Ethnic Politics and Job Performance in the Kenyan Police 1957-1970*

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Abstract

Using a panel of 6,725 Kenyan police officers 1957-1970, we show how ethnic politics encroached and changed the daily behavior of the members of the police force as soon as after independence in 1963. We find a significant detoriation in discipline for officers of the ethnic groups that were represented in the ruling party KANU. We investigate the channels of this detoriation in discipline. We find little evidence for selection: The quality of new recruits did not detoriate, nor did well-performing police officers disproportionately leave the force at independence. We also find little evidence that the reorganisation of police divisions caused the divergent trends. We indeed find strong evidence that the behavior of existing officers of mostly lower ranks in the Police Force changed. (JEL:)

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1 Introduction

Protecting citizens and their property is one of the most fundamental public goods that the state provides. However, in spite of profound welfare implications, many developing countries lack an efficient law enforcing body. Limited state capacity could be one driver of poor police performance.¹ Another and possibly related driver could be political interference and partisan interests that undermine the effectiveness and discipline of the police. This channel should be particularly relevant when ethnic groups that vie for political power are represented in the police force. In spite of the importance of law enforcement, there is a dearth of work on police performance in low income countries, and its interaction with ethnic polics has received almost no attention. Relying on unique historical data from Kenya, our paper will assess how the rise of ethnic politics following independence affected the performance of its police force.

The Kenya Police Force (KPF) provides a particularly interesting context to study the interaction between ethnic politics and police performance. Kenya's Police consistently ranks among the top 5 most corrupt police forces in the world. Indeed Kenyans perceive the police as the most corrupt among all their state institutions (International, 2013).² At the same time, the police is perceived as highly inefficient in preventing and detecting crime (Anderson, 2002; Ruteere, 2011; Okia, 2011; Akech, 2005). The ruling party and powerful individuals interfere in the police, not neccessarily legitimately so. Kenyan politics has a strong ethnic component, drawing support from and polarising along ethnic lines. The failure and shortcomings of the police as well as the ethnic dimension have been most well-documented for the 2007/08 post-election ethnic clashes that followed after the disputed victory of Kibaki over Odinga that left 1,133 dead and about 350,000 people displaced (Waki, 2008, p. 351, 358).³ There were numerous instances of police brutality; 405 "senseless deaths" were allegedly inflicted by the police, with citizens "unlawfully shot from behind" (Waki, 2008, p. 417). Police officers did often not respond, even committed crimes themselves. Police investigations were unprofessional and absent. The clashes also revealed an ethnic

¹It is often argued that governments in any political system, whether democracy or autocracy, should have a strong interest in a disciplined police force. After all, if laws were not enforced, legislation and executive would have little reach. However, this ignores the trade-off between efficiency and political loyalty.

²In 2013, Kenya's Police was leading the corruption perception index with 95% of survey respondents stating that the Police 'is corrupt or extremely corrupt'. In 2006, respondents paid an average of 5 bribes to police officers in the last 12 months.

³Kibaki drew support among Kikuyu, Embu and Meru, whereas Odinga ran on an alliance of Luo, Luhya, Kalenjin, and coastal peoples.

dimension. In some areas, the police took sides depending on the ethnicity of perpetrators and victims (Okia, 2011).

In this paper we use new, absolutely unique data obtained from personnel records that allow us to track 6.725 Kenyan police officers over their entire career. For each officer, the files describe the offenses committed while serving, mostly cases of absenteeism, disobedience, and drunkenness. We study the period 1957-1970, because ethnic politics has featured prominently in Kenya ever since independence 1963. Thus, Kenyan independence marked the start of a new era in which certain ethnic groups began to dominate policy-making. The seven years before independence provides us with a comparison period in which ethnic politics was not necessarily absent, but favoured different groups with less profound implications. We find that the rise of ethnic politics after independence had an immediate effect on discipline in the police force. Police officers of ethnic groups that were members of the ruling ethnic political alliances started to perform significantly worse and commit more offenses. We then investigate the channels. We are able to rule out that ethnic favouritism had an effect through adverse selection of human capital: We find that neither the quality of policemen entering nor the quality of those exiting the force changed signficantly after independence. In contrast, we find evidence of behavioural changes in cohorts of predominantly non-senior policemen. Division and individual characteristics (other than ethnicity) cannot explain the changing behaviour by themselves, but we do find sustantial heterogeneity in the main effect. Among police officers of ethnicities that hold political power, the increase in misconduct is stronger for officers who signed their booklets (rather than providing a thumbprint) and for those officers stationed in their ethnic homelands. For certain cohorts, we find that the promotion opportunities of the politically dominant ethnicities suffer less from past misconduct. These results are broadly consistent with ruling ethnic groups facing lower costs of "shirking", in a context of patronage and ethnic favouritism inside and outside of the police.

