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## Gender, ethnicity, and unequal opportunity in colonial Uganda: European influences, African realities, and the pitfalls of parish register data<sup>†</sup>

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The renaissance of African economic history in the past decade has opened up new research avenues for studying the long-term social and economic development of Africa. A sensitive treatment of African realities in the evaluation of European colonial legacies and a critical stance towards the use of new sources and approaches is crucial. In this article, we engage with a recent article by Meier zu Selhausen and Weisdorf to show how selection biases in, and Eurocentric interpretations of, parish registers have provoked an overly optimistic account of European influences on the educational and occupational opportunities of African men and women. We confront their dataset, drawn from the marriage registers of the Anglican Cathedral in Kampala, with Uganda's 1991 census, and show that trends in the literacy and numeracy of men and women born in Kampala lagged half a century behind those who wedded in Namirembe Cathedral. We run a regression analysis showing that access to schooling during the colonial era was unequal along lines of gender and ethnicity. We foreground the role of Africans in the spread of education, and we argue that European influences were not just diffusive but also divisive, and that gender inequality was reconfigured rather than eliminated under colonial rule.

T he renaissance of African economic history over the past decade has been truly impressive. Not only have a growing number of scholars engaged with questions of long-term African economic development, the 'new' economic history of Africa has also opened up new avenues of research. It benefits from substantial input by economists, anthropologists, and political scientists, includes new theoretical perspectives and innovative quantitative methods, and is stimulated by a revolution in the collection and use of quantitative data.<sup>1</sup>

A critical approach towards new sources, concepts, and methods is fundamental to African economic history. Many of the data that are being used have been

<sup>1</sup> Austin and Broadberry, 'Introduction'; Akyeampong, Bates, Nunn, and Robinson, *Africa's development*. For discussion, see Hopkins, 'New economic history'; Fenske, 'Causal history'. For a review of the data revolution, see Fourie, 'Data revolution'.

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produced by foreigners, such as European missionaries, merchants, travellers, or colonial officials. Thus, the sources reflect the implicit, and sometimes very outspoken, pre-occupations, preconceptions, and priorities of people who are alien to the societies about which they collected information. Moreover, many of the analytical concepts and empirical methods that are used to produce narratives about long-term development were originally designed for the study of European economic history. To reduce the risk of conceptual Eurocentrism, it is imperative to scrutinize and debate the applicability of concepts such as national income, real wages, human capital, social mobility, or gender inequality to an African context.<sup>2</sup>

In the present study, we engage in ongoing academic debates on the variegated legacies of European colonial rule and missionary education in Africa,<sup>3</sup> as well as the deep roots and historical determinants of African gender inequality.<sup>4</sup> We develop our argument in response to a recent contribution in this journal by Meier zu Selhausen and Weisdorf, 'A colonial legacy of African gender inequality? Evidence from Christian Kampala, 1895–2011'. In their study, Meier zu Selhausen and Weisdorf explore the marriage registers of the Anglican 'St Paul's Cathedral' on Namirembe Hill in Kampala, Uganda, to investigate the development of literacy, numeracy, and occupational status among men and women. Meier zu Selhausen and Weisdorf claim to find a 'gender Kuznets curve' during the colonial era and argue that Europeans contributed to a gender-balanced accumulation of human capital by breaking with 'traditional' indigenous norms of female disempowerment and transplanting the virtues of 'modernity' on to Ugandan society.

Based on painstakingly collected data from Africa's scattered missionary parish registers—preserved *in situ*—their work opens up a new avenue of research into the social and economic history of sub-Saharan Africa.<sup>5</sup> Missionary sources cast light on human development back into a time when colonial bureaucracies were still absent or insufficiently equipped to collect fine-grained data. A prime treasure is the marriage registers. The brides' and grooms' capacity to sign provides an indicator of literacy development; their capacity to report their exact age sheds light on the

<sup>2</sup> On conceptual Eurocentrism, see Austin, 'Reciprocal comparison'. For discussion on GDP, see Jerven, *Poor numbers*; and for real wages, see Frankema and van Waijenburg, 'Structural impediments'; de Haas, 'Measuring'.

<sup>3</sup> In the late nineteenth and early twentieth centuries Africa south of the Sahara experienced a genuine schooling revolution. Recent studies have contributed to our understanding of the effects of variegated colonial policies on the establishment of mission schools across French, British, and Belgian Africa; for example, Dupraz, 'British and French colonial education'; Frankema, 'Colonial education'; Cogneau and Moradi, 'Borders that divide'. They have revealed significant differences between Protestant and Catholic missions in terms of literacy development and educational gender inequality; for example, Woodberry and Shah, 'Pioneering Protestants'; Gallego and Woodberry, 'Christian missionaries'; Nunn, 'Religious conversion'. They have tested the long-term implications of missionary and public schooling for a wide range of development outcomes; for example, Bertocchi and Canova, 'Colonization'; Bolt and Bezemer, 'Understanding long-run African growth'; Brown, 'Democracy'; Fenske, 'African polygamy'; Lloyd, Kaufman, and Hewett, 'Spread of primary schooling'. They have also shown the persistent development effects of geographically and temporally uneven investments in mission schools; for example, Huillery, 'History matters'; Grier, 'Colonial legacies'; Feldmann, 'Long shadows'.

<sup>4</sup> Recent empirical contributions include Alesina, Briosch, and La Ferrara, 'Violence against women'; Alesina, Giuliano, and Nunn, 'On the origins'; Ashraf, Bau, Nunn, and Voena, 'Bride price'; Fenske, 'African polygamy'; Henderson and Whatley, 'Pacification'.

<sup>5</sup> For related work by Meier zu Selhausen and co-authors, see Meier zu Selhausen, 'Missionaries'; idem, 'Women's empowerment'; Meier zu Selhausen and Weisdorf, 'Colonial legacy'; Meier zu Selhausen, van Leeuwen, and Weisdorf, 'Social mobility among Christian Africans'. See also their project website: 'The economic history of Christian Africa', at http://ehca.info/. Other recent work using Ugandan parish register data include Doyle, *Before HIV*; idem, 'Parish baptism registers'; Peterson, 'Politics'. Further references can be found in Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 233, n. 21.

development of numeracy; and recorded occupations of spouses and their fathers contain valuable information on skills, occupations, and social mobility. While most colonial records are heavily male-biased, these marriage registers include information on African men *and* women, providing new scope for the study of gender inequality.

The authors deserve ample credit for their innovative use of locally sourced microdata and their empirical contribution to debates on the historical development of gender inequality. Still, we are concerned that the use of biased data in combination with an insufficiently contextualized application of analytical concepts has generated a questionable narrative of long-term African development. In particular, we take issue with their revisionist conclusion— purportedly supporting Boserup's seminal contribution *Woman's role in economic development* (1970)—that exposure to Europeans contributed to a gender-balanced pattern of human capital development by instilling 'modern' norms of gender equality in a society that was inherently prone to discriminate against women, and their suggestion that 'African discrimination against a modernized (European-style) economy could be key for understanding contemporary women's lack of access to education and formal employment, and hence one reason for the persistence of poverty in Africa'.<sup>6</sup>

We re-evaluate the link between colonial rule and gendered educational and occupational opportunities in Uganda along five lines. In section I of this article, we demonstrate how data biases particular to the African context can result in doubtful conclusions. To make this point, we discuss *selection biases* in the parish register data used by Meier zu Selhausen and Weisdorf, and re-chart literacy and numeracy trends using microdata from the 1991 population census. A representative selection of persons from birth cohorts in the census data demonstrates a much slower accumulation of literacy and numeracy than the population of individuals who married in Kampala's Anglican Namirembe Cathedral. Our data, moreover, do not conform with the idea that gender gaps closed during the colonial period.

Next, we scrutinize the impact of Europeans on *educational outcomes* of African men and women. Section II challenges the idea that the diffusion of missionary education in Uganda should be attributed to Europeans at all. We outline how elites in the Buganda Kingdom pragmatically sought out a political coalition with European missionaries, and used this coalition to further their local and regional power. We also discuss how indigenous teacher-converts played a prime role in the diffusion of literacy and schooling. In section III, we present a panel regression analysis to carry out a quantitative exploration of the role of gender, ethnicity, and place of birth in schooling attainment among six consecutive birth cohorts across Uganda (1913–72), using microdata from the 1991 census. The analysis shows that the diffusion of schooling in Uganda was highly uneven, and that substantial schooling attainment gaps opened up between men and women, and between the Baganda and other ethnic groups during the colonial era.

Subsequently, we focus on *economic opportunities* for African men and women in colonial Uganda. In section IV, we discuss the labour market in colonial Kampala. Instead of the *diffusive* nature of European influences, we point to the unequal occupational opportunities generated by the colonial economy. In section V, we

<sup>&</sup>lt;sup>6</sup> Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 255.

return to the key issue of gender emancipation. We revisit Boserup's views on gender inequality in Africa and note, contrary to Meier zu Selhausen and Weisdorf, that she gives primacy to *economic* rather than *cultural* explanations for female labour market marginalization, and is sceptical about the emancipatory impact of European cultural influence in Africa. In line with Boserup, we argue that missionaries and colonial officials in Uganda often coalesced with indigenous patriarchal interests to domesticize women.

Ι

On the basis of various indicators of human capital and occupational activity among brides and grooms who married in Namirembe Cathedral (hereafter the Namirembe dataset), Meier zu Selhausen and Weisdorf argue that 'the arrival of Europeans in Uganda ignited a century-long transformation of Kampala involving a gender Kuznets curve'.<sup>7</sup> Their data suggest that Kampala men acquired almost full literacy in the early twentieth century and quickly found their way into the formal wage economy, while women took slightly longer but followed suit. Upon independence virtually all of the observed brides and grooms were literate and numerate, while the gap in terms of employment (working skills, white-collar work, waged work) was still substantial, but closed rapidly in the early post-colonial era. A composite indicator of marital gender inequality shows a widening gap during the early decades of colonial rule, peaking among newlyweds in the 1910s. Subsequently the gap narrowed, and in 1962 it was not much larger than it had been at the onset of colonial rule. Meier zu Selhausen and Weisdorf then refer to Boserup to argue that African gender norms discriminated against women. They argue that European influence contributed to a gender-balanced pattern of human capital development in Kampala, observing that daughters of African men working in the 'traditional, informal economy ... were more often subjected to marital gender inequality than daughters of men employed in the modernized, formal economy created by the Europeans'.<sup>8</sup>

Setting aside the question of whether a general invocation of 'pre-colonial times' serves as a proper counterfactual for the evaluation of colonial influences,<sup>9</sup> our principal concern here is whether a study of selective marriage registers can ever justify such far-reaching claims. Close reading reveals that Meier zu Selhausen and Weisdorf themselves struggle with the issue of data representativeness. On the one hand, they consider the Namirembe dataset 'a fairly good representation of Kampala individuals (regardless of religious affiliation)'.<sup>10</sup> On the other hand, they admit that 'the first Africans to convert to Christianity were those that stood to gain from a close connection with the new colonial rulers, notably the local elites'.<sup>11</sup> To accommodate this concern, Meier zu Selhausen and Weisdorf replicate the analysis for sub-samples, excluding people with presumed elite backgrounds. They

<sup>7</sup> Ibid., p. 229.

<sup>8</sup> Ibid., p. 229.

<sup>10</sup> Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 238, also p. 234.

<sup>11</sup> Ibid., p. 251.

<sup>&</sup>lt;sup>9</sup> Numerous scholars have pointed out that late nineteenth-century Uganda was far from 'pristine'. See, for example, Doyle, *Before HIV*, ch. 2; Hanson, *Landed obligation*, ch. 4; Reid, *Political power*; also section II of this article.

find 'identical' results and conclude that 'this builds confidence that our conclusion regarding the evolution of gender inequality is robust to a possible sample selection bias driven by an uneven process of conversion to Christianity'.<sup>12</sup>

However, there is ample reason to believe that the problem of sample selection bias is far more serious than the authors have been willing to admit. First, as will become clear in section II, the process of conversion to Christianity was indeed uneven.<sup>13</sup> Second, only a *minority* of Christian Ugandans-mostly the wealthy and well-connected-opted for a 'ring marriage' rather than customary or more informal unions.<sup>14</sup> This reality was not confined to the early colonial period. A study from the 1950s, for example, specifies that Christian church marriages were 'rare' because of 'the considerable cost of such marriages, although they confer social status', and because they 'can, in the case of breakdown, only be dissolved in a Protectorate court'.<sup>15</sup> A study from the 1960s observed that 'those who contract ring marriages tend to be members of the wealthy or upper class'.<sup>16</sup> Third, Namirembe Cathedral itself emerged as the elite church of early colonial Uganda. The cathedral was erected in the vicinity of Buganda's royal court, and attracted relatively well-off people, some of whom travelled far to marry in the most prestigious Anglican cathedral of the country.<sup>17</sup> The cathedral retains its status up until today, even though its membership has probably become more diverse over time.

