World War I and the Rise of Direct Taxation in Colonial Africa

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Abstract

Recent work has emphasized the rise of direct taxation after World War I as a phenomenon of Western Europe and the United States, mostly due to the establishment of the personal income tax. However, other forms of direct taxation were prevalent elsewhere, especially in African colonies. Colonial rule in Africa reached its peak in the interwar period, consolidating dramatically after World War I. I explain this consolidation through the rise of direct taxes. Using a differences-in-differences design, I assess the effect of increasing revenue pressures due to the war on the shift to direct taxation, mostly in the form of head and hut taxes. Qualitative historical evidence from British and Portuguese colonies documenting the choice by colonial administrators to increase and establish new direct taxes supplements this analysis. I argue that in the colonial context, a shift to direct taxation need not be redistributive at all.

Direct taxation is one of the most personal forms of government interaction with citizens. The rise of direct taxation is often explained as a form of exchange between citizens giving up revenue to the state, and a government extending rights of representation in return. However, direct taxation has also been prevalent in colonial settings, where those subject to tax were not extended political power in return.

Colonial rule in Africa reached its peak in the period between World War I and World War II. European imperial powers only constructed the bureaucratic apparatus of the colonial state in the late nineteenth century and the early years of the twentieth century (Berman 1984). By the 1920s, European colonial administration became increasingly involved directly in the lives of Africans. In this project, I seek to explain the rise of direct taxation on the continent, a clear imposition by the colonial state on native Africans.

Existing work on the rise of direct taxation primarily focuses on the expansion of the income tax as a story of the balance of power in settings of [relatively] representative government. But direct taxation has also increased without anything approaching this exchange. The frequency and intensity of direct taxation in African polities, mostly colonies, increased significantly after World War I. I argue that this increase can be partly explained by increasing revenue pressures due to declining trade during the war. Polities which suffer a negative trade shock during World War I increase direct taxation more in the interwar period. Qualitative historical evidence from British and Portuguese colonies illuminates how colonial administrators, facing these constraints, chose to expand direct taxes on Africans. After declines in both import and export tax revenues at the onset of the war, Kenyan authorities raised existing head taxes (Overton 1989). Facing similar problems, Nigerian colonial administrators established new head taxes (Osuntokun 1979).

This article makes three main contributions. First, I emphasize the different use and impact of direct taxation in settings of representative government versus in a colonial setting. Direct taxation is not limited to the income tax, and it need not be redistributive, progressive, or modern. Second, I document and explain the prevalence of direct taxation in Africa in

the interwar period, a time when "non-Western" countries' tax revenues initially diverged from the West, after which they largely remained lower (Lee and Paine 2022). While tax revenues *were* generally lower outside the "West," this is not solely due to the absence of direct taxes. In fact, direct taxes made up a substantial portion of many polities' revenues. Finally, I provide an explanation for the rise of direct taxation in African polities after World War I. While this pattern has frequently been noted by historians, cross-national evidence of the trend is rare. I provide clear evidence for a relationship between declining trade revenues during WWI and the rise of direct taxation in the following period.

The paper is organized into six sections. The first section addresses existing explanations about the establishment and expansion of direct taxes and explains why these theories of the income tax in Western Europe and the United States are limited in their applicability to African colonies. In the second section, I develop a theory about what motivates leaders to select direct taxation over alternatives. Section three describes the setting in Africa before and during World War I, and defends the analysis of these polities as units capable of making their own fiscal policy. The fourth section describes the data and the differences-in-differences setup. The fifth explains the results and provides additional case evidence from several polities on the decision-making process of colonial administrators.

1 Explaining Patterns of Taxation

Existing work on the rise of direct taxation, especially the income tax, has centered on settings of representative government (Aidt and Jensen 2009). This pattern of adoption after World War I is well-documented in the Global North (Scheve and Stasavage 2016; Lee and Paine 2022). While increasing revenue pressures form an important part of this transition, Scheve and Stasavage (2016) emphasize the income tax as a "compensatory" progressive innovation for the human sacrifice of the poor during WWI. Facing high costs from the war effort, the United States focused an income tax on the relatively wealthy in

an attempt to broaden or equalize the effect of the war. However, this use of the income tax as an effort to compensate for the unequal death toll of military service during the war was clearly motivated by democratic concerns, where a democratically-empowered class was capable of exerting their preferences by voting if their concerns were not addressed. The democratic setting structured the decisions of policymakers toward a certain tax base — incomes of the relatively wealthy and less likely to serve in the war — because of the democratic power of another group.