Our paper contributes to two main strands of literatures. First, our work adds to research on ethnic politics and the economic costs of ethnic diversity. There is a large literature that links ethnic diversity to poor local public goods provision at the local level (Alesina, Baqir and Easterly, 1999) and poor economic growth at the macro level (Easterly and Levine, 1997; De Luca et al., N.d.). In Kenya, Miguel and Gugerty (2005) show that schooling facilities and access to water suffer from ethnic diversity. Burgess et al. (2015) show how Kenyan road building was concentrated in the

districts that share the same ethnicity as the president in power. We provide micro-evidence on how the rise of ethnic politics affected the functioning of the states bureaucracy and the performance of its personnel at the very micro, day-to-day level. In the context of Kenya's flower market, Hjort (2014) conducts a similar micro study of how ethnic tensions in an organization affect individual performance. This author finds that political violence increases the costs of ethnic diversity. In the very different organization set-up of Kenya's police administration, our results confirm that political tensions between ethnic groups affect the day-to-day performance of policemen. However, in our context, it is not ethnic diversity in itself, but the political dominance of certain ethnic groups that appears to drive poor performance. This result could reflect that both the nature of political shocks (violent ethnic conflict versus increased political power) and the nature of the organization (private firms producing in teams versus public service) matter for the relationship between ethnic politics and job performance.

Second, we contribute to the literature on the quality of public service provision in developing countries. Absenteeism in the health and education sector features prominently in this literature (Banerjee and Duflo, 2006; Duflo, Hanna and Ryan, 2012). The same is not true for the police, even though functioning law enforcing institutions are arguably at least as important for economic development (Auerbach, 2003). One notable exception is the work by Banerjee et al. (N.d.), who use an RCT to study the effects of improved work conditions and increased monitoring of policemen in Rajasthan.⁴ In parallel to work focusing on the performance of public sector "workers", a growing literature also considers the performance of higher level "bureaucrats". Among the determinants of bureaucratic effectiveness, existing work has studied the role of training and career background (Bertrand et al., 2015), personality traits (Callen et al., 2015), and turn-over (Iyer and Mani, 2012).⁵ Most bureaucrats change postings at high frequency and are working far from their homes, like the police in Kenya. Moreover, certain contributions to this literature use complete career data similar to the information we exploit for the Kenyan police. Still, the broad literature on public service provision has paid little attention to how ethnic tensions shape the behaviour of public servants. Our paper shows that the political context in which policemen operate can affect their behaviour

⁴Quantitative studies on police organization are rare, even for high-income countries. Exceptions are Crawford and Disney (2014) studying pension reforms on ill-retirement in the police in England and Wales, and Mas (2006) who finds that pay raises for the police below a reference point reduces job performance.

⁵Bo, Finan and Rossi (2013) study how advertised work conditions for bureaucratic posts affect the pool of applicants.

in their day-to-day jobs.

The paper proceeds as follows. In the next section we give a background of ethnic politics in general and in the police in particular. Section 3 describes the data and the measurement of police performance. Section 4 presents the empirical strategy. Section 5 describes the main results. Section 6 explores the channels of poor performance. Section 7 concludes.

2 Background

2.1 The Rise of Ethnic Politics

Kenya's population is made up of more than forty ethnic groups. Based on the 1962 population census, Kenya's main ethnic groups are the Kikuyu (18.8%), Luo (13.4%), Luhya (12.7%), Kalenjin (10.8%), and Kamba (10.5%). These ethnic groups predate British colonial rule but boundaries between them were often not well defined. Centralized political structures based on ethnic lines were largely absent. Authority was typically personal and at the village level, often a function of lineage, age, and wealth and not ethnic allegiance (Mamdani, 1996; Herbst, 2000; Lynch, 2011).

The politicization of ethnicity has its roots in settler capitalism and its uneven penetration of ethnic homelands. In the Central Province, among the Kikuyu ethnic group, the economic penetration resulted in proletarianization on a considerable scale and, at the same time, engendering a concentration of a landed and propertied class (Cowen and Kinyanjui, 1977). In fact, the Mau Mau uprising in the 1950s was largely a conflict between the landed and the landless. Nyanza province, on the other hand, remained largely unaffected by settler capitalism, leaving pre-colonial modes of production intact. Confronted with minimal agricultural potential, lack of infrastructure, and markets for wage goods, the Luo responded to the colonial economy as suppliers of labour, primarily as railway workers and eventually at the docks in Mombasa (Ajulu, 2002; Omolo, 2002). Thus, the Kenya's settler economy created stark economic differences between ethnic groups, which found their reflection in the later African political organizations.