Finally, even though Meier zu Selhausen and Weisdorf argue that polygamy does not bias their sample, 'supplementary' wives, concubines, and domestic servants are—by definition—excluded from the marriage registers.<sup>18</sup> Polygyny and female domestic servitude were common in pre-colonial Buganda. The church, however, expected Christian men to free slaves and dissolve customary marriages with 'surplus wives'. Contracting an additional wife after a Christian marriage was made illegal.<sup>19</sup> Still, polygamy continued to be widely practised.<sup>20</sup> Since 'supplementary' wives and other female dependents tended to have lower status in African polygamous households,<sup>21</sup> chosen Christian wives undoubtedly outperformed their unofficial counterparts on most indicators of gender equality.

In other work based on the Ugandan Anglican marriage registers, Meier zu Selhausen and co-authors provide a more balanced discussion of how selection may have given rise to biases in the marriage registers.<sup>22</sup> Still, inconsistent treatment of biases in church records, and the absence of a systematic investigation, leave much

- <sup>16</sup> Perlman, 'Law'; compare Southall and Gutkind, Townsmen, p. 74.
- <sup>17</sup> On the role of Namirembe Cathedral in early colonial Ganda society, see Kodesh, 'Renovating tradition'.

- <sup>19</sup> Southall and Gutkind, Townsmen, p. 74; Doyle, Before HIV, p. 109.
- <sup>20</sup> Taylor, *Growth of the church*, p. 184; Doyle, *Before HIV*, p. 148; Peterson, 'Politics', pp. 207–8; Tuck, 'Women's experiences', p. 176.

<sup>&</sup>lt;sup>12</sup> Ibid., p. 251.

<sup>&</sup>lt;sup>13</sup> On uneven conversion and the representativeness of parish registers, see also Doyle, *Before HIV*, pp. 134–5; Walters, 'Counting souls', p. 85.

<sup>&</sup>lt;sup>14</sup> Uganda Protectorate, *Census Returns 1931*. More evidence is provided in Perlman, 'Law'; Doyle, *Before HIV*, ch. 4; Obbo, *African women*, pp. 33–53.

<sup>&</sup>lt;sup>15</sup> Gutkind, 'Town life', p. 43. See also Richards, *Economic development*, pp. 176-7.

<sup>&</sup>lt;sup>18</sup> Bantebya Kyomuhendo and McIntosh, Women, p. 69; Taylor, Growth of the church, p. 175.

<sup>&</sup>lt;sup>21</sup> Boserup, Woman's role, pp. 41-7; Stephens, 'Complicated history', pp. 136, 144.

<sup>&</sup>lt;sup>22</sup> Meier zu Selhausen, 'Missionaries', pp. 84–7; idem, 'Women's empowerment', pp. 46–8, 53–4; Meier zu Selhausen et al., 'Social mobility', pp. 15–18.

		Me	n	Women			
Year of birth	Uganda	Kampala	Kampala share (%)	Uganda	Kampala	Kampala share (%)	
1895-1902	1,704	12	0.7	1,427	22	1.5	
1903-12	4,902	46	0.9	4,664	59	1.3	
1913-22	11,692	102	0.9	11,785	120	1.0	
1923-32	20,886	157	0.8	22,330	178	0.8	
1933-42	32,606	237	0.7	33,383	306	0.9	
1943-52	46,966	402	0.9	49,786	416	0.8	
1953-62	79,395	1,108	1.4	82,920	1,236	1.5	
1963-72	128,440	3,017	2.3	146,527	3,248	2.2	

 Table 1.
 Sample size of the 1991 population census, by birth cohort

*Notes:* As a result of conflict and internal displacement in (Northern and Eastern) Uganda at the time of the census, the sample in these regions is not entirely balanced, an issue that the enumerators corrected by giving a weight to each enumerated individual. The male surplus for the early birth cohorts in Uganda at large results from an undercounting of women, particularly in northern and eastern Uganda. In figs. 1 and 2, we use unweighted shares, which eases the use of confidence intervals. Using weighted shares produces practically identical results.

Source: Uganda, Statistics Department, 1991 Population and Housing Census (data from Minnesota Population Center, Integrated public use microdata series).

uncertainty about the degree of bias and the validity of conclusions about human capital and occupational mobility among Christian Africans.

We compare literacy and numeracy trends among Namirembe brides and grooms with a sample of 1.5 million individuals (10 per cent of the population), drawn from the 1991 Uganda population census and made publicly available through the *Integrated public use microdata series* (IPUMS).<sup>23</sup> We project literacy trends backwards in time using the age of the enumerated individuals. To smooth fluctuations resulting from heaping at ages ending with 0 and 5, we group the census data in 20-year age cohorts, centred around two heaping ages (for example, from 28 to 37 years of age). We report results for individuals born in Kampala and also show the trend for the Ugandan population as a whole. We also derive a numeracy estimate from a census of the Baganda (the largest ethnic group) in Kampala in 1959. Before we present our results, we discuss some limitations of backward extrapolation of post-colonial census data.

First, our sample for the earliest birth cohorts observed in Kampala is small (table 1). Moreover, the elderly, who comprise the earliest birth cohorts, are known to exaggerate their age deliberately.<sup>24</sup> Thus, we need to interpret the early cohorts with care. The size and reliability of our sample improves over time, as indicated by narrowing confidence intervals for later birth cohorts.

Second, backward extrapolation of census data by birth cohorts may *overstate* literacy rates in earlier times. Extrapolating literacy trends backward using birth cohorts, we assume that people attained literacy and numeracy early in life. In fact, some individuals mastered such skills later in life.<sup>25</sup> Moreover, in particular for the early cohorts, we may expect a 'survivorship bias' towards literate individuals.<sup>26</sup>

<sup>&</sup>lt;sup>23</sup> Minnesota Population Center, *Integrated public use microdata series*. Original data from Uganda Bureau of Statistics, *1991 Population and Housing Census*. We thank Rebecca Simson for bringing this source to our attention. For her use of the IPUMS data, see Simson, 'Patronage'.

<sup>&</sup>lt;sup>24</sup> Compare A'Hearn, Baten, and Crayen, 'Quantifying', p. 791.

<sup>&</sup>lt;sup>25</sup> Particularly during the initial diffusion of literacy; see Peterson, 'Politics', pp. 205–6.

<sup>&</sup>lt;sup>26</sup> Idi Amin's regime in the 1970s, which was notorious for targeting highly educated persons such as doctors, may have had the opposite effect, causing a survivorship bias skewed towards uneducated persons. Still, we do

Indeed, school attainment was higher for the cohort born between 1914 and 1943 as recorded in the 1991 census, compared to the same cohort in the 1959 census, suggesting that our method of backward extrapolation *overstates* schooling for the early period.<sup>27</sup> It should be noted that correcting for this bias in the census data would widen the gap between the census data and the Namirembe dataset, thus strengthening the point we aim to make here.

Third, our Kampala data only pertain to individuals who were *born* in the area which was the administrative district of Kampala in 1991 (irrespective of their whereabouts at the time of the census). In the colonial period, Kampala included both 'Kampala Township', the expatriate enclave, and the 'Kibuga', the native capital of Buganda, which included the royal court and missionary cathedrals (compare section II).<sup>28</sup> Twentieth-century Kampala (like most African cities) was characterized by the large-scale immigration of employment-seeking adults.<sup>29</sup> Since our sample excludes immigrants, our results should not be interpreted to signify evolving literacy levels of the past *resident* population of Kampala.<sup>30</sup> Instead, assuming that (out)migration of children was limited, our data capture those who spent their *early lives* in and around Kampala, and thus were exposed to educational facilities in that area.<sup>31</sup> Since we are interested in engaging with the assertion of Meier zu Selhausen and Weisdorf that human capital accumulation was driven by the presence of Europeans in and around Kampala, a sample that singles out those exposed to local education is particularly suitable.<sup>32</sup>

Figure 1 compares the development of literacy in the census and signature literacy in the Namirembe dataset.<sup>33</sup> The differences are striking. The cohorts of Namirembe Cathedral grooms born after 1890 came close to full literacy, while brides lagged by just one decade. The census data for Kampala show that similar literacy rates were only first reached among men born in the late 1940s, and women in the 1950s—a difference of more than half a century. For Uganda as a whole, the development of literacy progressed at an even more modest pace. Only by the end of the colonial period did the majority of young men attain literacy, while female literacy just began to rise from a very low level.

The 1991 census also sheds light on the development of numeracy in Kampala. Additionally, we exploit the 1959 population census report, which contains an

<sup>28</sup> We use 'Kampala' to refer to the area containing both the Township and the *Kibuga*. Accounts of long-term urban development and town planning in Kampala are provided in Terreni Brown, 'Planning Kampala'; Gutkind, *Royal capital*; Omolo-Okalebo, Haas, Werner, and Sengendo, 'Planning of Kampala'; Vorlaufer, *Physiognomie*.

<sup>29</sup> Elkan, Migrants and proletarians, pp. 3-7.

<sup>30</sup> Since immigrants came from areas with fewer educational facilities and lower overall literacy and attainment rates (compare section III), it is plausible that individuals born in and around the city display a considerably higher level of literacy than that found among the full resident urban population.

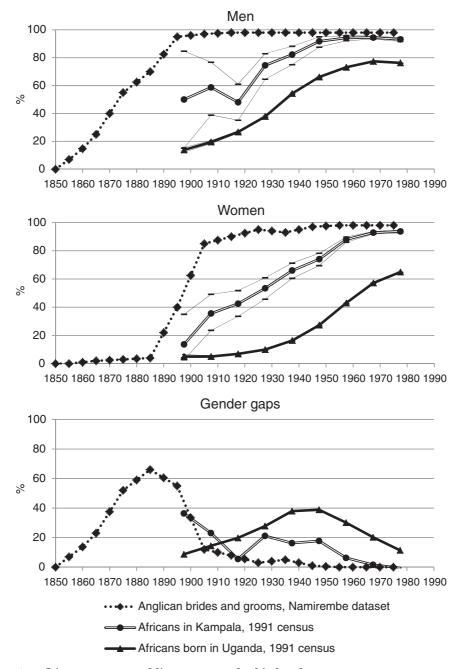
<sup>31</sup> As a result of urban population growth (compare section IV), many areas that had become part of urban Kampala by 1991and are included in our Kampala catchment area would have been peri-urban or rural earlier in the twentieth century.

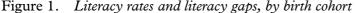
<sup>32</sup> Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 244.

<sup>33</sup> The census defines literacy as self-reported ability to read and write. We concur with Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 233, that signature literacy provides 'a reasonably good proxy' of literacy.

not expect the loss of educated Ugandans was sufficiently large to affect the representativeness of the literacy or numeracy shares among the pre-Amin cohorts. Idi Amin's expulsion of South Asians in 1972 does not affect *African* literacy in the 1991 census.

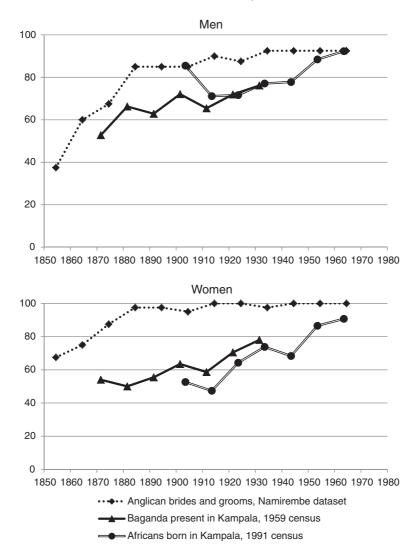
<sup>&</sup>lt;sup>27</sup> Reported in online app. S1.





Note: For the census estimates of male and female literacy, 95% confidence intervals are shown. Sources: Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 238; Uganda, Statistics Department, 1991 Population and Housing Census (data from Minnesota Population Center, Integrated public use microdata series).