Work on the earlier adoption of the income tax also emphasizes the role of elite divisions under conditions where the relevant actors are empowered politically (Mares and Queralt 2015; Beramendi, Dincecco, and Rogers 2019). The rise of more-direct taxation (through the income tax) is here seen as a component of a progressive tax system, or at least a tax on high-income earners (Mares and Queralt 2015). Potential taxpayers have a conflictual relationship with each other and use state institutions to exert power over opponent groups. Once again, this explanation for a rise in direct taxation is focused on the relatively-wealthy as a strategy of intra-elite political conflict, in a setting where potential taxpayers are represented in government. The colonial relationship is distinct in important ways. Above all, there is little expectation that increased tax burdens on colonial subjects should be related to increased representation. In fact, direct representation for Africans in British colonies was almost nonexistent before 1940 (Roberts 1967: 193).

Despite widespread frustrations about relatively low levels of contemporary income tax collection in many parts of the developing world (Chu, Davoodi, and Gupta 2000; Lora 2007; Besley and Persson 2014; Barreix, Benítez, and Pecho 2017), direct taxation actually began comparably early and was fairly widespread in much of the world. Kurtz (2009) even suggests that Chile was collecting more in direct taxes than many European countries at the end of the nineteenth century. In fact, in colonial settings, direct taxes were often clearly targeted at unrepresented colonial subjects. In Latin America, tribute collection on indigenous communities meant that direct tax revenue collection in Peru was among the

highest of any country in the early nineteenth century (Soifer 2015). Across Africa, direct taxes in the form of head or hut taxes are an example of a colonial state expanding its presence into the lives of Africans, an extractive relationship in the clearest sense, even when compared to the generally extractive patterns of colonial trade (Rodney 1981; Tadei 2018).

Lee and Paine (2022) document a "great divergence" in rates of tax collection after World War I, a divergence they attribute to increasing rates of income tax collection in the developed world but stalled development of tax administration in the developing world. However, this work omits the widespread presence of direct taxation outside of Western Europe, the United States, and Japan. These direct taxes often took a less administratively-intensive form, as they were frequently levied at a single rate on all dwellings or adult males, avoiding the need for income verification.

1.1 War and Taxation

A classic literature suggests that wars lead to state-making, the development of tax administration, and higher levels of taxation (Tilly, Ardant, and Council 1975; Tilly 1990). As states prepare for war, they must penetrate their societies in an effort to extract resources, including funds, food to feed an army, physical goods to supply a military effort, and men to fight. The considerable effort required to extract all these resources from society requires that states invest in expanded administration. At the most basic level, theory expects that war and the preparation for war should lead to higher taxes.

War can also alter government and citizen preferences surrounding taxation (Scheve and Stasavage 2016). As the cost of war in mortality falls more heavily on certain groups than others, war can alter state calculations on what groups will be willing to pay what taxes.

Wars can also affect state building and tax revenue collection in more indirect ways. An external threat may provide a revenue-seeking government an acceptable target and motivate certain wealth-holding groups to submit to taxation (Tilly 1985). In a physical sense, wars can also be destructive and decrease the tax base on which governments might

levy taxes (Schenoni 2021). Despite the potential for a war to provide motivation for a government to increase its administrative capabilities, war could also destroy the physical infrastructure of a state administration. Finally, wars often represent a substantial disruption to the global economy, which may have implications for domestic fiscal policy, as well. While this literature suggests that war should lead to higher taxes, the effect of war in Europe on colonial governments elsewhere depends on a variety of factors and the relationship between colony and metropole. I provide a potential link between how war abroad may contribute to taxation elsewhere.

2 Theory: Direct Taxation without Representation

In a setting without representative government institutions, the relationship between tax policy and taxpayer preferences is unique. Faced with the need to increase colonial revenues during and after World War I, colonial administrators faced different constraints and political conditions than politicians and administrators in European metropoles or the United States.

I argue that increasing revenue pressures led colonial administrators to raise revenues through raising existing direct taxes and implementing new ones. Because the colonial relationship depends on maintaining maximum levels of production, its ability to tax imports was limited. While several colonies did attempt to raise export taxes in response to the war (and declining export tax revenues)(Kay and Hymer 1972), continual fluctuations in prices and markets meant these efforts were only minimally successful.

Additionally, the political integration between exporter interests and colonial administration meant that exporter preferences around not being taxed were heavily represented in colonial tax policy. As such, when colonial administrators were faced with the need for new sources of revenues not dependent on international trade volumes, politically connected and powerful European settler populations were not an attractive target. Instead, administrators turned to a remaining potential source of tax revenues: direct taxation focused on African

populations.