While there were attempts to form pan-ethnic political organizations by Africans (e.g., the East African Association (EAA) in 1919 and the Kenyan African Union (KAU) in 1946), they were short lived and banned within a couple of years of their inception (Ajulu, 2002). The government followed a "divide-and-rule" policy, discouraging the formation of nation-wide African political activity, but

encouraged ethnic associations, which over time resulted in a proliferation of ethnic associations and contributed to the differentiation of ethnicities with distinct political interests (Omolo, 2002). This lead to eight politically relevant ethnic groups⁶ at the time of independence: the Gema (27%; composed of the Kikuyu, Embu, and Meru), the Kamatusa (15%; composed of the Kalenjin, Masai, Turkana, and Samburu), the Luhya (14%), the Luo (12%), the Kamba (11%), the Kisii (6%), the Mijikenda (5%), and the Somali (2%) (Posner, 2004; Cederman, Wimmer and Min, 2010).

The defeat of the Mau Mau in 1956 lead to the relaxation of political activity and the first direct (although severely limited franchise) African elections to the legislative council in 1957. African political parties were fully sanctioned at the Lancaster House Conference in January 1960. That following March, the Kenya African National Union (KANU) was formed under Jomo Kenyatta (a Kikuyu). It drew the bulk of its leadership, membership, and support from the Gema groups and Luo. Subsuming existing organizations, such as the Kenya Federation of Labour and the Kenya Independence Movement, KANU became an intensely anticolonial and nationalist party. Driven by the fear of Gema and Luo dominance, the Kenya African Democratic Union (KADU) was formed. KADU united a diverse set of local associations that represented minority ethnic groups (the Kamatusa groups) and was led by Daniel arap Moi (a Kalenjin) (Ndegwa, 1997, 605). These two parties competed in the first open nation-wide election in 1961 (KANU won 19 and KADU 11 of the 33 open seats), negotiated the constitutional structure of the new state in two subsequent conferences in 1962 and 1963, and contested the first post-independence elections in 1963. KANU won these "independence elections" overwhelmingly, taking 66 seats against KADU's 31 in the lower house and 19 seats against KADU's 16 in the Senate. By 1964 KADU and KANU had merged (Ndegwa, 1997, 606).

The merger of KANU and KADU shifted the balance of power within the ruling party in favour of the conservative elements, which led to the defection of the left-leaning Luo-lead wing, the Kenya People's Union (KPU) in 1966. They opposed the perceived growing conservatism and pro-western orientation of Kenyatta and the KANU leadership, which by then was composed exclusively of

⁶Following Cederman, Wimmer and Min (2010, 99) we "classify an ethnic group as politically relevant if at least one political organization claims to represent it in national politics or if its members are subjected to state-led political discrimination. Discrimination is defined as political exclusion directly targeted at an ethnic community – thus disregarding indirect discrimination based, for example, on educational disadvantage or discrimination in the labour or credit markets. The coding rules allow for the identification of countries or specific periods in which national politics was framed in nonethnic terms".

member of the Gema and Kamatusa groups (Ajulu, 2002, 260). In the subsequently held "Little General Election", KANU expanded its majority in both houses of parliament and following the anti-communist logic of the Cold War, banned the KPU in 1969 on national security grounds, ushering a more than 20 year period of single party rule.

2.2 Police Organization and Development

The Kenya Police is Kenya's main law enforcing body. It was also always an instrument of regime protection. During colonial times the police answered only to the Governor. At independence this unchecked concentration of power passed to the President (Auerbach, 2003). The police is therefore vulnerable to political influence, which may ultimitately affect the performance. Our study covers the last years of colonial rule 1957-1963 and the first years of independence 1963-1970. It excludes the Mau Mau uprising 1952-1956.

There was always an ethnic component in the composition of the Police Force (Throup, 1992). British officers believed to find men of soldierly qualities and whose loyality could be trusted among the Kamba and Kalenjin (the so-called 'martial races'). In contrast, very few Kikuyus entered the Police Force. Only after the end of Mau Mau and with independence approaching a deliberate attempt was made to bring the ethnic composition in line with that of the population (Clayton, 1989). In addition, a process of Africanization in the higher ranks was initiated. Asian and European senior officers were gradually replaced by newly-promoted African officers.

When president Jomo Kenyatta took control changes in the police followed the same pattern as in the most important ministries (Hornsby, 2012). Kenyatta relied on ethnic loyalities and alliances. He appointed Bernard Hinga, an ethnic Kikuyu, as Police Commissioner in 1964. By 1967 all branches and departments were led by an ethnic Kikuyu (except the Criminal Investigation Department which went to a Kikuyu in 1973). Kenyatta particularly relied on the General Service Unit (GSU). The GSU is a paramilitary branch of the police, well-equipped and well-trained, and highly political. It was employed against internal political threads, and specifically formed a counterweight to the army. Kenyatta shifted the GSU's officer corps and ethnic composition in

⁷In 1956, 22.6%, 21.6% and 3.2% of police officers were Kalenjin, Kamba and Kikuyus, whereas the 1962 Census population put their share at 10.8%, 10.5% and 18.8% respectively (Kenya Police Annual Reports; Census 1962).