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#### Figure 2. ABCC indices for Kampala, by birth cohort

*Notes*: An ABCC index of 100 means that all ages are equally represented in the birth cohort. In the case that everyone reports rounded ages (ending in 5 or 10), the ABCC will be 0. The higher the ABCC index, the lower the incidence of age heaping, and the higher we may expect the numeracy of the population to be. See A'Hearn, Baten, and Crayen, 'Quantifying quantitative literacy', for more information.

Sources: Uganda Protectorate, Uganda Census 1959: African Population; Uganda Protectorate, Uganda Census 1959: Non-African Population; Uganda, Statistics Department, 1991 Population and Housing Census (data from Minnesota Population Center, Integrated public use microdata series).

# age distribution of the Ganda population of 'Greater Kampala' (n = 118,965).<sup>34</sup> Figure 2 reports ABCC indices, an oft-used proxy for numeracy,<sup>35</sup> going back to the birth cohort 1870–9. The parish register data suggest almost perfect literacy

<sup>&</sup>lt;sup>34</sup> Uganda, *Census 1959: African Population*, pp. 98–9. We use the term 'Greater Kampala' to refer to Kyad(d)ondo County which encompassed Kampala and adjacent peri-urban and rural areas.

<sup>&</sup>lt;sup>35</sup> A'Hearn, Baten, and Crayen, 'Quantifying'; Baten and Fourie, 'Numeracy of Africans'; Cappelli and Baten, 'European trade'.

among women from the 1880s onwards. The census data, instead, show a gradual increase in correct age reporting (except for the eldest male cohort in 1991), with men performing better than women (except for the eldest cohort in 1959).

Meier zu Selhausen and Weisdorf acknowledge that 'the fast improvement in literacy admittedly raises suspicion that the marriage registers are not an entirely representative sub-set of the population living in (and around) Kampala in this period', but are quick to add that '[t]his does not detract from the fact that the sampled men and women performed very differently in terms of educational progress', reiterating their conclusion that 'gender inequality in literacy had practically disappeared by the mid-twentieth century'.<sup>36</sup> The census data present a different picture. The rise and fall of the Kampala male–female literacy gap was far less dramatic, and the gap closed only among men and women born in the 1950s, half a century later than among the Namirembe brides and grooms. For Uganda as a whole the gender literacy gap, which had been rising during most of the colonial period, only began to shrink for those born during the 1950s and educated after independence.

The large discrepancies between the church record data and the census data even for such very basic indicators of human capital—are easily explained: these sources capture different layers of Ugandan society. The church records reveal an early 'literacy explosion'<sup>37</sup> among a *highly selective* population of Christian brides and grooms in central Buganda, while the census data reveal a still substantial but much slower diffusion of literacy and numeracy among a *random* sample of people born in Kampala. While this comparison demonstrates that a biased sample cannot be used to infer broader trends, it does not address the mechanisms of human capital diffusion in colonial Uganda. It may be tempting to ascribe the exceptional performance of the Namirembe grooms and brides to their exposure to 'European' missionary education. However, as we discuss in the following sections, the rapid but uneven diffusion of education in Uganda was driven primarily by African demand and a profound Africanization of the mission.

Π

Meier zu Selhausen and Weisdorf's study of human capital formation among Christians in Kampala provides a new angle to an expanding literature that attributes a plethora of present-day development outcomes to the supposedly benign effects of (Protestant) missionary activity. This literature emphasizes the importance of European *supply* in the spread of the gospel and education.<sup>38</sup> In this section, instead, we use the case of Christian conversion in Buganda to show the importance of African *demand* for Christian religion and education—not only to find salvation, but also to obtain access to power, knowledge, and status. We show that rapid Christianization in Buganda and its subsequent diffusion was predicated on an alliance between British missionary and colonial interests and Ganda elite

<sup>&</sup>lt;sup>36</sup> Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 239.

<sup>&</sup>lt;sup>37</sup> Twaddle, 'Ganda receptivity', p. 311.

<sup>&</sup>lt;sup>38</sup> Johnson and more recently Nunn (and many others) maintain that the supply of mission stations was driven by Europeans, who looked for benign geographical conditions, and sought to maximize their expected returns in terms of conversion. Johnson, 'Location of Christian missions'; Nunn, 'Religious conversion'. Compare Frankema, 'Origins', p. 348.

factions, and stress the crucial role of native converts.<sup>39</sup> On a more general level, we emphasize the importance of indigenous social structures to explain the uneven diffusion of missionary education, a point we substantiate further in a regression framework in section III.

The Buganda Kingdom was the most powerful of a number of pre-colonial kingdoms in the Great Lakes region, drawing admiration from early explorers because of its receptivity to external influences and its sophisticated bureaucratic structures. In the words of one historian, '[the Kingdom] was equipped with an administrative apparatus as centralized and efficient as could conceivably have been erected without either writing or any means of transport other than the human head'.<sup>40</sup> When Europeans first arrived, Buganda was embroiled in intense regional military and political conflict, in particular with the neighbouring kingdom of Bunyoro. Buganda's *kabaka* (king) soon realized the potential gains from an alliance with Europeans. Islam had already taken hold in Buganda and introduced reading and writing,<sup>41</sup> but when Morton Stanley suggested that Christian missionaries should come to Buganda, King Muteesa is quoted to have responded pragmatically: 'I say that the white men are greatly superior to the Arabs, and I think that their book must be a better book than Mohammad's'.<sup>42</sup>

British Anglicans (the Church Missionary Society) arrived in 1877, quickly followed by French Catholics (the White Fathers) in 1879, both departing from their policy of incrementally extending missionary activities from the Indian Ocean coast.<sup>43</sup> Soon, the Christian missionaries found themselves contesting for power in a complicated internal conflict.<sup>44</sup> In a cut-throat scramble, several coalitions identifying with the different religious groups emerged and dissolved. Eventually—after the intervention of Captain Frederick Lugard and his maxim guns—a powerful faction of Anglican chiefs gained the upper hand, and Anglicanism became the de facto state religion of Uganda. Anglicans, Catholics, and Muslims were each assigned geographical spheres of influence, but freedom of worship and missionary activity was maintained.<sup>45</sup> St Paul's Cathedral, the Anglican centre of worship and evangelization, was erected on Namirembe Hill, close to the royal court on Mengo Hill. The Catholics established their headquarters on an adjacent hill.<sup>46</sup>

The conflation of missionary influence and local politics made a critical and long-lasting impact. When the British Protectorate was established in 1894, it

<sup>40</sup> Wrigley, 'Buganda: an outline economic history', pp. 71–2.

<sup>41</sup> Twaddle, 'Some implications', p. 229.

<sup>42</sup> Low, Fabrication, p. 61. Compare Brierly and Spear, 'Mutesa'; Wrigley, 'Christian revolution'.

<sup>43</sup> Curtin, *World*, p. 120.

<sup>46</sup> Later on, the Catholic Mill Hill and Verona Fathers also obtained a sizeable foothold in Uganda.

<sup>&</sup>lt;sup>39</sup> It should be kept in mind that indigenous attitudes towards European missionary and colonial interests and patterns of conversion and collaboration varied substantially between African societies. While in Buganda socio-political elites largely collaborated with British colonialists and played a decisive role in the diffusion of Christianity, in the nearby kingdom of Rwanda elites rejected Christianity and early converts consisted mostly of poor and vulnerable peasants; Desforges, *Defeat*, pp. 162–5, 176–7. For differential responses to Christianity and colonialism among Uganda's pre-colonial kingdoms, see Steinhart, *Conflict and collaboration*; Low, *Fabrication of empire*.

<sup>&</sup>lt;sup>44</sup> There is extensive literature on this episode of Buganda history; for example, Hanson, *Landed obligation*, pp. 93–126; Low, *Fabrication*, pp. 57–85.

<sup>&</sup>lt;sup>45</sup> The religious settlement 'gave rise to the basic patterns which characterize the distribution of religious communities in Buganda from the nineteen[*sic*] century to the present day'; Langlands and Namirembe, 'Historical background', p. 6.

was named after the Buganda Kingdom, even though the territory included a great diversity of—often antagonistic—polities and kingdoms. To establish hegemony over its newly acquired colonial territory, the British relied heavily on Ganda 'sub-imperialism'.<sup>47</sup> A Ganda military expedition defeated the defiant Bunyoro Kingdom, and Semei Kakungulu, a powerful chief and Anglican convert, conquered and ruled 'the land of the naked peoples'—north and east of Buganda.<sup>48</sup> Factions of Buganda's elites codified their privileges within their own kingdom, most notably through the Buganda Agreement of 1900 which allocated property rights for the kingdom's most fertile lands to a few thousand influential individuals.<sup>49</sup>

Early Ganda converts not only sought out European missionaries to further their own ends; they were soon at the forefront of evangelization and education. Meier zu Selhausen and Weisdorf stress 'the role of Europeans' in the diffusion of literacy among the first generation of Ganda converts.<sup>50</sup> Indeed, a small number of European missionaries—spurred on by eager Ganda elites—played a crucial role in setting up schools for the education of a new generation of leaders. Boarding schools were established, in the words of Alfred Tucker (Uganda's first Anglican bishop from 1899 to 1908), to 'instil a sense of responsibility' among the children of 'the ruling classes'.<sup>51</sup> Mengo High School, established on Namirembe Hill in 1895 and Uganda's first Anglican high school, had two British head teachers before the first African headmaster took office in 1912.

Yet an equation of the diffusion of missionary education with the role of Europeans greatly understates the crucial role of African, and particularly Ganda, converts. The spread of the gospel was first and foremost carried out by African evangelists.<sup>52</sup> Oliver describes Buganda's late nineteenth-century intellectual climate as 'one of the most remarkable and *spontaneous movements* for literacy and new knowledge that the world has ever seen'.<sup>53</sup> Tellingly, as noted by Hanson, 'African Christians insisted on the expansion of education more rapidly than [European] missionaries wanted and seized the initiative in carrying it out'.<sup>54</sup> Frankema has shown that the remarkable schooling revolution in colonial Uganda was indeed predicated on the 'Africanization of the mission'.<sup>55</sup> Due to the chronic lack of European missionaries and financial resources, the spread of mission schools beyond the confines of a handful of local centres depended crucially on the capacity of local African communities to mobilize resources for teaching materials, school buildings, and recruitment of teachers. Of the reported 8,456 teachers in primary schools in Uganda in 1938, only about 3 per cent (285) were of European origin.<sup>56</sup>

<sup>54</sup> Hanson, 'Indigenous adaptation', p. 157; compare Langlands and Bazirake, 'Expansion of missionary activity', p. 41. Note the repercussions this dynamic has for studies attributing mission expansion to conditions suitable for Europeans; for example, Nunn, 'Religious conversion'.

<sup>55</sup> Frankema, 'Origins', p. 335; see also Meier zu Selhausen, 'Missionaries', pp. 78-9.

<sup>56</sup> Frankema, 'Origins', p. 340.

<sup>&</sup>lt;sup>47</sup> Roberts, 'Sub-imperialism'.

<sup>&</sup>lt;sup>48</sup> Twaddle, Kakungulu, p. 139.

<sup>&</sup>lt;sup>49</sup> Hanson, Landed obligation, pp. 127-64.

<sup>&</sup>lt;sup>50</sup> Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 254.

<sup>&</sup>lt;sup>51</sup> Tucker, Eighteen years, p. 319; also Ssekamwa, History and development, pp. 59-70.

<sup>&</sup>lt;sup>52</sup> Pirouet, Black evangelists.

<sup>&</sup>lt;sup>53</sup> Oliver, *Missionary factor*, p. 184 (emphasis added); compare Hanson, 'Indigenous adaptation', p. 159.