While an alternative to head and hut taxes on Africans would be increasing land and income taxes on European settlers, the European community was staunchly opposed to raising taxes in other ways (Roberts 1967: 202). Communal landholding patterns among indigenous communities in West Africa made property taxes an unappealing alternative, as well (Frankema and Waijenburg 2019). Additionally, establishing income verification or a cadastral system sufficient to support a tax scheme along these lines would have been a greater administrative undertaking than the informationally-low head or hut tax.

Direct taxation in the form of hut and poll taxes reduced incentives for laborers to work abroad for higher wages, keeping the labor supply domestic, in accordance with landholder interests (Roberts 1967). The forced payment of these taxes in currency also motivated Africans facing a high tax burden to work for landholders. As such, the direct tax on Africans in the form of head or hut taxes satisfied colonial administrators' needs for increased revenues; did not antagonize powerful European settler interests; and in fact met several wishes of these groups.

Direct taxes are relatively difficult to collect. In contrast to trade taxes, which are collected at ports in concentrated locations, or other indirect taxes, which can be collected from business owners, direct taxes like head taxes are collected on individuals. The hut tax is levied at the household level, while the head or poll tax was levied on individual adult males. In contrast to the income tax, direct taxation in the form of head or hut taxes is not as informationally intensive, because it does not require precise information on each taxpayer or their income. However, this form of tax is somewhat labor intensive, since it requires accessing potential taxpayers. These taxes are also more administratively intensive than customs taxes, require some level of infrastructure, and a large population of tax collectors. Colonial governments did not heavily invest in this difficult source of tax revenue until pushed by revenue constraints, but they did in many places maintain direct taxation after the end of the war. The establishment or increase in direct taxation is one way that World War I

contributed to extended colonial rule in the interwar period.

Colonial rule consolidated in the interwar period in part because of the changes in colonial technology employed during the war. I argue that declining trade flows in African commodities during World War I contributed to increasing pressure on colonial administrators to raise revenues, including through finding new ways to tax. The decision to establish new and expand existing head and hut taxes on African populations during this period was shaped by fundamentally different decisions than the adoption of income taxes in relatively representative political settings.

3 Historical Setting: Africa before World War I

Nearly all present-day African countries experienced colonization during the twentieth century.[1] Extraction is a central motivation for colonial expansion and an important part of colonial administration (Frankema and Waijenburg 2014). This extraction took a variety of forms, including forced labor, taxes on imports and exports, other indirect taxes including a variety of consumption taxes, and direct taxes, including poll or head taxes (Albers, Jerven, and Suesse 2023). A long history on colonialism emphasizes the establishment of colonial relationships as a strategy for moving wealth from colonized entities back to the metropole. But fiscal policy within colonies also defined the extractive nature of colonialism, especially the balance in tax burden between European settlers and African laborers.

French, British, and Portuguese colonies were faced with the mandate to fund colonial administration through colonial revenue. European powers were opposed to the use of metropole funds for maintaining colonial administration (Frankema and Booth 2019), establishing a "revenue imperative" for colonies to collect their own revenues (Young 1994). Starting in about 1900, both British and French colonies "had to be self-sufficient on local sources of revenue" (Berman 1984: 178). Lingering British grants from the Coonial Office to African colonies were all eliminated by 1912 (McCracken 2012: 76). Portuguese colonies

[1] Liberia was never colonized, and Ethiopia experienced only a brief Italian occupation

were also required to fund their administration locally starting in 1910 (Alexopoulou 2019: 247). Not only did colonies have to maintain sufficient production and trade, they also had to increasingly invest in basic infrastructure, like roads and railroads, to maintain order and control across territory (Pierskalla, De Juan, and Montgomery 2019) and to facilitate the transport of tradable goods. Basic structures of colonial administration were largely built in the twenty five years leading up to World War I, and colonial rule's most stable period took place between the world wars (Berman 1984).

In addition to declining trade tax revenues, many colonial governments also faced increasing expenses during World War I as a result of African campaigns, including the East African and Kamerun campaigns (Osuntokun 1979).This revenue imperative in the colonies, combined with lower revenue from trade taxes and increased expenses meant that colonial governments were forced to shift their tax strategy onto a new base. Colonial fiscal policy, including tax policies and rates, was set by the colonial government in both British and French colonies. Despite the existence of the French Federations of West and Equatorial Africa, which might have theoretically developed pan-colonial policy, administrative policy was set at the colony level in both cases (Berman 1984: 177) and in Portuguese colonies (Alexopoulou 2019).

