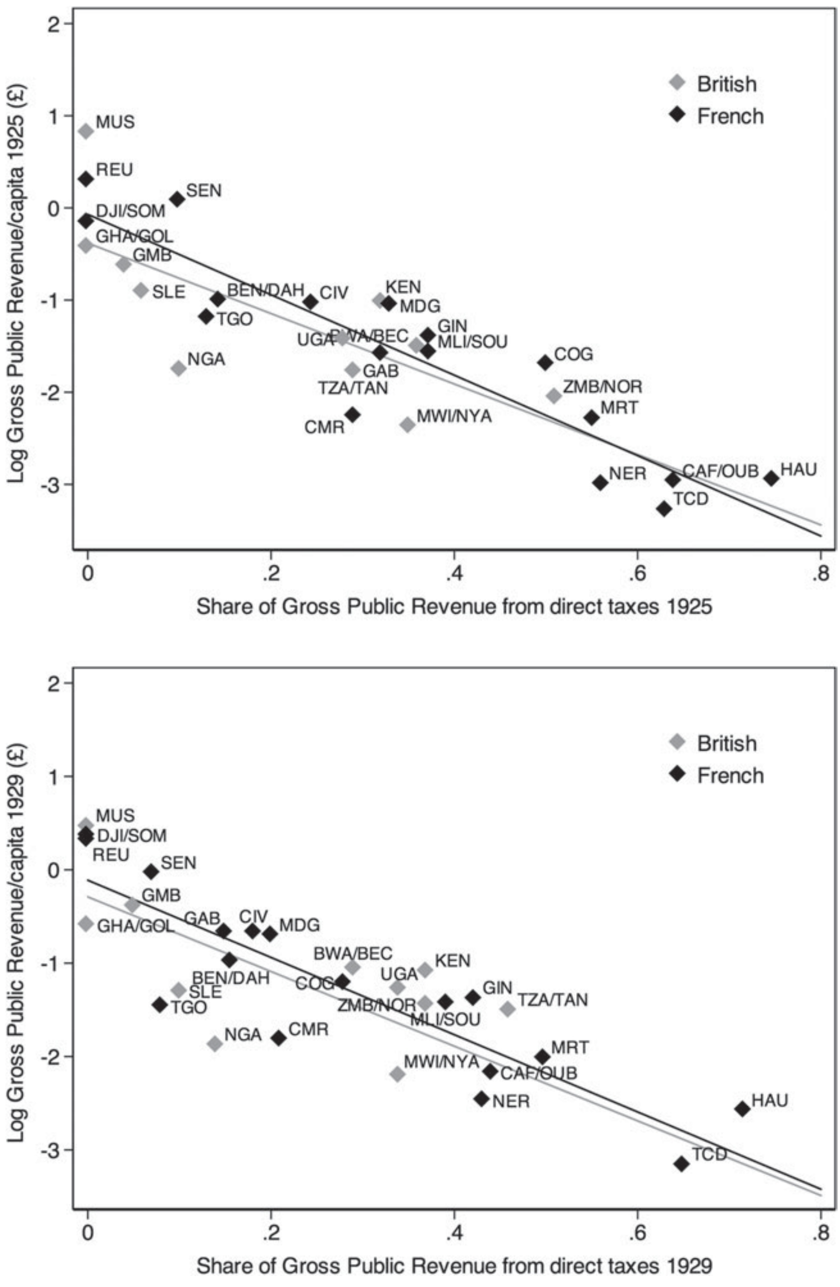
69 For Côte d'Ivoire, however, the net drain increasingly became a serious source of discontent. In the late 1950s, the Ivorian government broke with the federal rules of collecting and transferring customs duties and became the first country to introduce VAT to raise the local state budget.