While the impressive diffusion of education in Uganda should not be attributed to European missionaries, it should certainly not be associated with British colonial policy. The successful Africanization of the mission in fact delayed the British colonial government in taking responsibility for mass education in Uganda. Sir Henry Hesketh Bell, Uganda's governor (1905–9), remarked that this success story 'relieved [the administration] of making the provision for education which in any other dependency would have been a serious call upon the government's finances'.<sup>57</sup> This reality is borne out by some basic figures: in 1920 the colonial government spent a meagre £0.03 (constant prices 1910) per person enrolled in primary missionary education, which set Uganda at the bottom of a larger British African sample. For comparison: in Sierra Leone, the colonial government spent about £0.98 per student in 1920, about 30 times as much.<sup>58</sup>

The indigenous drive to conversion and education was as uneven as it was impressive. Among the Baganda, 32 per cent identified as Catholic and 30 per cent as Anglican by 1931. Increasingly, people from a wide range of backgrounds had access to education, and 'self-made men' were able to achieve social, economic, and political success.<sup>59</sup> Using the weapons of literacy and religion, several groups began to question 'the legal and social procedures that the Protestant establishment had erected', and to challenge the British–Ganda coalition.<sup>60</sup> Their efforts were at least partly successful, and some of the privileges and powers of the early colonial Ganda elites began to erode from the 1920s onwards.<sup>61</sup>

Christianity made much less headway in other parts of Uganda. Among non-Ganda Ugandans, only 5 per cent identified as Catholic, 6 per cent as Anglican, and 2 per cent as Muslim by 1931.<sup>62</sup> It was only during the late colonial period that conversion rates began to converge, as Christianity—Catholicism in particular—spread rapidly to Uganda's outlying regions. In 1959, 76 per cent of the population in Buganda identified as Christian, against 56 per cent in the rest of Uganda.<sup>63</sup> Due to the close link between Christianity and education, Buganda also built up a clear lead in terms of human capital formation.<sup>64</sup> As shown in table 2, Buganda significantly outperformed the rest of Uganda in terms of school attendance by the end of the colonial period. Interestingly, the table also shows that Christians in Buganda performed better than their counterparts elsewhere. Only by the mid-1950s did the colonial state begin to take greater responsibility for the education of Africans across Uganda, but by this time large disparities had already built up.<sup>65</sup>

III

A major advantage of using census data in place of the marriage registers of a specific group of church adherents is that they can cast a wider light on the

<sup>57</sup> Ssekamwa, *History and development*, p. 48.

<sup>58</sup> Frankema, 'Origins', p. 342.

<sup>59</sup> Meier zu Selhausen et al., 'Social mobility'.

<sup>60</sup> Peterson, 'Politics', p. 210.

<sup>61</sup> Hanson, Landed obligation; Meier zu Selhausen et al., 'Social mobility'.

<sup>62</sup> Uganda Protectorate, *Census Returns 1931*, p. 72. Conversion rates among the Batooro (26% Christians) and Banyoro (25% Christians) were also significantly higher than average, but much lower than among the Baganda. <sup>63</sup> Uganda, *Census 1959: African Population*, p. 31.

<sup>64</sup> See also Goldthorpe, African elite, p. 28.

<sup>65</sup> Lury, 'Dayspring mishandled?', p. 241.

		51			
	Buganda	Western	Eastern	Northern	Total
Anglicans	67	55	36	42	46
Catholics	51	40	34	35	39
Muslims	41	19	10	17	23
Other religions	7	8	8	7	7
Male	55	35	30	42	42
Female	40	11	8	10	18
Total	48	29	25	26	27

Table 2. Share (%) of population aged 6–45 that has ever been to school by 1959,<br/>by province

Source: Uganda Protectorate, Uganda Census 1959: African Population, pp. 32-3.

uneven diffusion of education across colonial Uganda. In this section we explore the role of gender and ethnicity in a multivariate regression framework. We run two specifications. First, we regress a number of variables on years of schooling, adding variables of interest one by one while controlling for time and place of birth. Second, we regress an identical set of variables on years of schooling for each birth cohort separately, reporting standardized beta-coefficients to explore the changing explanatory weights of our variables of interest over time. We deliberately confine our sample to the birth cohorts of 1903 to 1972, leaving out all people born before 1903 (to avoid survivorship bias and small samples; see section I) and after 1972 (to exclude the age group 0-18). We also exclude persons who were born outside Uganda. This leaves us with a sample of about 645,000 men and women.

The ordinary least squares (OLS) regression on years of schooling includes the following independent variables: *FEMALE* (capturing the effect of gender), *KAMPALA* (capturing the effect of being born in or around the capital), *GANDA* (capturing the effect of belonging to the dominant ethnic group) and *ANGLICAN* (capturing the effect of adhering to Protestant Christianity and the dominant denomination in colonial Uganda). We also include interactions of these variables to explore heterogeneous effects for Ganda women (capturing differences in gender inequality between the Baganda and other ethnic groups), Anglican women (capturing differences in gender inequality between Anglicans and adherents to other religions), and Ganda Anglicans (capturing the heterogeneous impact of Anglicanism among the Baganda and other ethnic groups).

The regression results confirm that the educational attainment gap between men and women was substantial and significant. Table 3b shows that this gap widened up to the birth cohort of 1943–1952, where it was close to three years of schooling, and only started to decline substantially for children born after independence (1963– 72). Table 3a also shows that the Baganda enjoyed a considerable advantage in access to schooling, and table 3b reveals that this advantage increased in absolute terms throughout the colonial era. The *GANDA* variable is consistently positive and highly significant for all birth cohorts. The standardized beta-coefficients reported in table 3b indicate that *GANDA* together with *FEMALE* explain most of the variation that is picked up by our model. Place of birth mattered too. Kampalaborn individuals benefited from growing up in the country's economic, political,

	Table 3a.		ession on yea	rs of schooling	OLS regression on years of schooling, birth cohorts 1902–62	s 1902–62		
Variables	(1) years of schooling	(2) years of schooling	(3) years of schooling	(4) years of schooling	(5) years of schooling	(6) years of schooling	(7) years of schooling	(8) years of schooling
FEMALE	$-2.131^{***}$	$-2.133^{***}$	$-2.163^{***}$	$-2.134^{***}$	$-2.164^{***}$	-2.354***	-2.099***	-2.356***
KAMPALA	(C&UU.U)	(0.008) 3.029***	(0.0080)	(c800.0)	(0.0080)	(0.0094)	(0.0100)	(0.0113) 2.512***
GANDA		(0.0387)	2.767***		2.694***	2.164***		(0.0382) 2.084***
ANGLICAN			(7610.0)	0.619***	(cnzn.n)	(1670.0)	0.665***	(96270.0) 0.607***
				(0600.0)	0.0099		(0.0138)	(0.0145)
GANDA*ANGLICAN					$0.246^{***}$ (0.0246)			$0.164^{***}$ ( $0.0240$ )
GANDA*FEMALE					~	1.161***		$1.156^{***}$
						(0.0230)		(0.0225)
ANGLICAN*FEMALE							$-0.0889^{***}$	0.0025
Constant	$6.904^{***}$	$6.701^{***}$	$5.247^{***}$	$6.704^{***}$	$5.043^{***}$	$5.344^{***}$	6.686***	4.976***
	(0.0115)	(0.0116)	(0.0182)	(0.0118)	(0.0183)	(0.0183)	(0.0124)	(0.0184)
Controls birth cohort	Y	Y	Y	Y	Y	Y	Y	Y
Controls birth province Observations	r 645 076	r 645 076	1 611 500	r 645 976	1 11 500	1 611 500	r 645 976	r 611 500
Adjusted R <sup>2</sup>	0.21	0.22	0.25	0.22	0.26	0.25	0.22	0.27
<i>Notes:</i> Robust standard errors are given in parentheses. ***indicates significance at the 1% level, ** at the 5% level, and *at the 10% level. As a robustness check, we also run a logit regression on literacy including the same independent variables, the results of which are reported in online app. S2, together with the summary statistics (online app. S3) and a correlation matrix (online app. S4). <i>Source:</i> Uganda, Statistics Department, <i>1991 Population and Housing Census</i> (data from Minnesota Population Center, <i>Integrated public use microdata series</i> ).	given in parentheses. ependent variables, th ment, 1991 Population	***indicates signiff he results of which i 1 and Housing Cens	cance at the 1% lev are reported in onlii us (data from Minn	/el, ** at the 5% leve ne app. S2, together lesota Population C	l, and *at the 10% le with the summary s enter, <i>Integrated pub</i> i	vel. As a robustness tatistics (online app <i>ic use microdata seri</i> :	parentheses. ***indicates significance at the 1% level, ** at the 5% level, and *at the 10% level. As a robustness check, we also run a logit regression variables, the results of which are reported in online app. S2, together with the summary statistics (online app. S3) and a correlation matrix (online 31 <i>Population and Housing Census</i> (data from Minnesota Population Center, <i>Integrated public use microdata series</i> ).	logit regression n matrix (online

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Table 3b. OLS re	OLS regression on year.	on years of schooling per birth cohort, including standardized beta-coefficients (in italics), 1903–72	· birth cohort, i	ıcluding standar	dized beta-coeff	icients (in italics	), 1903–72
	(t)	(2)	(3)	(4)	(5)	(9)	(2)
	Birth cohort 1903–17	Birth cohort 1913–22	Birth cohort 1923–32	Birth cohort 1933–47	Birth cohort 1943_57	Birth cohort 1953_62	Birth cohort 1963–77
	71-6061	77-6161	70-0761	74-0061	70-0461	70-6661	7/
FEMALE	-0.488***	$-0.854^{***}$	$-1.430^{***}$	$-2.456^{***}$	$-2.985^{***}$	$-2.777^{***}$	$-2.120^{***}$
	(0.0424)	(0.0312)	(0.0286)	(0.0286)	(0.0277)	(0.0238)	(0.0203)
Beta	-0.139	-0.213	-0.293	-0.393	-0.406	-0.352	-0.273
KAMPALA	1.471***	$1.186^{***}$	$1.501^{***}$	$1.758^{***}$	$2.221^{***}$	$2.487^{***}$	$2.805^{***}$
	(0.328)	(0.254)	(0.188)	(0.160)	(0.133)	(0.0753)	(0.0511)
Beta	0.089	0.059	0.056	0.052	0.057	0.076	0.107
GANDA	1.308***	$1.508^{***}$	$1.782^{***}$	$2.276^{***}$	$2.642^{***}$	$2.503^{***}$	$1.785^{***}$
	(0.139)	(0.0884)	(0.0788)	(0.0712)	(0.0669)	(0.0482)	(0.0383)
Beta	0.289	0.284	0.267	0.261	0.249	0.233	0.178
ANGLICAN	$0.293^{***}$	$0.319^{***}$	$0.436^{***}$	$0.596^{***}$	$0.763^{***}$	$0.684^{***}$	$0.595^{***}$
	(0.0596)	(0.0455)	(0.0424)	(0.0424)	(0.0388)	(0.0306)	(0.0248)
Beta	0.083	0.079	0.088	0.093	0.101	0.085	0.075
GANDA*ANGLICAN	$0.704^{***}$	$0.844^{***}$	$0.826^{***}$	$0.574^{***}$	$0.243^{***}$	0.0542	-0.0574
	(0.141)	(0.0998)	(0.0803)	(0.0743)	(0.0695)	(0.0492)	(0.0381)
Beta	0.097	0.099	0.077	0.039	0.014	0.003	-0.003
GANDA*FEMALE	-0.868***	$-0.688^{***}$	$-0.425^{***}$	$0.199^{***}$	$0.664^{***}$	$1.447^{***}$	$1.734^{***}$
	(0.135)	(0.0913)	(0.0756)	(0.0703)	(0.0656)	(0.0462)	(0.0354)
Beta	-0.151	-0.098	-0.048	0.017	0.048	0.100	0.131
ANGLICAN*FEMALE	$-0.235^{***}$	$-0.196^{***}$	$-0.246^{***}$	$-0.348^{***}$	$-0.223^{***}$	$0.106^{***}$	0.0897***
	(0.0722)	(0.0519)	(0.0462)	(0.0468)	(0.0454)	(0.0375)	(0.0309)
Beta	-0.055	-0.04	-0.042	-0.045	-0.024	0.011	0.009
Constant	$0.585^{***}$	$0.974^{***}$	$1.637^{***}$	$2.532^{***}$	$3.644^{***}$	$4.474^{***}$	4.791***
	(0.0739)	(0.0516)	(0.0501)	(0.0454)	(0.0441)	(0.0362)	(0.0300)
Controls birth province	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Observations	8,791	21,756	40,111	61,203	90,185	153,827	235,717
Adjusted R <sup>2</sup>	0.133	0.167	0.204	0.240	0.244	0.210	0.149
Note: Robust standard errors are given in parentheses. ***indicates significance at the 1% level, **at the 5% level, and *at the 10% level. Source: Uganda, Statistics Department, 1991 Population and Housing Census (data from Minnesota Population Center, Integrated public use microdata series)	ire given in parentheses. 0artment, 1991 Populatio	***indicates significanc n and Housing Census (d	e at the 1% level, **at ata from Minnesota P	the 5% level, and <sup>*</sup> at the opulation Center, <i>Integ</i>	le 10% level. rated public use microdata	t series).	