The nature and direction of the metropole-colony relationship during wartime remains an important part of the story of colonialism. Young (1994) even demonstrates that during World War I, France requested that its colonies send revenues back to the metropole to make up for wartime expenditures. In any case, colonial administrations were required to fund their own continued existence by this time, and were primarily reliant on commodity exports and some mining revenues (Gardner 2012). The flow of these exports were negatively affected during the war, and administrators had to develop and expand alternative sources of revenue.

4 Research Design

I analyze the effect of declining trade revenues on changes in colonial tax policy, specifically an increase in direct taxes. World War I significantly disrupted international trade flows and many trading relationships, changing the market toward war-related goods like metals and oil (Pallaver 2015), and away from common African exports, including cocoa (Kay and Hymer 1972), groundnuts, and cotton (Pallaver 2019). Prior to World War I, most African colonies funded their administration primarily via trade taxes and non-tax revenue, along with some other indirect taxes, although some colonies already featured direct taxes (Gardner 2012. As commodity exporters, the disruption in global commodities markets contributed to a sudden and substantial decline in revenues from trade taxes. This decline varied by industry and by colonizer (Kay and Hymer 1972).

While World War I is a major global event plausibly associated with the increasing strength of colonial states in Africa during the following period, the reason for this relationship is unexplored. In this paper, I explore one potential way the war may have affected the strategies of colonial rule. Using variation in the trade shocks experienced by African polities during WWI, I identify a relationship between experiencing a loss of trade tax revenue during the war with an increase in direct taxation in the interwar period. I use a differences-in-differences analysis to more specifically analyze this relationship (Scheve and Serlin 2022. I support the cross-national statistical evidence with qualitative historical evidence on the expansion of direct taxes during the interwar period.

4.1 Data

For the majority of these analyses, I take advantage of a new dataset on tax revenues in Africa from Albers, Jerven, and Suesse (2023). This dataset includes comparable annual revenue information on all African polities from 1900 to the present. The dataset represents a dramatic improvement on existing measures of tax collection during this period, especially

for the nebulous "direct tax" category. As a comparison, for the period of analysis, Lee and Paine (2022) have direct (income) tax data for only one country - South Africa.

The Albers, Jerven, and Suesse (2023) dataset includes both nominal tax revenues and tax revenues standardized into "wage days per capita," or a measure of how many days' labor the government extracts in taxes per year. I use the standardized wage days per capita measure for the following analyses.

4.1.1 Dependent Variable - Direct Taxation

My main dependent variable in this analysis is the direct tax revenue collected in the period after World War I, measured in wage days per capita. Figure 1 presents direct tax revenues in each polity in 1909 (before the war) and 1924 (after the war). Clearly, both the number of polities collecting direct tax revenue and the amount of direct tax revenue collected increases after the war.

Direct tax revenues are a good representation of expanding colonial rule, because these direct taxes represent efforts by the colonial state to directly impose and extract from non-settler populations. The personal income tax is fairly uncommon in this sample, and in the few cases of its existence, it was primarily levied on European settlers. The direct taxes represented here, instead, take the form of head or hut taxes, a clear imposition by the colonial state, later vocally and violently opposed by colonial subjects(Brautigam, Fjeldstad, and Moore 2008).

4.1.2 Explanatory Variable - Trade Shock

Ultimately, I am interested in the effect of shifts in trade flows on the changes in colonial tax policy. However, the way that changing trade flows affect tax policy is primarily through their influence on tax revenues. Because the data is good quality and readily available, I use as my independent variable a "trade shock" of World War I, or the change in trade tax revenues brought on by the war.