MATCHING 1911	**BRITISH AFRICA (£)**	**FRENCH AFRICA (fr.)**	
Indigenous clerk/*commis*	50·00	1500·00	30·00
Indigenous teacher/*instructeur*	50·00	1800·00	36·00
Carpenter/*charpentier*	0·15	4·02	27·03
Unskilled worker/*manouvrier*	0·05	1·61	32·04
PPP (FWA/BWA)			**31·27**
Official exchange rate (Ffr/£)			25·10
MATCHING 1920	**BRITISH AFRICA (£)**	**FRENCH AFRICA (fr.)**	
Indigenous clerk/*commis*	55·00	1500·00	27·27
Indigenous teacher/*instructeur*	56·00	1950·00	34·82
Carpenter/*charpentier*	0·14	3·88	28·22
Unskilled worker/*manouvrier*	0·06	1·50	20·00
PPP (FWA/BWA)			**27·58**
Official exchange rate (Ffr/£)			52·02
MATCHING 1925	**BRITISH AFRICA (£)**	**FRENCH AFRICA (fr.)**	
Indigenous clerk/*commis*	67·00	3500·00	52·24
Indigenous teacher/*instructeur*	60·00	3500·00	58·33
Carpenter/*charpentier*	0·25	10·25	41·00
Unskilled worker/*manouvrier*	0·07	3·00	43·32
PPP (FWA/BWA)			**48·72**
Official exchange rate (Ffr/£)			101·30
MATCHING 1929	**BRITISH AFRICA (£)**	**FRENCH AFRICA (fr.)**	
Indigenous clerk/*commis*	56·00	6150·00	109·82
Indigenous teacher/*instructeur*	60·00	7400·00	123·33
Carpenter/*charpentier*	0·22	16·00	74·42
Unskilled worker/*manouvrier*	0·07	4·80	69·40
PPP (FWA/BWA)			**94·24**
Official exchange rate (Ffr/£)			124·02
MATCHING 1934	**BRITISH AFRICA (£)**	**FRENCH AFRICA (fr.)**	
Indigenous clerk/*commis*	81·00	6030·00	74·44
Indigenous teacher/*instructeur*	91·00	7725·00	84·89
Carpenter/*charpentier*	0·16	15·00	96·00
Unskilled worker/*manouvrier*	0·05	4·00	73·85
PPP (FWA/BWA)			**82·30**
Official exchange rate (Ffr/£)			76·70
MATCHING 1937	**BRITISH AFRICA (£)**	**FRENCH AFRICA (fr.)**	
Indigenous clerk/*commis*	56·00	6100·00	108·93
Indigenous teacher/*instructeur*	50·00	8500·00	170·00
Carpenter/*charpentier*	0·17	10·00	60·33
Unskilled worker/*manouvrier*	0·06	3·45	58·32
PPP (FWA/BWA)			**99·39**
Official exchange rate (Ffr/£)			122·18

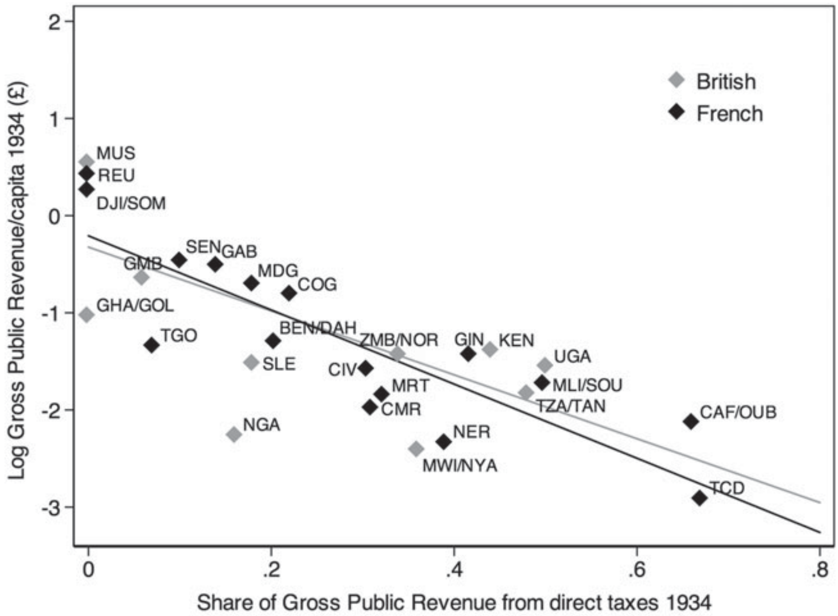
Table A.1. Unit Value Ratios and Purchasing Power Parities, 1911–37. *Notes*: Starting salaries of indigenous clerks and teachers were derived from those with a rank just above a probationer/*stagaire*.

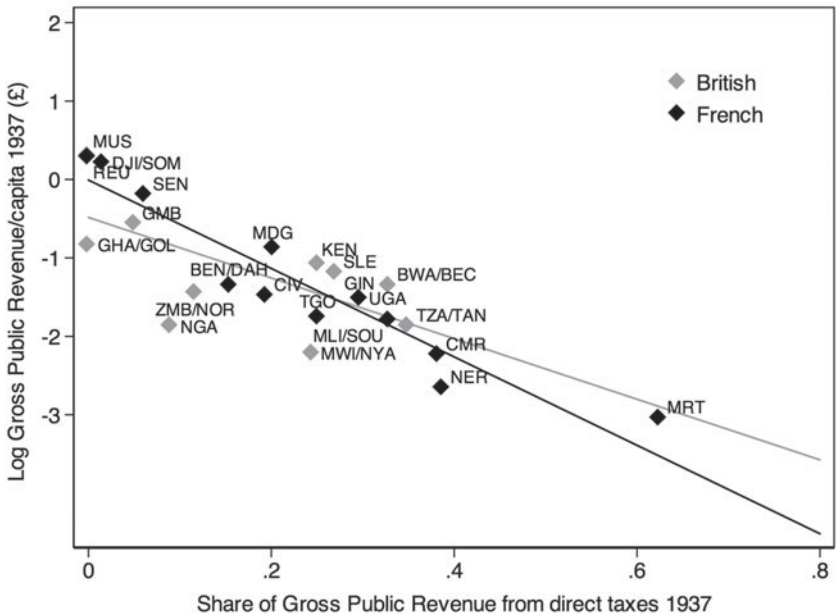


Figs. A.1. a–b. GPR/*capita* (log) vs share GPR from direct taxation in 1911 & 1920.