⁸Kenya's second president, Daniel Arap Moi, an ethnic Kalenjin, acted similarly and moved Kalenjin into important positions (Hornsby, 2012).

favor of the Kikuyu, especially Luo officers had to go. These appointments were clearly politically motivated. Kenyatta used his presidential powers, bypassed the Police Service Commission Board, ignoring for example seniority as criterion for promotions (Frazer, 1994, as cited in N'Diaye, 2002).

The geographical organisation followed a fourfold hierarchy with the headquarter in Nairobi, then police divisions, stations and finally police posts that could be as small as a road block. The Kenya Police was not evenly or equally distributed. Reflecting longstanding colonial interests, the police was heavily concentrated in the urban commercial and European residential areas. They also served the 'White Highlands' where Europeans owned farms. In 1957 as a legacy of Mau Mau, the police was also well presented in Kikuyu and the bordering Kalenjin areas (Throup, 1992). With the end of violence, however, the number of police posts were reduced in those areas. The majority of African rural areas in contrast was underserved. After independence the policing network expanded, particularly to African areas. Our data indicates that Kikuyu and Kalenjin areas still received a disproportionate share of policing. Figure 1 shows police officers per population by police divisions in 1957, 1963 and 1970.

INSERT FIGURE 1 HERE

A related issue to where police divisions were located is who was stationed there. The colonial regime feared fraternisation and abuses, if police officers were policing their own ethnic kin or homeland. Police regulations in 1957 permitted up to 45% of personnel serving in their own home area (Clayton, 1989).¹¹ Being stationed close to home was certainly more attractive to police officers.

3 Data and Measurements

3.1 Collection and Sampling

Our primary data source are the Kenya Police Service Registers. These service records contain systematic and comprehensive information about a police officer over the full length of his ca-

⁹Policing areas did not necessarily overlap with administrative divisions.

¹⁰African reserves were originally policed by the 'Tribal Police' (it became the 'Administration Police' in 1958), which dealt with offenses against district council by-laws and customary law. The Kenya Police dealt with offenses against the Penal Code and general legislation (TNA CO1037/41).

¹¹Previous rules were stricter allowing policemen in their home area only after six years of service when they had demonstrated their loyality.

reer.¹² In particular, the service registers recorded personal details at recruitment (name, ethnicity, height, marital status, place of birth and residence), any training beyond the obligatory six months, names of divisions at which the policer officer served with dates of transfers, any misconducts/commendations and corresponding punishments/rewards, promotions/demotions and particulars of discharge (date, reason, overall conduct).

These personnel files are from non-active police officers and were sorted out for destruction in 2009. Awaiting appraisal by the Kenya National Archives the files were dumped in a depot at the outskirts of Nairobi.¹³ The files did not follow any obvious order and leaks in the roof destroyed a good share of the records. Our sampling strategy was to collect all readable registers, with the exception of police officers of Kamba ethnic origin recruited before 1950, that we deliberately undersampled as they were numerous in the Police Force before 1950.¹⁴ While our sampling procedure does not raise any obvious concerns that our sample may be non-random (apart from the undersampling of Kamba police officers pre-1950), we checked whether the ethnic composition in our sample follows the statistics officially reported in the Kenya Police Annual Reports. Figure 2 shows the comparison. The Kamba undersampling is visible. Apart from this, there is a very strong agreement between the two sources. We are therefore confident that our sample is largely representative of the Kenya Police Force.

INSERT FIGURE 2 HERE

Overall, this type of individual level data on police officers is absolutely unique. For our purposes, we brought the data into a police officer-service year panel structure. In total we have a sample of 6,725 police officers doing their service between 1957 and 1970.

3.2 Measurements

For each police officer, we know the dates of entry and exit, family background, ethnic group, education, place of birth, a full promotion record, assignment history, salary, acts of misconduct, punishment for misconduct, good behavior, training undertaken, rewards for good performance, and

¹²The Service Registers were introduced in the late 1930s. By the early 1940s all active policemen were covered.

¹³We thank Kenya Police HQ for granting us access to the records, and Kenya National Archives for support in retrieving them.

¹⁴It was easy to identify the year of recruitment as the colour of the service registers turned from blue to red in the 1950s.

the character assessment on discharge. Among these variables, the richest information is contained in the conduct and punishment variables. These cover an extremely wide range of misbehavior by policemen (e.g., from successful arrest and its corresponding reward, to falling asleep with its corresponding fine, to murder and its prison sentence), recorded at very high frequency. We observe 10,325 offenses in our sample. In the raw data, these offenses are described in great detail, one officer for example is reported to have stolen a "leopard's skin". Still, most acts of misconduct fall into a limited number of categories. The most common offenses are failure to attend duty and absent without leave (2,391 cases out of 10,325), disorderly behaviour (1,083 cases), drunkenness (904 cases), being idle (799 cases), being dirty (744 cases), disobedience (727 cases), falling asleep on duty (418 cases), and allowing prisoners to escape (331 cases). 60% of policemen commit at least one offense. The average number of offenses for an individual-year is 0.2, implying that an act of misconduct is committed every five years.