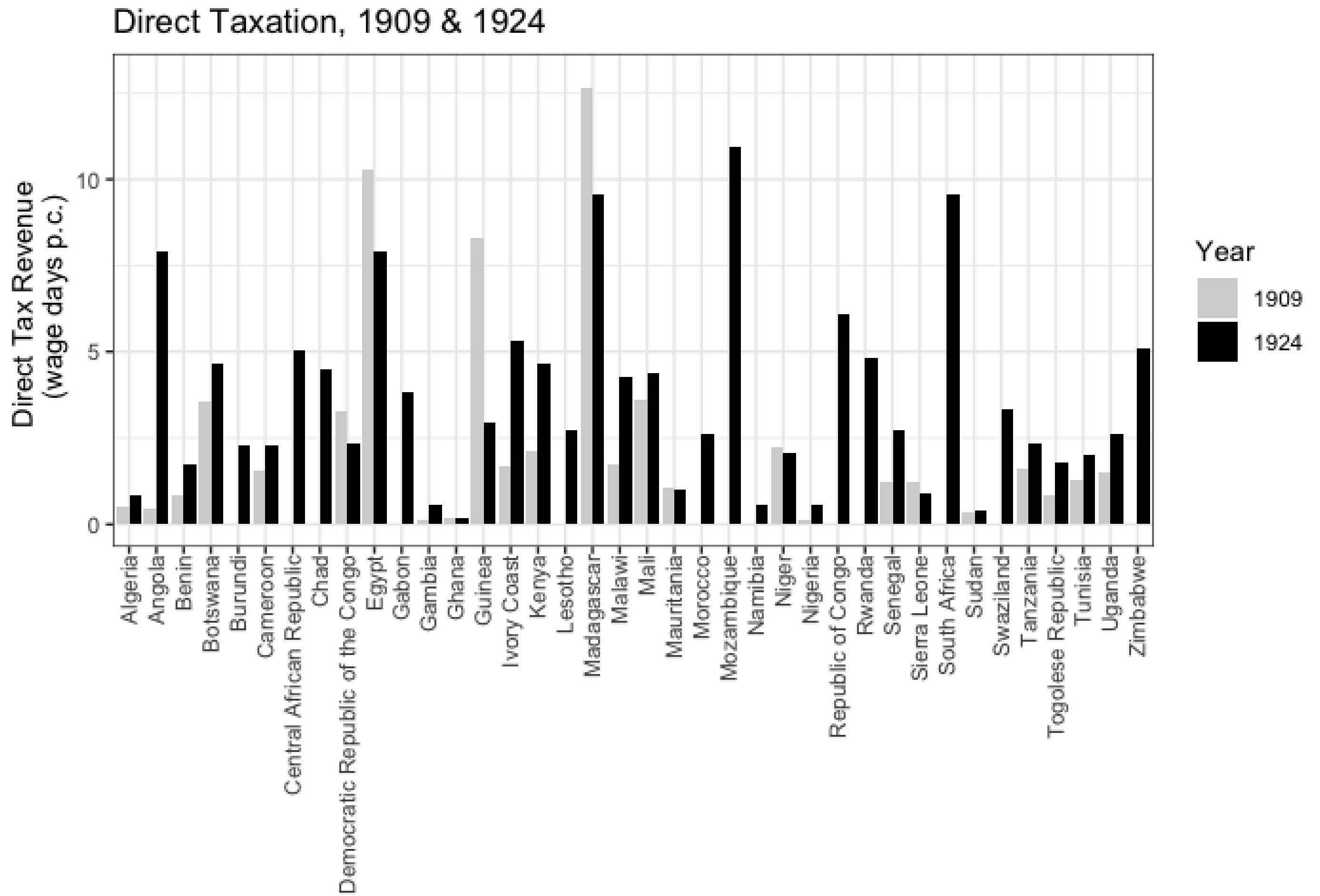

Figure 1: Direct tax revenue by polity in 1909 and 1924, measured in wage days per capita. Data from Albers, Jerven, and Suesse (2023)

To do this, I calculate the change in trade tax revenues at the polity level between 1918 (the end year of the war) and 1910 (a year chosen before anticipation effects of the war).

$$\Delta trade_i = trade_{i1910} - trade_{i1918}$$

The variable is constructed such that larger (more positive values) mean a greater (more negative) trade shock. I choose 1910 as the initial measure because it is before the war, but close enough that trade systems should otherwise be relatively comparable - that is, I assume polities' export strategies did not change dramatically between 1910 and 1914 for reasons other than WWI.

I plan also to do this analysis based on actual trade flows, rather than trade tax revenues ultimately collected. However, I believe the trade tax measure to be a conservative estimate of the effects I might otherwise observe. In Ghana, for example, cocoa exports suffered on the international market during World War I as North American demand shifted. Colonial authorities responded very quickly to declining trade volumes by raising trade tax rates. However, by about 1916, even raising tax rates could not maintain dropping revenues, and leadership turned to alternatives (Kay and Hymer 1972). Since colonies initially tried to raise trade tax rates to counteract low trade flow, the trade tax revenue measure may not be as responsive to shocks. [2]

Table 1 contains summary statistics on the variables involved in the following analyses. The trade shock measure I calculate myself based on data from Albers, Jerven, and Suesse (2023), and direct tax revenue and resource revenue data also come from that project. Miles of railroad measures come from J. Rogowski et al. (2017), and urbanization rate data from Coppedge and Gerring (2022).