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and missionary centre, but the beta-coefficients reveal a consistently larger weight for Ganda ethnicity than for being born in Kampala. The effect of adhering to the Anglican Church is also positive, but weighs in less heavily.

The interaction effect of *GANDA* and *FEMALE* is of particular interest. The effect is positive for the full sample (table 3a), but the sign of the coefficient changes from negative to positive over the course of the colonial era, while remaining significant at the 99 per cent confidence level throughout (table 3b). This finding indicates that the educational gender gap was large among the Baganda (compared to other ethnic groups) for the early birth cohorts (1903–32), but smaller for later birth cohorts (1933–72). The most plausible explanation is that Ganda boys benefited first from the new schooling opportunities, while Ganda girls benefited from these new infrastructures with a lag. This process was repeated elsewhere at a later date. As a result, the educational gender gap opened up and closed *sooner* among the Baganda than among other ethnic groups.<sup>66</sup>

The positive effect of being Anglican on educational outcomes is of a smaller magnitude than the premium of being Ganda and male. It should also be noted that the direction of causality between religion and education is ambiguous. While gender and ethnicity are mostly fixed at birth, religion is not. The census provides information about religious affiliation in 1991, and does not specify at what point in their lives the enumerated individuals converted to their stated religion. Those in the earlier birth cohorts in particular may have converted after school-going age, in which case education outcomes potentially affected choice of religion rather than the other way around. The religion variable, therefore, provides a poor proxy of religious education, even when we set aside the issue of unobserved selection effects arising from uneven conversion (section I).

Still, we find some interesting interaction effects with the ANGLICAN variable. For the overall sample, Anglican Ganda performed better than their non-Ganda counterparts (compare table 2), probably reflecting the special position of Anglicanism in Buganda as a result of the historical dynamics discussed in section II. This finding is further corroborated by the fact that the GANDA\*ANGLICAN interaction effect is strongest for the early birth cohorts and loses its statistical significance for those educated after independence (1953–72 birth cohorts), suggesting that the benefits associated with Anglicanism in Buganda eroded over time. For the full sample, the FEMALE\*ANGLICAN interaction effect does not point to an effect of religion on the educational gender gap. However, when we zoom in on the individual birth cohorts, we observe, contrary to expectation, that among the birth cohorts educated during the colonial era (1903–52 birth cohorts), Anglicans had a (slightly) *larger* gender gap than other religions, suggesting that Anglican educational resources were particularly skewed towards boys (compare section V). The effect flipped only for cohorts educated after independence (1952– 72 birth cohorts).

The bottom line of this section is that the regression results are consistent with our overarching argument about the crucial importance of gender and ethnicity in the uneven spread of education in colonial Uganda. Additionally, we find that the interaction of these two variables mattered, and that Anglicanism was

<sup>&</sup>lt;sup>66</sup> Consistent with the literacy trends observed in Kampala and Uganda (section I, fig. 1).

associated with educational attainment in particular among the Baganda, which is consistent with the historical narrative of African demand for education developed in section II. The use of literacy as the dependent variable instead of attainment levels confirms these results.<sup>67</sup>

Meier zu Selhausen and Weisdorf observe a striking occupational transformation among the Namirembe grooms during the colonial era. They take this as proof of an impressive expansion of occupational opportunity, taking the spectacular rise in the share of 'white-collar' workers from a mere 1 per cent at the start of the colonial era to almost 80 per cent at independence in 1962 as evidence of a 'century-long transformation of Kampala from an entirely rural economy to one of urban modernity'.<sup>68</sup> It is beyond doubt that the imposition of a new governance structure and the coinciding development of an urban economy in Kampala created new labour market opportunities that had not existed before<sup>69</sup> but was the occupational transformation in Kampala itself really so spectacular, and what does it tell us about broader employment trends in colonial Uganda?

Unfortunately, we do not have a full occupational enumeration of Kampala to compare with the Namirembe dataset. However, an anthropological survey conducted between 1953 and 1955 provides us with a glance into the occupational structure of two African neighbourhoods, Mulago and Kisenyi. Like the Namirembe dataset, these surveys reveal considerable occupational diversity and a sizeable share of Africans in skilled positions. The occupational composition of Mulago, a relatively prosperous African suburb and home to Uganda's largest referral hospital, is reported in table 4. The (presumably male) occupational structure of Kisenyi is rather similar, with 27 per cent unskilled waged, 31 per cent unskilled independent, 11 per cent skilled independent, and 31 per cent unspecified (presumably mostly skilled employed and property owners).<sup>70</sup>

The 45 per cent *skilled* male labourers in the Mulago sample compares to just under 60 per cent skilled labourers in the Namirembe dataset for the same period. If migrant labourers were excluded from the Mulago sample, the share of skilled labourers may well converge with, or even surpass, the share of skilled workers found among the Anglican grooms of Namirembe Cathedral.<sup>71</sup> However, while similar on the surface, a further decomposition of the occupations ultimately reveals the biases in the Namirembe dataset. Particularly notable is the over-representation of clerks in the latter: 17 per cent of grooms (1950–9) compared to only 3 per cent of the males in the Mulago sample (1953). Conversely, there is a pronounced under-representation of traders: only 8 per cent of Namirembe grooms compared to 31 per cent (mostly petty food traders) of the surveyed men in Kisenyi.<sup>72</sup>

<sup>67</sup> Logit regressions of literacy are presented in online app. S2.

<sup>68</sup> Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 241.

<sup>69</sup> See, for example, Elkan, Migrants and proletarians; Southall and Gutkind, Townsmen; Vorlaufer, Physiognomie.

<sup>70</sup> Southall and Gutkind, *Townsmen*, p. 55. The larger share of wage labourers in Mulago may be due to the presence of the hospital.

<sup>71</sup> Compare Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 237.

<sup>72</sup> This difference does not result from the inclusion of migrants in the Kisenyi survey. Baganda men made up a large share of beer, charcoal, or banana sellers; Southall and Gutkind, *Townsmen*, p. 260.

		ıpled iduals	Share of the total sample (%)		Average monthly income (shillings)		
Type of occupation	М	F	М	F	М	F	F/M
Not working	36	286	5	68	n.a.	n.a.	n.a.
Working	621	135	95	32	92	59	0.64
Unskilled waged	263	24	40	6	58	44	0.76
Unskilled independent	58	59	9	14	88	60	0.69
Skilled waged	225	33	34	8	126	72	0.57
Skilled independent	75	19	11	5	113	50	0.44
Total	657	421	100	100	87	19	0.22

 Table 4.
 Occupations of sampled men and women in Mulago, Kampala, 1953–5

*Note:* Southall and Gutkind interviewed households in a particular area of Mulago. They observed 64 different occupations, which they classify as (1) 'unskilled employed', (2) 'unskilled selfemployed', (3) 'skilled employed', (4) 'supervisory', 'professional & managerial', (5) 'professional & managerial', (6) 'domestic service', (7) 'property ownership', and (8) 'clerical work'. We recode these into waged (1, 3, 4, 5, 6, 8), independent (2, 5, 7), skilled (3, 4, 5, 7, 8), and unskilled (1, 2, 6). Note that, following this classification, 'shop assistants' and 'shop boys' are unskilled and waged; 'food sellers' are unskilled and independent; 'shopkeepers' and 'cattle sellers' are skilled and independent; 'tailors', 'seamstresses', and 'matmakers' are skilled and independent; 'prostitutes' are unskilled and independent; and 'cotton and coffee growers' are skilled and independent. Since the bar chosen by Southall and Gutkind to classify someone as skilled or professional seems fairly low (that is, not conditional on primary education), any comparisons with other classifications of skilled shares (for example, HISCO/HISCLASS used by Meier zu Selhausen and Weisdorf) should be made cautiously.

Source: Southall and Gutkind, Townsmen, p. 262.

To assess the evolution of occupational opportunities in colonial Uganda, we should also see Kampala—a relatively small centre of trade, services, and administration—as part of a wider colonial economy. Indeed, Kampala's clerks and traders would not have had a job without Uganda's rural majorities producing the cash crops that underpinned the formal sector and state finances.<sup>73</sup> At independence, Uganda was still overwhelmingly rural and agrarian, with only 3.8 per cent of the entire population living in cities, towns, or trading centres; an estimated 11.5 per cent of the adult population was formally employed at all, and a mere 7.9 per cent outside agriculture.<sup>74</sup> Characteristic of Uganda's agrarian economy, Kampala—while by far the largest urban centre—harboured only a fraction of the total population, which is still the case (table 5).

Another constraint on African occupational opportunity in Uganda was the fact that a large share of the lucrative (semi-)skilled jobs were taken up by expatriates, especially South Asians.<sup>75</sup> According to census estimates, the South Asian population grew steadily from 2,216 individuals in 1911 to 71,933 in 1959.<sup>76</sup> While many South Asians initially arrived as labourers, those who chose to stay in Uganda tended to be skilled and entrepreneurial, taking up roles as commercial middlemen, cotton ginners, plantation owners, and clerks, often employing unskilled African labour. Illustrating their infusion of human capital into the Ugandan economy, figure 3 shows the high numeracy skills of the South Asian population in Uganda (the closest we were able to get to a comparable indicator of working skills), compared to the indigenous Baganda of 'Greater Kampala'.

<sup>73</sup> de Haas, 'Measuring'; Jamal, 'Taxation'.

<sup>&</sup>lt;sup>74</sup> Based on population estimates from Uganda, 1959 Census: African Population, p. 16, and employment estimates from Uganda Protectorate, Annual Report of the Labour Department, p. 65, in the same year.

<sup>&</sup>lt;sup>75</sup> We use the term 'South Asians' to refer to residents of British Indian and subsequently Bangladeshi, Indian, and Pakistani descent.

<sup>&</sup>lt;sup>76</sup> Uganda Protectorate, Census Returns 1911, p. 9; idem, Census 1959: Non-African Population, p. 7.

Census year	Uganda population (x1,000)	Kyadondo population (x1,000)	Kampala population (x1,000)	Kampala share of Uganda (%)	Urban sex ratio (m/f)
1904	n.a.	66	n.a.	n.a.	n.a.
1911	2,840	105	n.a.	n.a.	103
1921	3,065	105	n.a.	n.a.	87
1931	3,554	94	n.a.	n.a.	112
1948	4,918	133	48	1.0	143
1959	6,450	237	92	1.4	137
1969	9,535	450	331	3.5	124
1980	12,636	n.a.	459	3.6	103
1991	16,672	n.a.	774	4.6	95
2002	24,442	n.a.	1,189	4.9	92
2014	34,635	n.a.	1,507	4.4	93

 Table 5. Official population census estimates for Uganda and Kampala, 1904–2002

*Note:* The population figures of colonial Kampala include both the township and surrounding (peri-)urban areas. Post-colonial Kampala pertains to Kampala district. See also the discussion in section I. Sex ratios during the colonial period are for Kyadondo County.

Sources: Uganda Protectorate, Census Returns 1911; idem, Census Returns 1921; idem, Census Returns 1931; East African Statistical Department, Report on the Census of the Non-Native Population; Uganda, Census 1959: African Population, p. 91; Uganda, Census Office, Report on the 1969 Population Census; Uganda, Statistics Division, Report on the 1980 Population Census; Uganda, Statistics Division, Report on the 1980 Population and Housing Census (data from Minnesota Population Center, Integrated public use microdata series); Uganda Bureau of Statistics, 2002 Population and Housing Census (2014; Southall and Gutkind, Townsmen, p. 6.

South Asians absorbed a large portion of the limited demand for (semi-)skilled labour in the colonial export economy. Without a doubt, the infusion of South Asian skills, capital, and entrepreneurship accelerated Uganda's economic growth. At the same time, however, their presence also cut off avenues for occupational mobility to African men and women, and diminished incentives for the colonial state to allocate resources to developing working skills and encourage African business activity.<sup>77</sup> An investigation into trade in Uganda from the early 1950s found that in Kampala Township there were only 27 officially licensed African traders, compared with 50 Europeans and 1,014 South Asians.<sup>78</sup> Although some Africans built thriving businesses, most were self-employed petty traders, or hired by larger South Asian traders, 'scrap[ing] by with rather a miserable existence'.<sup>79</sup> The exclusion of Africans from trade and industry played an important role in the grievances that developed towards South Asians, which ultimately culminated in Idi Amin's decision to expel them in 1972.<sup>80</sup>

While African occupational opportunity was constrained, it was also distributed very unevenly. Buganda was not only far ahead of the other provinces in terms of education (compare section II), it also had the most diversified occupational structure. In 1959 Buganda harboured 28 per cent of Uganda's total population, 43 per cent of all enumerated African wage labourers, and 48 per cent of all African wage income earned.<sup>81</sup> In terms of gross domestic income per head of the African

<sup>&</sup>lt;sup>77</sup> Ehrlich, 'Paternalism'; Jamal, 'Asians'.