Table 1 presents additional summary statistics for other key variables. About 30% of officers serve in regions where their own ethnicity is the largest group (i.e., their ethnic homelands), and a similar percentages serve in police divisions in which their own ethnic group is dominant either at large or in the senior ranks. About 26% of policemen signed their booklet, while the remaining officers provided just a thumbprint. Formal education is limited, with an average of just 2 years. The rank of every policemen is summarized on a 1 to 4 scale, where 1 corresponds to constables and recruits; 2 to Corporals; 3 to Sargeants; and 4 to Inspectors and higher ranks. The average rank is close to 1. The police booklets also provide a character assessment at discharge, ranging from "Bad" to "Exemplary", which we code on a scale between 0 and 4, where the sample mean is around 2.34.

Acts of misconduct can be fined, and conditional on committing an offense the average fine in our sample is about 17 Kenyan Shilling. We also construct a residual fine measure, which is obtained from regressing the log of fine on the type of offense as well as year effects and a tenure control. By construction, the mean of this variable is close to zero, but the standard deviation is large, suggesting that fines are not mechanically linked to a given type of offense. This means that the residual fine measure captures discretion in the punishment of misbehaviour.

4 Empirical Strategy

Our paper studies how the increased political clout of the Gema & Kamatusa after indepence affected the behaviour of these groups in the police administration. We rely on a difference-indifference approach for our main results, comparing the Gema-Kamatusa groups (which were at the centre of Kenya's dominant post-independent party, the KANU), before and after independence. Figure 3 offers a graphical depiction of the identification strategy. The figure plots the average number of offenses by year for the Gema-Kamatusa versus all other ethnic groups. Both levels and trends of offense rates before 1961 are similar for the two broad groups. After Kenya's independence in 1963, however, the politically powerful ethnic groups are responsible for significantly higher offense rates. The effect is sizeable: Relative to the politically weak groups, the Gema & Kamatusa commit 40% more offenses in 1969.

Our baseline econometric specification is the simple difference-in-difference model illustrated by figure 3:

$$Offense_{i,d,t} = \alpha + \beta * Indep_t + \gamma * GemaKamatusa_i$$

$$+ \delta * GemaKamatusa_i * Indep_t + \epsilon_{i,d,t}$$

$$(1)$$

where the dependent variable is the number of offenses, for policeman i, serving in division d, and in year t. $Indep_t$ is a dummy variable indicating the post-independence period, and $GemaKamatusa_i$ is a dummy variable equal to one for policemen of the Gema and Kamtasa ethnic group. While Kenya's independence is clearly an important political shock, it was part of a larger transition period. To uncover the exact timing of effects in the transition process, we augment the baseline model to estimate the effect of the first elections in 1961.

In our sample, policemen enter and leave the sample on a rolling basis. Baseline specification 1 does not allow us to identify whether any differential offense rates of the Gema and Kamatusa after independence are driven by changing behaviour of existing policemen or by selective recruitment and dismissal of policemen. Evidence on behavioural change comes from the inclusion of individual fixed effects in our main specification. In this approach, we need to restrict our sample to individuals

who serve in the force before and after independence. Our results section describes the sensitivity of results to sample restriction choices in detail. In order to provide explicit evidence on selection, we will look at the cumulative offense profile of policemen leaving the force at certain points in time and at the behaviour of new recruits in their first year of service.

Causal identification of the difference-in-difference coefficient δ relies heavily on the common trend assumption: in the absence of independence, the Gema & Kamatusa would have followed the same trends as the other ethnic groups. Figure 3 provides the most direct evidence in support of this assumption, and this assumption is further corroborated through a placebo test in which we shift the timing of the treatment 4 years forward (table A.13). The analysis of pre-treatment trends, however, does not address the concern that the Gema & Kamatusa could have had certain characteristics that affected behaviour differentially after independence. This concern is particularly relevant, because socio-economic differences between ethnic groups existed before independence. Our treatment group might also have been assigned selectively to divisions that with higher offense rates. To address these questions, we augment the baseline specification to include control variables and their differential effect after independence:

$$Offense_{i,d,t} = \alpha + \beta * Indep_t + \gamma * GemaKamatusa_i$$

$$+\delta * GemaKamatusa_i * Indep_t + \kappa * X_{i,d,t} + \lambda * X_{i,d,t} * Indep_t$$

$$+\mu * GemaKamatusa_i * X_{i,d,t} * Indep_t + \epsilon_{i,d,t}$$
(2)

In addition to exploring the role of individual and division-level characteristics X as potential confounders, we can also examine them as sources of heterogeneity. Individual and division characteristics could also give rise to heterogeneous treatment effects and shed light on the channels linking changing offense rates to the political clout of ethnic groups. These effects are captured by the triple interaction the specification above.