[2]Data collection on actual trade flows is in progress, but not yet available for the full sample.

Table 1:

Statistic	N	Mean	St. Dev.	Min	Max
Trade Shock	46	.319	.506	-2.801	4.499
Direct Tax Revenue	675	2.694	3.437	0	14.239
Resource Revenue	676	0.249	1.441	0	14.592
Miles of Railroad	178	31,130	68,054	0	547,596
Urbanization Rate	853	0.127	.288	0.003	1.961

4.2 Differences - in - Differences Analysis

To demonstrate the causal relationship between changes in trade tax revenues during World War I and the increase in direct tax revenues extending into the interwar period, I use a differences-in-differences strategy with a continuous treatment (Callaway, Goodman-Bacon, and Sant'Anna n.d.), where the treatment condition is the trade shock due to WWI. This strategy depends on two sources of variation: the timing of the onset of World War I and the magnitude of the trade shock experienced by each country. This strategy depends on the two sources of variation to be plausibly exogenous.

I then exclude the years 1910 - 1918 from my differences-in-differences analysis, because they are the years used in constructing the treatment variable. The pre-treatment time period is thus 1900 - 1909 and the post-treatment time period is 1919 - 1939.

The differences-in-differences specification can be represented:

$$direct_{it} = \beta_1 \Delta trade_i * postwar_t + \beta_2 \Delta trade_i + \beta_3 X_{it} + \beta_4 year + \delta_{it}$$

where $direct_{it}$ refers to the direct tax revenue collected by colony i in year t. $\Delta trade_i$ is the trade shock in polity i, $postwar$ is a binary variable, where 1 indicates years after 1918. X_{it} is a vector of control variables. I also add a time trend to address the potential of serial auto-correlation. Coefficient β_1 represents the effect of a change in trade revenues on direct tax revenues.

The central assumption for the differences-in-differences analysis is that treated polities would have continued on the same trajectory as untreated polities in the absence of treatment. If World War I and its attendant trade shocks had not occurred, polities' levels of direct taxation would have continued along parallel paths. Evidence for parallel trends between polities who faced a negative trade shock in WWI and a positive trade shock in WWI appears acceptable in Figure 2, with polities separated by positive and negative shock.

5 Results

Results from the differences-in-differences analysis are presented in Table 2 and Figure 2. Experiencing a negative trade shock during the war is associated with an increase in direct taxation after 1918. Specifically, a one-wage-day increase in trade shock (one-wage-day lower trade tax revenues by the end of the war) means an approximately 11.6% increase in wage days of direct taxation per capita in the postwar period, although interpreting coefficients from continuous treatment analyses in this way is difficult (Callaway, Goodman-Bacon, and Sant'Anna n.d.).

Model 1 presents the results with no control variables, and Model 2 incorporates resource revenues as a control variable. If administrators have other, more easily collected, sources of revenue available, this may affect their decision to turn to direct taxation, but the incorporation of resource revenues into the equation does not significantly affect the results.

Figure 2 shows polities grouped by whether they experienced a positive trade shock (trade tax revenues increased) or a negative trade shock (trade tax revenues decreased) during the war. This figure demonstrates that polities which experienced a negative trade shock during the war undergo a similar trend in direct tax collection between the years of 1900 and 1918. However, after the war, the two groups diverge: polities which experienced a negative shock during the war begin to collect more in direct taxes after the war, while polities which experienced a positive shock during the war continue along a similar trend in

Table 2:

	Dependent variable:		
	direct tax revenue, wage days p.c., logged		miles of railroad, logged
	(1)	(2)	(3)
trade shock	−0.184***	−0.176***	−0.679**
	(0.050)	(0.050)	(0.313)
postwar	−0.008	−0.028	1.394
	(0.129)	(0.128)	(1.053)
resource revenues, p.c., logged		0.176***	
		(0.050)	
urbanization rate, logged			11.008***
			(3.788)
year	0.016***	0.016***	0.054
	(0.004)	(0.004)	(0.033)
trade shock * postwar	0.116**	0.114**	0.529
	(0.053)	(0.053)	(0.337)
Constant	−29.672***	−29.480***	−95.986
	(8.350)	(8.270)	(63.097)
Observations	593	593	49
Adjusted R^2	0.129	0.145	0.657
Residual Std. Error	0.607 (df = 588)	0.601 (df = 587)	1.445 (df = 43)
F Statistic	22.886*** (df = 4; 588)	21.146*** (df = 5; 587)	19.377*** (df = 5; 43)