<sup>&</sup>lt;sup>78</sup> Uganda Protectorate, Advancement, p. 15.

<sup>&</sup>lt;sup>79</sup> Gutkind, 'Town life', p. 43; compare Southall and Gutkind, Townsmen, pp. 155-9.

<sup>&</sup>lt;sup>80</sup> Jamal, 'Asians'.

<sup>&</sup>lt;sup>81</sup> Uganda, Census 1959: African Population; East African Statistical Department—Uganda Unit, Enumeration of Employees, tabs. 5 and 13.

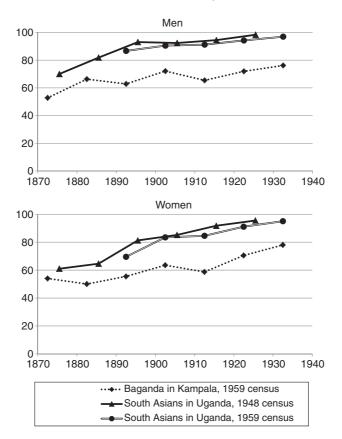


Figure 3. ABCC indices for Baganda in Kampala and South Asians in Uganda, by birth cohort

Notes: See fig. 2 for more information on the ABCC index. Note that a large share of South Asians, especially in the earlier cohorts, migrated to Uganda as adults.

Source: East African Statistical Department, Report on the Census of the Non-Native Population, pp. 94-5; Uganda, Census 1959: Non-African Population, pp. 82-4.

population, Buganda was also well ahead of the rest of the Protectorate, with an estimated £26 annual income per capita, versus £15 in the Eastern Province, and £12 in the Northern and Western Provinces.<sup>82</sup>

Buganda's occupational opportunities, in turn, were concentrated in Kampala. Even though Kampala harboured only 5 per cent of Buganda's population in 1959, 31 per cent of all African wage labourers in Buganda were employed in Kampala, earning 39 per cent of Buganda's total wage bill.<sup>83</sup> The cost of living in Kampala was much higher than in the countryside and most migrant labourers could not afford to bring their families, resulting in a transient population and workforce.<sup>84</sup> The unskilled labour market was dominated by circular migrant labourers from

<sup>&</sup>lt;sup>82</sup> Jameson, ed., Agriculture, p. 117.

<sup>&</sup>lt;sup>83</sup> Uganda, Census 1959: African Population, pp. 17, 91; East African Statistical Department—Uganda Unit, Enumeration of Employees, tabs. 1 and 5.

<sup>&</sup>lt;sup>84</sup> de Haas, 'Measuring', esp. online supplement S4; Elkan, *Migrants and proletarians*; Southall and Gutkind, *Townsmen*.

Uganda's rural peripheries, as well as neighbouring colonial territories, who worked for subsistence wages.<sup>85</sup> The Baganda themselves stood at the 'apex of the [African] occupational and wage structure'.<sup>86</sup> Only a small class of relatively well-paid skilled workers could afford to settle permanently in Kampala. In other words, the share of skilled workers in colonial Kampala may seem impressive, but these workers signify a strong selection effect in migration towards a small, service-oriented urban centre in an otherwise overwhelmingly rural economy.<sup>87</sup>

In conclusion, the importance of small-scale family farming and the presence of expatriates meant that the demand for skilled African workers was limited. As a result, the colonial government lacked the incentives to invest heavily in the training of a large non-agricultural African labour force, let alone promote white-collar work among broad sections of the population. The lack of well-paid skilled jobs and limited opportunities in the commercial sector meant that one of the few ways to obtain a lucrative waged position was to rub shoulders with the Ganda missionaries and the mission-educated local government and merchant elites, concentrated in and around Kampala. The 'happy few' who managed to attain such a position show up as 'clerks' (984 individuals, 17 per cent of the sample) and 'teachers' (505 individuals, 8 per cent of the sample) among the grooms in the Namirembe dataset during the period 1895–1959.

V

We now return to the central issue of the changing position of women in colonial Uganda. We have already shown in sections I and III that, for the Ugandan population at large, gender inequalities in terms of literacy and educational attainment persisted throughout the colonial era. Can we attribute these persistent inequalities to African hostility towards 'benign' European influences, as suggested by Meier zu Selhausen and Weisdorf? How useful is the dichotomy of 'European modernity' versus 'African tradition' in exploring African gender inequality?

Because gender norms varied substantially between different ethnic groups, we confine the discussion to Buganda. Scholars have already pointed out that women in pre-colonial Buganda probably had more freedom and marital gender relations were less exploitative than in neighbouring polities.<sup>88</sup> Still, Meier zu Selhausen and Weisdorf rightly note that traditional Ganda gender norms were patriarchal. Women primarily had a domestic role, and their agency was constrained by fathers and husbands.<sup>89</sup> It is also notable that the vast majority of slaves in pre-colonial Buganda were female.<sup>90</sup> Moreover, the position of women probably deteriorated in the tumultuous decades leading up to the arrival of expatriate missionaries and subsequent colonization.<sup>91</sup>

<sup>89</sup> Doyle, *Before HIV*; Perlman, 'Law'; Musisi, "Elite polygyny"; Bantebya Kyomuhendo and McIntosh, *Women*, p. 80.

<sup>90</sup> Tuck, 'Women's experiences'.

<sup>91</sup> Hanson, 'Queen mothers'.

<sup>&</sup>lt;sup>85</sup> Frankema and van Waijenburg, 'Structural impediments', p. 910; de Haas, 'Measuring', pp. 626–7.

<sup>&</sup>lt;sup>86</sup> Elkan, Migrants and proletarians, p. 44.

<sup>&</sup>lt;sup>87</sup> Elkan, Migrants and proletarians.

<sup>&</sup>lt;sup>88</sup> Doyle, Before HIV, pp. 47-57; Perlman, 'Law'.

To test the effect of exposure to European norms on gender inequality, Meier zu Selhausen and Weisdorf exploit the variation among the brides observed in the Namirembe dataset. They observe that daughters from fathers working in what they classify as the 'traditional sectors' performed worse on a composite marital equality indicator than daughters from fathers involved in 'activities directly linked to Europeans'.<sup>92</sup> These differences in terms of marital inequality between different categories of fathers' occupations are interesting, but, in our view, certainly do not warrant a spectacular leap to the conclusion that African gender inequality persisted because of 'African discrimination [*sic*] against a modernized (European-style) economy'.<sup>93</sup> To substantiate our critique, it is helpful to revisit the work of Boserup.

First, while Boserup makes several cursory remarks about the *cultural* causes of gender discrimination in Africa (as emphasized by Meier zu Selhausen and Weisdorf), she develops a much more elaborate argument about its *economic* causes. Boserup's first line of argument revolves around the importance of female agricultural labour input in the 'traditional' rural African household, compared to many other world regions.<sup>94</sup> While the value of their labour provided African women with responsibility and bargaining power in the household, their large contribution to domestic income also implies that the *opportunity costs* of girls' education and off-farm labour were high.<sup>95</sup> Hence, in a colonial context where labour market opportunities for women were limited, and economic returns to female education were low, one does not need to invoke cultural norms to understand why many fathers did not choose to educate their daughters.

The opportunity costs of women's education were particularly high for households relying on 'traditional occupations' (such as peasant farmers, basket makers, or barkcloth makers). Such households were typically situated in rural areas with greater access to fertile farmland to cultivate food and cash crops.<sup>96</sup> Additionally, their incomes were probably lower than those of mission workers, clerks, or medical assistants, implying that they were more dependent on female (agricultural and domestic) labour input. According to Bantebya Kyomuhendo and McIntosh, formal labour market participation in Uganda was:

limited to those women whose parents had been able to pay for their education and whose labor was not needed at home. No one argued that peasant women too should be free to earn their own incomes. Furthermore, the ability of educated women to work relied upon cheap, unskilled female workers to take their place within the household.<sup>97</sup>

Second, Boserup points out that gender discriminatory attitudes of African men resulted not only from 'loathing the idea of their wives and daughters working under the authority of a foreign man', but primarily from 'the desire, shared with men in other continents, to reserve for themselves the much-desired jobs in the modern sector, [which] keeps the women out of that sector'.<sup>98</sup> Rather

<sup>&</sup>lt;sup>92</sup> Meier zu Selhausen and Weisdorf, 'Colonial legacy', p. 250.

<sup>&</sup>lt;sup>93</sup> Ibid., p. 257.

<sup>&</sup>lt;sup>94</sup> For support in recent empirical literature, see Alesina et al., 'On the origins'.

<sup>95</sup> Boserup, Woman's role, p. 34.

<sup>&</sup>lt;sup>96</sup> Compare Elkan, Migrants and proletarians, pp. 43-4.

<sup>&</sup>lt;sup>97</sup> Bantebya Kyomuhendo and McIntosh, Women, p. 83; compare Elkan, 'Employment', pp. 17–18.

<sup>&</sup>lt;sup>98</sup> Boserup, *Women's role*, p. 190.

than beneficial for women, Boserup sees 'training in crafts and home industries as a deliberate method of reducing the number of women competing with men for employment in the modern sector'.<sup>99</sup> She also argues that this fear of female competition was aggravated by the presence of a 'favoured minority' (South Asians, in this case), which limited occupational opportunities for African men (as argued in section IV).<sup>100</sup> Relatedly, Boserup points out that the large numbers of female nurses and teachers should not be equated with a development towards overall occupational gender equality, but instead indicates that women remained confined to a few specific—and relatively unthreatening—'feminine' occupations.<sup>101</sup> This fear of female competition certainly operated in the Ugandan context as well. The economist Walter Elkan noted in 1955 that 'despite full employment men are obsessed with fear of being edged out by women workers',<sup>102</sup> and that 'men object to the employment of women in occupations which they have come to regard as men's. From these occupations only teaching, nursing and child care are excluded'.<sup>103</sup>

Third, Boserup stresses that the key European legacy for gender inequality in Africa has been to reinforce and reshape—rather than eliminate—discrimination against women and to cut off women's participation in new lucrative economic activities, both in villages (cash crop cultivation) and in towns (factory work). She points out that agricultural extension services in colonial Africa were primarily geared towards men (explicitly invoking the example of cotton in Uganda);<sup>104</sup> that '[colonial fear of female prostitution] served as a barrier to women's emancipation from tribal and family authority, and to their efforts to obtain genuine urban employment';<sup>105</sup> that 'Europeans, with predominantly female clerical staffs in their home country stick to local traditional sex patterns in office recruitment overseas';<sup>106</sup> that 'foreign economies and cultural pressures' in East Africa limited female participation in the marketplace;<sup>107</sup> and that 'missionaries, Catholic as well as Protestant', 'encouraged a stay-at-home policy of the urban women on moral grounds'.<sup>108</sup>

A rich and recent historical literature has debated the extent to which such dynamics operated in Uganda as well.<sup>109</sup> One issue that stands out is that European missionaries actively discouraged mixed schools, and that girls' education was primarily aimed at training women to be good Christian wives.<sup>110</sup> This meant inculcating an attitude of moral purity and 'domestic virtues', which included

- <sup>101</sup> Ibid., p. 153.
- <sup>102</sup> Elkan, 'Employment', p. 15.
- <sup>103</sup> Ibid., p. 16.
- <sup>104</sup> Boserup, Woman's role, pp. 56-7.
- <sup>105</sup> Ibid., pp. 100–1.
- <sup>106</sup> Ibid., p. 132.
- <sup>107</sup> Ibid., p. 182.
- <sup>108</sup> Ibid., p. 219, also p. 60.

<sup>109</sup> On discussion on gendered colonial policies in Uganda, see Bantebya Kyomuhendo and McIntosh, *Women*; Musisi, 'Morality'; idem, 'Colonial and missionary education'; idem, 'Gender and the cultural construction'; idem, 'Politics of perception'; Doyle, *Before HIV*, pp. 105–38; Tripp, 'New look'. On the gendered impact of cash crops and missionaries in Eastern Uganda, see Summers, 'Force'.

<sup>110</sup> Bantebya Kyomuhendo and McIntosh, *Women*, pp. 52-6; Hanson, 'Indigenous adaptation', p. 161; Musisi, 'Colonial and missionary education'.