Figs. A.1. c–d. GPR/*capita* (log) vs share GPR from direct taxation in 1925 & 1929.





Figs. A.1. e–f. GPR/*capita* (log) vs share GPR from direct taxation in 1934 & 1937.

A2. Sources PPPs and government revenues

Sources British Africa:

Colonial Office: *Bechuanaland Protectorate, Blue Book* (Colonial Office), various issues.

The Bechuanaland Protectorate, Blue Book (Mafeking: Government Printing Office), various issues.

The Gold Coast Colony, Blue Book (Accra: Government Printing Office), various issues.

The Colony of the Gambia, Blue Book (Bathurst: Government Printing Office), various issues.

The British East Africa Protectorate, Blue Book (Nairobi: Government Printing Office), various issues; this publication changed into *The Colony and Protectorate of Kenya, Blue Book* (Nairobi: Government Printing Office), various issues.

The Colony of Mauritius, Blue Book (Port Louis: Government Printing Office), various issues.

The Colony and Protectorate of Nigeria, Blue Book (Lagos: Government Printing Office), various issues; *Annual Report on the Social and Economic Progress of the People of Nigeria for 1938* (London: His Majesty's Stationary Office), 1938.

Northern Rhodesia, Blue Book (Livingstone: Government Printing Office), various issues.

Nyasaland Protectorate, Blue book (Zomba: Government Printing Office), various issues.

Sierra Leone, Blue Book (Freetown: Government Printing Office), various issues. *The Tanganyika Territory, Blue Book* (Dar es Salaam: Government Printing Office), various issues.

The Uganda Protectorate, Blue Book (Kampala: Government Printing Office), various issues.

Sources French Africa:

Gouvernement Général de l'Afrique Occidentale Française: *Budget Général* (Goree, Imprimerie du Gouvernement Général), various issues.

Annuaire Statistique de l'Afrique Occidentale Française et du Togo Placé sous Mandat de la France (Paris: Agence Économique de L'Afrique Occidentale Française), issues 1936, 1937, 1938, années 1950 à.

Côte d'Ivoire, Budget du Service Locale (Bingerville: Imprimerie, du Gouvernement Général), various issues; this publication changed into: *Côte d'Ivoire, Budget du Service Locale* (Bingerville: Imprimerie, du Gouvernement Général), various issues.

Dahomey & Dépendances, Projet de Budget, Recettes et des Dépenses (Porto-Novo: Imprimerie, du Gouvernement Général), various issues; this publication changed into *Colonie du Dahomey, Budget du Service Locale* (Porto-Novo: Imprimerie du Gouvernement Général), various issues.

Budget Locale de la Guinée Française (Conakry: Imprimerie du Gouvernement Général), various issues.

Budget Locale du Haut-Sénégal-Niger (Bamako: Imprimerie du Gouvernement Général), various issues. Early volumes include *Budget Annexe de Territoire Militaire du Niger*, various issues.

Budget Local de la Haute-Volta (Bamako: Imprimerie du Gouvernement Général), various issues.

Comptes Définitifs des Recettes et Dépenses, Budget Annexe Territoire Civil de la Mauritanie (Goree: Imprimerie du Gouvernement Général), various issues.

Comptes Définitif des Recettes et Dépenses, Budget Local de la Mauritanie (Saint-Louis: Imprimerie du Gouvernement Général), various issues.

Comtes Définitif des Recettes et Dépenses de la Colonie du Niger (Gorée: Imprimerie du Gouvernement Général), various issues.

Colonie du Sénégal, Budget des Pays de Protectorat (Saint-Louis: Imprimerie du Gouvernement Général), various issues.

Colonie du Sénégal, Compte Définitif des Recettes et Dépenses (Saint-Louis: Imprimerie du Gouvernement Général), various issues.

Budget Local du Soudan Français (Koulouba: Imprimerie du Gouvernement Général), various issues.

République Française, Ministère des Colonies, *L'Afrique Équatoriale Française, Budget Général* (Brazzaville: Imprimerie du Gouvernement Général), various issues. These volumes include: *Budget Local du Gabon, Budget Local du Moyen Congo, Budget Local de L'Oubangui-Chari, Budget Local du Territoire du Tchad.*

L'Afrique Équatoriale Française Budget Local, Comptes Définitifs des Recettes et Dépenses (Brazzaville: Imprimerie du Gouvernement Général), various issues.

Cameroun, Budget des Recettes et des Dépenses (Yaoundé: Imprimerie du Gouvernement), various issues.

Madagascar et Dépendances, Budget des Recettes et des Dépenses du Service Local (Tananarive: Imprimerie Officielle), issues; various issues.

Ile de la Réunion, Service Local, Exposé des Motifs et Projet de Budget Local (Saint-Denis: Imprimerie Centrale Albert Dubourg, Imprimeur du Gouvernement), issues; various issues.

Protectorat de la Côte Française des Somalis et Dépendances, Budget des Recettes et des Dépenses (Paris: Imprimerie Nationale), various issues.

Territoire du Togo, Budget Local (Imprimerie de L'École Professionelle), various issues.