Note: *p<0.1; **p<0.05; ***p<0.01

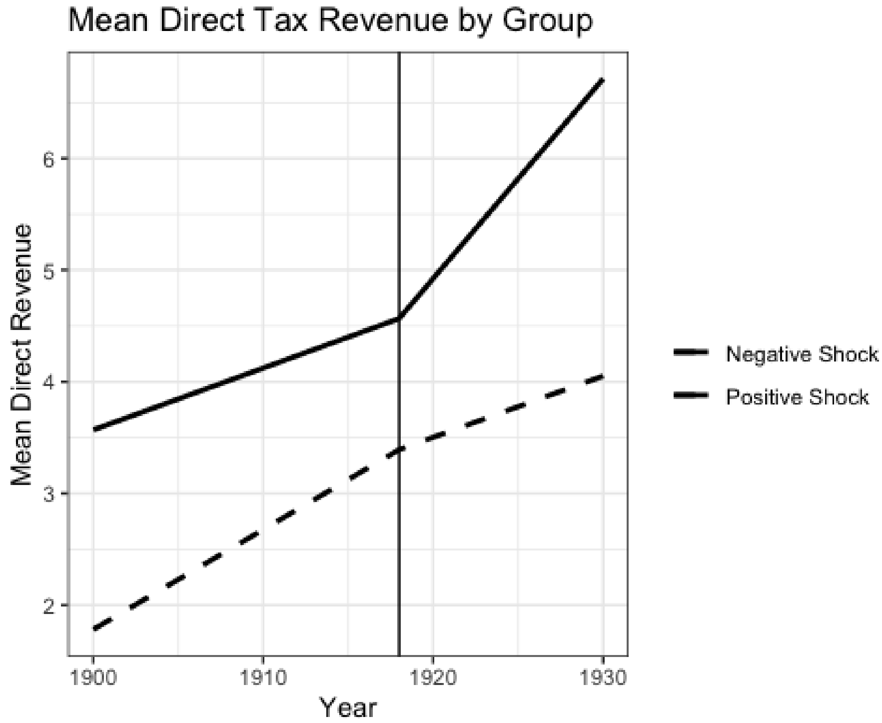

Figure 2: Direct Tax Revenues by Trade Shock Group

direct tax revenue collection as before. The effect identified in Table 2 is driven largely by negatively-shocked polities.

Since an increase in direct tax revenue is likely also associated with and depends on increased manpower and infrastructure to physically collect such taxes, Model 3 of Table 2, uses miles of railroad (logged) as an alternative outcome variable ($p = .12$)(data from J. Rogowski et al. 2017). This is a measure of infrastructural capacity plausibly associated with the ability to collect direct taxes across territory, so I present it as a preliminary check for the outcome measure.[3] I also include urbanization as a control variable in this model, because not all measures of railroad construction are equivalent.[4]

[3]Model 3 has fewer observations because the J. C. Rogowski et al. (2022) data is only measured every five years, and is not available for every polity in the Albers, Jerven, and Suesse (2023) dataset.

[4]I am working on incorporating land area, instead, but border changes have made this difficult so far. Ideally, I would prefer to use railroad per unit area as the measure.

5.1 Qualitative Evidence on the Selection of Direct Taxes

Historians also present case evidence that after experiencing revenue challenges at the onset of the war, colonial administrators responded by establishing new or increasing existing direct taxes. Evidence from colonies across British Africa, including Nigeria in British West Africa, Kenya in British East Africa, and Nyasaland/Malawi in British Central Africa provide further support for the colonial decision-making involved in the adoption of direct taxation during this period. Because regional distinctions in British colonial policy have been covered in the historiography on direct taxation (Gardner 2019), I incorporate colonies from across the regions.

In Nigeria, the loss of German markets for palm kernel, groundnut, and timber exports significantly affected trade volumes with the onset of World War I (Osuntokun 1979). Direct taxation already comprised a portion of colonial revenues from Northern Nigeria, but trade revenues contributed the clear majority, and the disruption of the war was significant. At the time of the war, the colonial government was committed to a variety of infrastructure projects, including improvements to ports and water supply in Lagos, the construction of a new capital at Kaduna, and expanding railroads across the colonial territory, "with estimated costs totalling some millions of pounds" (Osuntokun 1979: 28).