<sup>&</sup>lt;sup>99</sup> Ibid., p. 221.

<sup>&</sup>lt;sup>100</sup> Ibid., pp. 153, 205.

industrious activities such as household crafts. One particular petition to open an Anglican school for girls in 1911 summarizes the spirit of the time:

it is absolutely necessary for the welfare of the country that the girls should also be educated to a degree suitable for their conditions in life. To teach the girls to lead pure, clean lives, and become industrious. To shew [*sic*] them the best methods for cultivating their gardens, and keeping their homes clean, and to teach them what I may call 'Home Industries' e.g., mat making, basket making, sewing etc.<sup>111</sup>

The shares of tailors (29 per cent), weavers (21 per cent), mat makers (16 per cent), and basket makers (4 per cent) among the Anglican brides in the Namirembe dataset is very large.<sup>112</sup> We take the high prevalence of domestic craft 'occupations' in the Namirembe dataset as an indication that 'respectable' Ganda Anglicans had embraced the missionary model of 'domestic virtue'.<sup>113</sup>

While 'home industries' undoubtedly contributed to the welfare of the household, they probably did not bring in much cash income and contributed little to women's economic independence: the missionaries encouraged women to learn handicrafts 'mainly to improve their own homes', and 'craftware made by some women in a community could be made by others too, so there was little demand'.<sup>114</sup> The Baganda were fully aware of the low economic returns to women's education. When in 1937 a Ganda civil servant testified to a committee about African men refusing to pay school fees for girls, he pointed out that 'they think education the girls are receiving today is not as good as that of boys; and they are not willing to pay for anything for which they do not receive proportionate value'.<sup>115</sup> This was no incidental remark, as, in the same year, the Anglican Missionary Council itself acknowledged that 'in Uganda many Africans are feeling that the Church has failed in the adequate education of girls'.<sup>116</sup> One statistic sums up the meagre professional skill attainment among women in Uganda quite well: in 1959, only 295 African girls (compared to 2,819 boys) were enrolled in senior secondary schools, all Christian.<sup>117</sup>

Meier zu Selhausen and others have rightly pointed out that missionary schools did provide pathways for a limited number of women into a small number of occupations outside the domestic sphere.<sup>118</sup> The prevalence of 'teachers' (7 per cent) and 'nurses' (2 per cent) among the brides in the Namirembe dataset testifies to the existence of such possibilities. Some factions within the missionary movement—particularly female Anglicans<sup>119</sup>—encouraged and facilitated 'service careers' for women. However, the demand for such jobs was small, and—as stressed

<sup>111</sup> Quoted in Bantebya Kyomuhendo and McIntosh, Women, p. 54.

<sup>114</sup> Bantebya Kyomuhendo and McIntosh, Women, pp. 103-4.

<sup>115</sup> Quoted in Hanson, 'Indigenous adaptation', p. 162.

<sup>118</sup> Ibid., p. 58; Meier zu Selhausen, 'Missionaries'.

<sup>119</sup> Tripp, 'New look'.

<sup>&</sup>lt;sup>112</sup> These numbers contrast with the Mulago sample, in which only 5% of the women reported 'matmaker', 'seamstress', or 'tailor' as their occupations, and two out of three women reported having no (cash) earnings at all (compare tab. 4).

<sup>&</sup>lt;sup>113</sup> Our emphasis differs from that of Meier zu Selhausen, who argues that the predominance of domestic work among Christian women signifies 'the presence of deeper pre-colonial roots of female labour segregation in Uganda'; Meier zu Selhausen, 'Missionaries', p. 91.

<sup>&</sup>lt;sup>116</sup> Archives of the Church of Uganda, Uganda Christian University, Mukono (Uganda), file 'Statistics 1937', letter dated 16 June 1937.

<sup>&</sup>lt;sup>117</sup> Bantebya Kyomuhendo and McIntosh, *Women*, p. 83.

by Boserup—their potential to provide a 'stepping stone' to widespread female labour market participation was limited.

Still, women managed to increase their economic independence, slowly but progressively. They migrated to towns and participated in the informal urban economy as traders, beer brewers, and sex workers,<sup>120</sup> and they made their voices heard in the public sphere.<sup>121</sup> There is no empirical basis, however, for attributing this development to the modern values introduced by European colonial and missionary agents. Instead, the issue of gender inequality in education and the labour market exemplifies the complex interactions of African realities and European influences in the colonial era. Even though women exposed to missionary education may have attained literacy and accumulated schooling more quickly than their rural, unexposed counterparts, their education was primarily supposed to benefit them and their families in the domestic sphere. 'Traditional' Ganda gender norms restricted female opportunity, but it was their interaction with late Victorian Anglican values and changing economic realities that produced new forms of institutionalized gender inequality.<sup>122</sup>

### VI

The use of missionary parish registers to enhance our knowledge of African human capital formation, occupational opportunity, and gender inequality is both promising and problematic. In this study, we have demonstrated how selection biases in parish record data have provoked an overly optimistic account of European influences on educational and occupational opportunities and gender emancipation in an African colonial context. Using a birth cohort approach, we have projected post-colonial census data back in time to show how literacy rates, numeracy rates, and school attainment in colonial Kampala and Uganda increased, but at a pace more modest than the marriage registers of Namirembe Cathedral suggest.

We have also called into question a narrative that stresses the benign effects of European missionary and colonial influences. The arrival of a limited number of European missionaries set in motion the widespread diffusion of literacy and formal education in Uganda, and this may indeed be called a legacy. However, it is equally true that this development was as much an outcome of African *demand* as it was of European *supply*, and that without the deep involvement and commitment of Ganda converts and teachers, who profited politically and economically from their connection to British colonizers, European influence would have remained very limited. Moreover, we have demonstrated how education spread unevenly, along lines of gender, ethnicity, and region, with inequalities in educational opportunities for African men and women, we have shown that colonial policies were not geared towards opening up opportunities for a broad section of Uganda's African population, and that occupational change was limited. Finally, we have revisited the

<sup>&</sup>lt;sup>120</sup> Davis, 'Sexuality'; Obbo, African women; Southall and Gutkind, Townsmen.

<sup>&</sup>lt;sup>121</sup> Tripp and Ntiro, 'Women's activism'.

<sup>&</sup>lt;sup>122</sup> Bantebya Kyomuhendo and McIntosh, *Women*; Musisi, 'Morality'; idem, 'Colonial and missionary education'. For broader African and imperial perspectives, see Hansen, ed., *African encounters*; Levine, ed., *Gender and empire*.

The crux of our argument relates to the way in which colonial influences and legacies are to be conceptualized. First, to further our understanding of processes of transformation during the era of colonial rule in Africa, it is crucial for (empirical) studies to acknowledge and incorporate the initiative of Africans and the impact of their agency on development outcomes. Colonial states were not capable of defining, organizing, and financing their activities without the active involvement of certain sections of the indigenous populations, and their interaction determined subsequent paths of (uneven) development. Second, our study has reiterated that European influences were not just *diffusive*; they also tended to be *divisive* along lines of ethnicity, race, and gender. Evaluations of colonial legacies become much more constructive and balanced when the dynamics of inclusion and exclusion—which in the case of Uganda contributed to a violent and tragic post-colonial history<sup>123</sup>—are properly addressed.

Finally, we have argued that a dichotomy between 'African tradition' and 'European modernity' is of questionable value in understanding developments in the colonial era, whether they pertain to gender equality or any indicator of social, economic, or political development. Colonial and missionary agents brought different, ambiguous, and sometimes conflicting new ideas into their colonies, and these ideas interacted with those of African agents in similarly variegated fashion. It is exactly these complex dynamics between European influences and African realities that innovative research approaches and new historical datasets can help unravel.

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#### Footnote references

- A'Hearn, B., Baten, J., and Crayen, D., 'Quantifying quantitative literacy: age heaping and the history of human capital', *Journal of Economic History*, 69 (2009), pp. 783–808.
- Akyeampong, E. K., Bates, R. H., Nunn, N., and Robinson, J. A., Africa's development in historical perspective (Cambridge, 2014).
- Alesina, A., Brioschi, B., and La Ferrara, E., 'Violence against women: a cross-cultural analysis for Africa', National Bureau of Economic Research working paper (2016).
- Alesina, A., Giuliano, P., and Nunn, N., 'On the origins of gender roles: women and the plough', *Quarterly Journal* of *Economics*, 128 (2013), pp. 469–530.
- Ashraf, N., Bau, N., Nunn, N., and Voena, A., 'Bride price and female education', National Bureau of Economic Research working paper (2016).
- Austin, G., 'Reciprocal comparison and African history: tackling conceptual Eurocentrism in the study of Africa's economic past', African Studies Review, 50, 3 (2007), pp. 1–28.
- Austin, G. and Broadberry, S., 'Introduction: the renaissance of African economic history', *Economic History Review*, 67 (2014), pp. 893–906.
- Bantebya Kyomuhendo, B. G. and McIntosh, M. K., Women, work and domestic virtue in Uganda, 1900-2003 (Oxford, 2006).
- Baten, J. and Fourie, J., 'Numeracy of Africans, Asians, and Europeans during the early modern period: new evidence from Cape Colony court registers', *Economic History Review*, 68 (2015), pp. 632–56.

<sup>123</sup> See, among others, Kasozi, Social origins; Mamdani, Citizen and subject; Wrigley, 'Four steps'.

- Bertocchi, G. and Canova, F., 'Did colonization matter for growth? An empirical exploration into the historical causes of Africa's underdevelopment', *European Economic Review*, 46 (2002), pp. 1851–71.
- Bolt, J. and Bezemer, D., 'Understanding long-run African growth: colonial institutions or colonial education?', *Journal of Development Studies*, 45 (2009), pp. 24–54.
- Boserup, E., Woman's role in economic development (New York, 1970).
- Brierley, J. and Spear, T., 'Mutesa, the missionaries, and Christian conversion in Buganda', *International Journal of African Historical Studies*, 21 (1988), pp. 601–18.
- Brown, D. S., 'Democracy, colonization, and human capital in sub-Saharan Africa', *Studies in Comparative International Development*, 35 (2000), pp. 20-40.

Cappelli, G. and Baten, J., 'European trade, colonialism and human capital accumulation in Senegal, Gambia and western Mali, 1770–1900', *Journal of Economic History* (forthcoming).