A important limitation of our data is that the misconduct events are recorded by the police, and the political shocks we study might have changed the nature of reporting. The fact that the

¹⁵In Table A.12 of the appendix, we show that Gema & Kamatusa differed significantly from other ethnic groups in terms of key characteristics before independence.

service registers we use for our data set were not public in the time period we study makes strategic reporting less likely. To assess the scope for selective reporting further, we analyse the unexplained variation in fines as well. We argue that the absence of preferential fining supports the assumption that reporting is not preferential.

5 Main Result

Figure 3 shows the annual offense rate of Gema & Kamatusa and other police officers as well as the 95% confidence intervals. It nicely shows our main result.

INSERT FIGURE 3 HERE

Between the end of the Mau Mau uprising in 1957 and independence in 1963 the offense rate of Gema & Kamatusa police officers is indistinguishable from the offense rate of officers from other ethnic groups. Post-independence, however, the trends diverge significantly. While the offense rate of non-Gema & Kamatusa officers remains around 0.2 offenses per year and officer, that of the Gema & Kamatusa officers increases to 0.3 offenses per officer-year, or a 35% increase relative to the average offense rate of all other police officers.

In Table 2, we move beyond the graphical analysis and employ the regression framework specified above.

INSERT TABLE 2 HERE

Column 1 confirms the pattern shown in Figure 3. Officers from the main ethnic groups in power have a significantly higher post-independence offense rate than the officers of marginalised groups. On average they commit 0.075 offenses more per officer, which is roughly 1/7 of the standard deviation. Columns 2 and 3 sequentially introduce annual and ethnic fixed effects to account for overall time trends and time invariant differences between ethnic groups. Including those additional controls does not affect our main result: Gema & Kamatusa officers still commit on average 0.072 offenses per officer and year more than the police officers of ethnic groups excluded from power. Finally, note that in all models the coefficient estimate of the interaction term with the first elections (1961) is very close to and not significantly different from zero. Hence, in subsequent regressions we limit our analysis to the post-independence difference in offense rate.

Panel A in Appendix Table A.13 presents results from the same regression model, but including the additional annual cutpoint 1959 to assess the parallel trend assumption. The coefficient estimate of the interaction between 1959 and the Gema & Kamatusa officers is very close to and statistically indistinguishable from zero for all three specifications, providing evidence that the parallel trend assumption holds. Note also that the interaction with the date of the first election shows no significant difference between officers from groups in and out of power.

In Panel B of Appendix Table A.13 we separate the Gema and Kamatusa groups and estimate separate interactions for each of the two groups. Again, the appropriate interaction terms confirm that the parallel trend assumption holds for both the Gema and the Kamatusa groups and both the Gema and Kamatusa police officers have on average significantly higher offense rates than their fellow officers of other groups. The Gema officers have slightly higher average offense rates than the Kamatusa officers, but the difference (0.029) is not statistically significant (t=1.036), which is why in the subsequent regression models we combine them, looking at the officers of the main ethnic groups in power versus those officers of ethnic groups without access to political power.¹⁶

6 Mechanisms

So far we have established that Gema & Kamatusa police officers have on average a higher post-independence offense rate than other police officers. In this section we investigate the reason for this. First, we consider whether this difference is due to selection. In particular, we look at whether the quality of Gema & Kamatusa recruits changed post independence or whether a disproportionally large number of high quality Gema & Kamatusa officers left the force after independence. Next, we look at whether the difference in offense rates is due to behavioral changes. That is, we look at whether Gema & Kamatusa police officers serving during independence change their performance post-independence. Third, we discuss whether key individual characteristics other than ethnicity appear to drive or strengthen the observed increase in misbehaviour. Fourth, we consider the role of division characteristics. In the final subsection, we discuss how punishment and promotion change for the Gema & Kamatusa after independence.

¹⁶In the appendix, we also show that the main results hold separately for "absenteeism" and for all other types of offenses (Table A.19).

6.1 Selection Effects

Post-independence ethnic patronage in public sector jobs is a potential reason for the observed decrease in discipline among the Gema & Kamatusa officers. Table 3 presents the results of our investigation of selection effects. Columns 1 and 2 present the results on entry selection and Columns 3-5 on exit selection.

INSERT TABLE 3 HERE

Column 1 presents the results for all years and officers. We find no significant difference in the offense rate of Gema & Kamatusa officers enlisted before and after independence. However, since looking at all years conflates selection and behavioural effects, we limit ourselves in Column 2 to the first year of enlistment. Again, we find no significant difference in the first year offense rate between pre- and post-independence Gema & Kamatusa officers. This suggests that the difference in performance between Gema & Kamatusa officers and officers of other ethnic groups cannot be due to lower quality recruits.