Initially, the colonial leadership tried to make up for these revenue losses through increased customs duties on tobacco and other food products, additional taxes on palm kernel and cocoa exports, and a variety of efforts to increase the export of Nigerian palm kernels to Britain and Holland. At first, the Colonial Office considered the establishment of a direct tax in Southern Nigeria too dangerous because of potential rebellion in response. However, by mid-1916, the military had returned from its Kamerun campaign and was available to quell potential uprisings, and Governor Lugard established a new direct tax in Southern Nigeria. In 1918, the administration imposed a poll tax, with "every adult Egba to pay not less than five shillings" annually (Osuntokun 1979: 126). This new poll tax led to violent opposition, but the returned military used considerable violence, "making suppression easy"

(Osuntokun 1979: 129).

Similarly, in the East Africa Protectorate (Kenya by 1920), World War I brought on a "fiscal crisis," as revenue from trade taxes declined significantly because of decreasing imports and exports, especially grain, sesame, cotton, and groundnuts, but "ordinary expenditure was maintained" (Overton 1989: 205). Potential alternative revenue sources, including "customs duties, increased railway rates and a land tax, faced stiff settler opposition" (Overton 1989: 211). While direct taxation on Africans predated WWI, "facing severe cash flow problems," the colonial administration increased the hut tax rate from three rupees to five rupees annually in 1916 (Overton 1989: 211). In 1918, the hut tax rate was increased even further, to ten rupees annually. Overton (1989) emphasizes that World War I was not universally disastrous for Kenyan economic interests, and in fact some European settlers benefited during this time. But the survival of the colonial state took place at the expense of Africans and by way of increasing direct taxation.

Exports of coffee, tea, tobacco, and cotton also declined during World War I in the British Nyasaland Protectorate (later Malawi). The colonial administration first abolished hut tax rebates in 1920, which had allowed some potential taxpayers to avoid payment. The European settler community was strongly opposed to the payment of new or increasing taxes (Roberts 1967: 202). Faced with a continued need for revenue, in the following year, the administration changed an existing hut tax to a combined hut and poll tax, expanding the tax base to include more adult males who had not previously been subject to the hut tax (Roberts 1967: 199).

Beyond British Africa, the Portuguese colony of Angola also shifted from a hut tax to a head tax in 1919, expanding the number of Africans subject to payment. Previously tax payments had sometimes been accepted in kind, but starting in 1920, tax payment was required in money (Alexopoulou 2019: 247). Faced with pressing revenue needs due to the war and limited political options, colonial administrators' chosen solution was that of "exploiting African taxation" (Overton 1989: 211).

6 Conclusion

Colonial institutions matter for contemporary institutions and economic prosperity (Acemoglu, Johnson, and J. A. Robinson 2001). A substantial literature connects the nature of colonial administration to present-day development outcomes in Africa (Huillery 2009; Mkandawire 2010; Heldring and J. Robinson 2012). Fiscal exploitation during the colonial period is also a common explanation for variation in African independence movements and low levels of African development in the modern era (Rodney 1981; Tadei 2018), and World War II is often cited as the beginning of the end of colonial rule. I find cross-case evidence that trade shocks associated with World War I led polities to expand existing and implement new direct taxes on Africans. Using qualitative evidence from British and Portuguese colonies, I demonstrate that colonial administrators believed "increased [direct] taxation had become pressing on account of the war" (Kenyan colonial official cited in Overton 1989: 211).

Trade taxes, taxes levied on goods as they enter or leave the country or polity, are considered relatively easy to collect taxes. Because of the challenges associated with harder-to-collect head taxes, governments may only make the transition to direct taxes when they face financial pressures and reduced options for easy collection. While the rise of the income tax in the United States and Western Europe has been the focus of recent study (Scheve and Stasavage 2016; Mares and Queralt 2020), government calculations surrounding the transition to direct taxes in other settings, without representative institutions, present new opportunities to understand the relationship between revenue constraints and state building strategies. This project expands theorizing about the rise of direct taxation beyond the income tax. Other kinds of direct taxation, prevalent throughout Latin America and Africa during colonization and after, have different implications for governance and the potential rights of taxpayers.

Perhaps more substantially, this study on the rise of direct taxes in African polities affected by trade shocks of World War I also helps to explain the entrenchment and expansion of colonial rule during the interwar period. Colonial rule in Africa reached its zenith after

World War I, with direct taxes an important representation of this shift. With direct taxes, the colonial state expanded its reach into the countryside to directly impose on the lives of Africans. While the rise of direct taxation, particularly in the form of the personal income tax, in other contexts has been heralded as the sign of modernization, expanding direct taxation under colonial rule has no such implication.

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