- Cogneau, D. and Moradi, A., 'Borders that divide: education and religion in Ghana and Togo since colonial times', *Journal of Economic History*, 74 (2014), pp. 694–729.
- Curtin, P. D., The world and the west: the European challenge and the overseas response in the age of empire (Cambridge, 2002).
- Davis, P. J., 'On the sexuality of "town women" in Kampala', Africa Today, 47, 3 (2000), pp. 29-60.
- DesForges, A. L., Defeat is the only bad news: Rwanda under Musinga, 1896-1931 (Madison, Wis., 2011).
- Doyle, S. D., 'Parish baptism registers, vital registration and fixing identities in Uganda', in K. Breckenridge and S. Szreter, eds., *Registration and recognition: documenting the person in world history* (Oxford, 2012), pp. 277–96. Doyle, S. D., *Before HIV: sexuality, fertility and mortality in East Africa, 1900–1980* (Oxford, 2013).
- Dupraz, Y., 'British and French colonial education in Africa: a discontinuity analysis at the border between French and English speaking Cameroon', mimeo, Paris School of Economics (Paris, 2013).
- Ehrlich, C., 'Some social and economic implications of paternalism in Uganda', *Journal of African History*, 4 (1963), pp. 275–85.
- Elkan, W., 'The employment of women in Uganda', Inter-African Labour Institute Bulletin, 4, 4 (1957), pp. 8-23.
- Elkan, W., Migrants and proletarians: urban labour in the economic development of Uganda (1960).
- Feldmann, H., 'The long shadows of Spanish and French colonial education', Kyklos, 69 (2016), pp. 32-64.
- Fenske, J., 'The causal history of Africa: a response to Hopkins', *Economic History of Developing Regions*, 25 (2010), pp. 177–212.
- Fenske, J., 'African polygamy: past and present', Journal of Development Economics, 117 (2015), pp. 58-73.
- Fourie, J., 'The data revolution in African economic history', *Journal of Interdisciplinary History*, 47 (2016), pp. 193-212.
- Frankema, E., 'The origins of formal education in sub-Saharan Africa: was British rule more benign?', European Review of Economic History, 16 (2012), pp. 335–55.
- Frankema, E., 'Colonial education and post-colonial governance in the Congo and Indonesia', in E. Frankema and F. Buelens, eds., Colonial exploitation and economic development: the Belgian Congo and the Netherlands Indies compared (2013), pp. 153–77.
- Frankema, E. H. P. and van Waijenburg, M., 'Structural impediments to African growth? New evidence from British African real wages, 1880–1965', *Journal of Economic History*, 72 (2012), pp. 895–926.
- Gallego, F. A. and Woodberry, R., 'Christian missionaries and education in former African colonies: how competition mattered', *Journal of African Economies*, 19 (2010), pp. 294–329.
- Goldthorpe, J. E., An African elite: Makerere College students, 1922-1960 (1965).
- Grier, R. M., 'Colonial legacies and economic growth', Public Choice, 98 (1999), pp. 317-35.
- Gutkind, P. C. W., 'Town life in Buganda', Uganda Journal, 20 (1956), pp. 37-46.
- Gutkind, P. C. W., The royal capital of Buganda: a study of internal conflict and external ambiguity (The Hague, 1963).
- de Haas, M. A., 'Measuring rural welfare in colonial Africa: did Uganda's smallholders thrive?', *Economic History Review*, 70 (2017), pp. 605–31.
- Hansen, K. T., ed., African encounters with domesticity (New Brunswick, NJ, 1992).
- Hanson, H. E., 'Queen mothers and good government in Buganda: the loss of women's political power in nineteenth-century East Africa', in S. Geiger, J. M. Allman, and N. B. Musisi, eds., Women in African colonial histories (Bloomington, Ind., 2002), pp. 219–36.
- Hanson, H. E., Landed obligation: the practice of power in Buganda (Portsmouth, NH, 2003).
- Hanson, H. E., 'Indigenous adaptation: Uganda's village schools, ca.1880–1937', *Comparative Education Review*, 54 (2010), pp. 155–74.
- Henderson, M. and Whatley, W., 'Pacification and gender in colonial Africa: evidence from the ethnographic atlas', Munich Personal RePEc Archive paper no. 61203 (2015).
- Hopkins, A. G., 'The new economic history of Africa', Journal of African History, 50 (2009), pp. 155-77.
- Huillery, E., 'History matters: the long-term impact of colonial public investments in French West Africa', *American Economic Journal: Applied Economics*, 1 (2009), pp. 176–215.
- Jamal, V., 'Asians in Uganda, 1880–1972: inequality and expulsion', *Economic History Review*, 2nd ser., XXIX (1976), pp. 602–16.

- Jamal, V., 'Taxation and inequality in Uganda, 1900–1964', *Journal of Economic History*, 38 (1978), pp. 418–38. Jameson, J. D., ed., *Agriculture in Uganda* (1970).
- Jerven, M., Poor numbers: how we are misled by African development statistics and what to do about it (Ithaca, NY, 2013).
- Johnson, H. B., 'The location of Christian missions in Africa', Geographical Review, 57 (1967), pp. 168-202.
- Kasozi, A., Social origins of violence in Uganda, 1964-1985 (Montreal, 1994).
- Kodesh, N. C., 'Renovating tradition: the discourse of succession in colonial Buganda', International Journal of African Historical Studies, 34 (2001), pp. 511-41.
- Langlands, B. W. and Bazirake, S. B., 'The expansion of missionary activity in Uganda', in B. W. Langlands and G. Namirembe, eds., *Studies on the geography of religion in Uganda* (Kampala, 1967), pp. 41–65.
- Langlands, B. W. and Namirembe, G., 'The historical background to the distribution of religion in Buganda', in B. W. Langlands and G. Namirembe, eds., *Studies on the geography of religion in Uganda* (Kampala, 1967), pp. 3–20.
- Levine, P., ed., Gender and empire (Oxford, 2004).
- Lloyd, C. B., Kaufman, C. E., and Hewett, P., 'The spread of primary schooling in Sub-Saharan Africa: implications for fertility change', *Population and Development Review*, 26 (2000), pp. 483-515.
- Low, D. A., Fabrication of empire: the British and the Uganda kingdoms, 1890-1902 (Cambridge, 2009).
- Lury, D. A., 'Dayspring mishandled? The Uganda economy 1945–1960', in D. A. Low and A. Smith, eds., *History of East Africa*, vol. 3 (Oxford, 1976), pp. 212–50.
- Mamdani, M., Citizen and subject: contemporary Africa and the legacy of late colonialism (Princeton, NJ, 1996).
- Meier zu Selhausen, F., 'Missionaries and female empowerment in colonial Uganda: new evidence from Protestant marriage registers, 1880–1945', *Economic History of Developing Regions*, 29 (2014), pp. 74–112.
- Meier zu Selhausen, F., 'Women's empowerment in Uganda: colonial roots and contemporary efforts, 1894–2012' (unpub. Ph.D. thesis, Utrecht Univ., 2015).
- Meier zu Selhausen, F., van Leeuwen, M. H. D., and Weisdorf, J., 'Social mobility among Christian Africans: evidence from Anglican marriage registers in Uganda, 1895–2011', *Economic History Review* (forthcoming), DOI: 10.1111/ehr.12616.
- Meier zu Selhausen, F. and Weisdorf, J., 'A colonial legacy of African gender inequality? Evidence from Christian Kampala, 1895–2011', *Economic History Review*, 69 (2016), pp. 229–57.
- Minnesota Population Center, Integrated public use microdata series, international: version 6.4 [machine-readable database] (Univ. of Minnesota, 2015).
- Musisi, N. B. "Elite polygyny" and Buganda state formation', Signs, 16 (1991), pp. 757-86.
- Musisi, N. B., 'Colonial and missionary education: women and domesticity in Uganda, 1900–1945', in K. Tranberg Hansen, ed., *African encounters with domesticity* (New Brunswick, NJ, 1992), pp. 172–94.
- Musisi, N. B., 'Morality as identity: the missionary moral agenda in Buganda, 1877–1945', Journal of Religious History, 23 (1999), pp. 51–74.
- Musisi, N. B., 'Gender and the cultural construction of "bad women"', in D. L. Hodgson and S. A. McCurdy, eds., 'Wicked' women and the reconfiguration of gender in Africa (Portsmouth, NH, 2001), pp. 171–87.
- Musisi, N. B., 'The politics of perception or perception and politics? Colonial and missionary representation of Baganda women, 1900–1945', in J. Allman, S. Geiger, and N. B. Musisi, eds., *Women in African colonial histories* (Bloomington, Ind., 2002), pp. 95–115.
- Nunn, N., 'Religious conversion in colonial Africa', American Economic Review: Papers & Proceedings, 100 (2010), pp. 147-52.
- Obbo, C., African women: their struggle for economic independence (1980).
- Oliver, R. A., The missionary factor in East Africa (2nd edn. 1965).
- Omolo-Okalebo, F., Haas, T., Werner, I. B., and Sengendo, H., 'Planning of Kampala City 1903–1962: the planning ideas, values, and their physical expression', *Journal of Planning History*, 9 (2010), pp. 151–69.
- Perlman, M. L., 'Law and the status of women in Uganda: a systematic comparison between the Ganda and the Toro', *Tropical Man*, 2 (1969), pp. 60–106.
- Peterson, D. R., 'The politics of transcendence in colonial Uganda', Past & Present, 230 (2016), pp. 197-225.
- Pirouet, L., Black evangelists: the spread of Christianity in Uganda, 1891–1914 (1978).
- Reid, R. J., Political power in pre-colonial Buganda: economy, society and welfare in the nineteenth century (Oxford, 2002).
- Richards, A., Economic development and tribal change: a study of immigrant labour in Buganda (Cambridge, 1954).
- Roberts, A. D., 'The sub-imperialism of the Baganda', Journal of African History, 3 (1962), pp. 435-50.
- Simson, R., 'Patronage or meritocracy? Public sector employment in postcolonial Kenya, Tanzania and Uganda', African Economic History Network working paper 26 (2016).
- Southall, A. W. and Gutkind, P. C. W., Townsmen in the making: Kampala and its suburbs (Kampala, 1956).
- Ssekamwa, J. C., History and development of education in Uganda (Kampala, 1997).

Steinhart, E. I., Conflict and collaboration: the kingdoms of Western Uganda, 1890-1907 (Princeton, NJ, 1977).

Stephens, R., "Whether they promised each other some thing is difficult to work out": the complicated history of marriage in Uganda', *African Studies Review*, 59 (2016), pp. 127–53.

- Summers, C., 'Force and colonial development in Eastern Uganda', in J. M. Bahemuka and J. L. Brockington, eds., *East Africa in transition: communities, cultures and change* (Nairobi, 2002), pp. 181–207.
- Taylor, J. V., The growth of the church in Buganda (1958).
- Terreni Brown, S., 'Planning Kampala: histories of sanitary intervention and in/formal spaces', *Critical African Studies*, 6 (2014), pp. 71–90.
- Tripp, A. M., 'A new look at colonial women: British teachers and activists in Uganda, 1898–1962', *Canadian Journal of African Studies*, 38 (2004), pp. 123–56.
- Tripp, A. M. and Ntiro, S., 'Women's activism in colonial Uganda', in A. M. Tripp and J. J. Kwesiga, eds., The women's movement in Uganda: history, challenges and prospects (Kampala, 2002), pp. 23-39.
- Tuck, M. W., 'Women's experiences of enslavement and slavery in late nineteenth and early twentieth century Uganda', in H. Médard, and S. Doyle, eds., *Slavery in the Great Lakes region of East Africa* (Oxford, 2007), pp. 174–88.

Tucker, A., Eighteen years in Uganda & East Africa (Westport, Conn., 1970).

- Twaddle, M., 'Ganda receptivity to change', Journal of African History, 15 (1974), pp. 303-15.
- Twaddle, M., Kakungulu and the creation of Uganda, 1868-1928 (1993).
- Twaddle, M., 'Some implications of literacy in Uganda', History in Africa, 38 (2011), pp. 227-55.
- Vorlaufer, K., Physiognomie, Struktur und Funktion Gross-Kampalas: ein Beitrag zur Stadtgeographie Tropisch-Afrikas (Frankfurt am Main, 1967).
- Walters, S., 'Counting souls: towards an historical demography of Africa', *Demographic Research*, 34 (2016), pp. 63-108.
- Woodberry, R. D. and Shah, T. S., 'The pioneering Protestants', Journal of Democracy, 15, 2 (2004), pp. 47-61.
- Wrigley, C. C., 'Buganda: an outline economic history', Economic History Review, 2nd ser., X (1957), pp. 69-80.
- Wrigley, C. C., 'The Christian revolution in Buganda', *Comparative Studies in Society and History*, 2 (1959), pp. 33-48.
- Wrigley, C. C., 'Four steps towards disaster', in H. B. Hansen and M. Twaddle, eds., Uganda now: between decay and development (1988), pp. 27–35.

#### **Official publications**

- East African Statistical Department, Report on the Census of the Non-Native Population of Uganda Protectorate Taken on the Night of the 25th February, 1948 (Nairobi, 1953).
- East African Statistical Department-Uganda Unit, Enumeration of Employees, June 1959 (1960).
- Uganda Bureau of Statistics, 2002 Population and Housing Census (Kampala, 2006).
- Uganda Bureau of Statistics, The National Population and Housing Census 2014-Main Report (Kampala, 2016).
- Uganda, Census Office, Report on the 1969 Population Census (Kampala, 1971).
- Uganda, Statistics Department, 1991 Population and Housing Census (Kampala, 1995).
- Uganda, Statistics Division, Report on the 1980 Population Census (Kampala, 1982).

Uganda Protectorate, Advancement of Africans in Trade (Entebbe, 1956).

- Uganda Protectorate, Annual Report of the Labour Department for the Year 1959 (Entebbe, 1960).
- Uganda Protectorate, Census Returns 1911 (Entebbe, 1911).
- Uganda Protectorate, Census Returns 1921 (Entebbe, 1921).
- Uganda Protectorate, Census Returns 1931 (Entebbe, 1931).
- Uganda Protectorate, Uganda Census 1959: African Population (Nairobi, 1959).
- Uganda Protectorate, Uganda Census 1959: Non-African Population (Nairobi, 1960).

### Supporting information

Additional Supporting Information may be found in the online version of this article at the publisher's web-site:

S1. Share of cohort born 1914-43 with >0 and >4 years of schooling

- S2. Logit regression on literacy, birth cohorts 1903–72
- S3. Summary statistics
- S4. Correlation matrix