Columns 3 and 4 consider the offense rate of police officers upon exit. Column 3 looks at all years and officers in our sample and Column 4 looks at only the last year of service to rule out any underlying behavioural changes. We find no evidence that after independence better performing Gema & Kamatusa officers left the force at higher rates. If anything, we find the opposite: those Gema & Kamatusa officers leaving the police after independence have significantly higher offense rates than those leaving from other ethnic groups. Column 5 looks at a different outcome: the exiting officers' final character assessment, which may range from "Bad" (0) to "Exemplary" (4). Consistent with the offense rate regressions in Column 4, we find that Gema & Kamatusa officers leaving the force post-independence had a worse overall conduct than their fellow exiting officers from other ethnic groups. Overall, these results suggest that the differential performance of officers from the ethnic groups in power is not due to an exit of disproportionally good performing Gema & Kamatusa officers post-independence, as we might have expected to an increase in more attractive outside employment options in the public sector. If anything, the results suggest that at least in the immediate period after independence the Kenyan police remained largely independent of patronage pressures and controlled selection and performance of its members ethnically unbiased and fairly well.

6.2 Behavioural Changes

Table 4 presents the results of a series of individual fixed-effects regressions assessing the extent to which our main finding can be explained by behavioral changes. Panel A looks at a fixed sample of officers over time and Panel B looks at biannual cohorts of recruits across a fixed number of years.

INSERT TABLE 4 HERE

Column 1 in Panel A looks at all officers and years, showing that even in an individual-fixed effects regression our main result from above persists. However, since this specification conflates selection and behavioural changes columns 2-5 look at a fixed set of officers over time. Focusing on the coefficient estimates of the interaction term, we see that the groups of Gema & Kamatusa officers joining the force before the end of the Mau Mau uprising (1957) or prior to 1959 and staying on until at least 1966 did not perform any differently from their colleagues of other ethnic groups. But their co-ethnics joining before the first election (1961) or before independence (1963) and serving until at least 1965, do show a significantly higher offense rate, similar in size to the overall difference in offense rate reported in Column 1. This suggest that a shift in behavior of the later cohorts of Gema & Kamatusa recruits post-independence is responsible for the observed ethnic differential in performance.

The results of the cohort analysis in Panel B support this conclusion. While the Gema & Kamatusa recruits joining the police force in 1956/57 and 1958/59 and serving at least until 1966 show no differential performance, their co-ethnics in later cohorts 1960/61 and 1962/63 and serving for at least seven years, show a significant behavioural shift. Together Panels A and B of Table 4 provide consistent and strong evidence that a behavioural change in the later cohort of recruits, 1960 onwards, is the driver of our main result. The following subsections investigate the reasons underlying this cohort specific behavioural change.¹⁷

¹⁷The panels in Table 4 are not perfectly balanced, as we consider the full career of officers between 1957 and 1970 to estimate the behavioural change. Balancing the panel requires additional sample restrictions on the years in the sample (in additional to the cohorts considered). In table A.14 of the appendix we construct such balanced panels, starting in the recruitment year of a particular cohort and ending in 1967. The results of this analysis are very close to those reported in Table 4.

6.3 Individual characteristics

While the fixed effect analysis of Table 4 accounts for a large set of confounding factors, the results could still capture the time-varying impact of individual characteristics that are correlated with ethnicity.

INSERT TABLES 7, 8, AND 9 HERE

Table 7 controls for the rank of policemen (on a 1-4 unit scale), as well as its interactions with a post-independence dummy, and the "treatment" interaction. In all specifications, the main difference-in-difference coefficient retains its magnitude. The triple interaction in column (6) confirms that increased misconduct of Gema and Kamatusa is strongest for the lower ranks. Our data records whether the recruit signed or thumbprinted his service register, which can be interpreted as a proxy for literacy. Allowing "literate" policemen to behave differently after independence does not change our findings (Table 8). However, among the Gema and Kamatusa, policemen who signed their booklet are responsible for a higher number of offenses. This finding is consistent with the idea that within politically powerful ethnic groups, those with better outside options were willing to shirk more. However, the results on formal education do not confirm this interpretation (Table 9): there is no significant triple interaction for the number of years of education. Hence, the ability to sign the booklet may reflect individual traits or skills that are more important than formal education.

6.4 Division characteristics

The changing behaviour observed in Table 4 could be the result of the assignment of Gema and Kamatusa to divisions with poorer discipline after independence. Table 5 introduces division-year fixed effects in addition to individual fixed effects. The coefficients remain close to those of Table 4, confirming that the effects are driven by changes in behaviour by the Gema and Kamatusa compared to other groups serving in the same division.¹⁹

INSERT TABLES 5 AND 6 HERE

¹⁸Signature literacy is widely used among historians (Rachal, 1987).

¹⁹In line with this general finding, division-level ethnic diversity and the General Service Unit (the most political police unit) are not driving the results (Tables A.18 and A.15).

Even if changes within divisions drive our results, the match between individuals and divisions could matter. In the colonial period, the extent to which ethnic groups could police their own homelands was limited. The effect of serving in the homelands is not clear-cut. On the one hand, being stationed in homelands might provide more leisure opportunities.²⁰ On the other hand, being stationed close to their families might make policemen more keen to keep their jobs. In Table 6, we confirm that our finding is not explained by a general homeland effect (columns 1 and 4), or a differential homeland effect after independence (2 and 5). However, we do find mild evidence that the main treatment effect is stronger for Gema & Kamatusa serving in the homelands (columns 2 and 6). This finding is consistent with the hypothesis that the KANU ethnicities were more likely to benefit from political patronage in their own homelands.²¹

6.5 Promotion and punishment

The increased misbehaviour of Gema and Kamatusa after independence could be the result of better outside options for these groups. This interpretation would be consistent with the literature on patronage and ethnic favouritism. Another possibility is that the way the police disciplines its rank and file changes suddenly after independence, so that the politically powerful ethnic groups are punished less for misconduct. Punishments can take different forms in this context. Offenders can be denied promotion opportunities, they can be fined, and they can be dismissed. We will test if these responses to offenses change for the KANU ethnicities after independence.

INSERT TABLES 10 AND 11 HERE

Table 10 reports promotions. In Table 10, we test how the average annual number of offenses in a policeman's career affect his promotion prospects. In general, higher offense rates make promotions less likely and dismissals more likely (as shown in the first row). Interestingly, in column (2), there is evidence of preferential treatment of the Gema & Kamatusa, in the sense that their average past

²⁰Focusing on a different performance outcome than ours, Lyall (N.d.) finds that co-ethnic security personnel are more effective counter-insurgents. Being based far from one's homeland could also hurt work satisfaction (similarly, Bo, Finan and Rossi (2013) estimate the compensation public servants require to work in remote locations).

²¹In the appendix, we confirm that a triple interaction for Gema and Kamatusa, post-independence, and belonging the the dominant ethnicity of one's division is also significant. This measure of ethnic dominance is very strongly (positively) correlated with the homeland indicator. For an alternative measure of ethnic dominance, based on whether one's ethnicity is dominant among the senior officers in the division, we do not find a significant heterogeneity. This suggests that the main mechanism is not the prefential treament of Gema and Kamatusa by co-ethnic senior officers.

misconduct harms promotion chances less than for other ethnicities. The effect is large, but only significant in the subsample with recruits entering until 1963.

Table 11 analyses the fines in a sample of individual-years with at least one offense. The odd columns focus on total fine amounts, while the even columns focus on the variation in fines that is not explained by the type of offense, rank, or tenure of the offender. In both cases, there is no evidence of preferential treatment. If anything, the fines are slightly larger for the Gema and Kamatusa after independence compared to other groups.

7 Conclusions

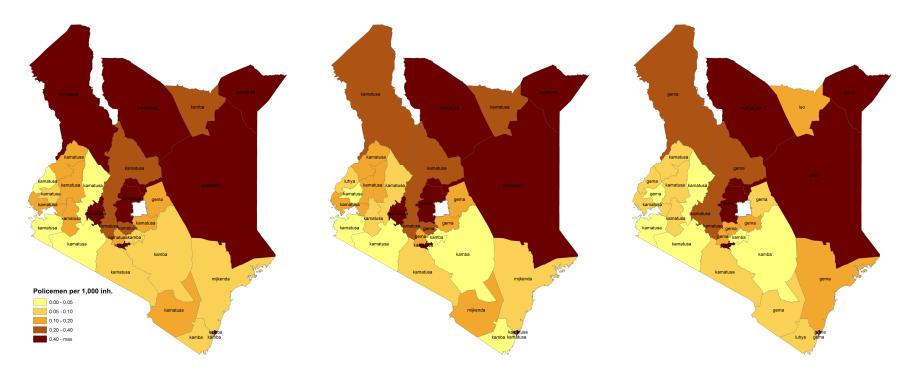
After Kenya's independence, two ethnic alliances constitute the heart of the ruling KANU party: the Gema and the Kamatusa. While ethnic favouritism and political patronage have been documented in existing work on Kenya, our paper can leverage unique data on the day-to-day functioning of individual public servants in one of the most important public administrations: the police. We find that the Gema and Kamatusa are more likely to misbehave after independence, as measured by acts of misconduct that were recorded in their official police booklets.

Why do the Gema and Kamatusa officers commit more offenses after independence? Based on our analysis, the police did not start recruiting "bad" policemen from these groups after independence, nor fire its good Gema and Kamatusa policemen. Instead, we observe the same individuals committing more offensens after independence. Then, why did the same policemen change behaviour? While we are naturally constrained by the historical data used in our study, we could find some elements pointing toward lower costs of misbehaviour for the KANU ethnicities through channels within and outside of the police. Within the police, we observe a lower sensitivity of promotions to past offense rates for the Gema and Kamatusa. We also find that Gema and Kamatusa who could sign their booklet are more likely to misbehave after independence. This result is also consistent with the idea that policemen receive a higher expected net pay-off from shirking when their job market opportunities are better. Finally, we found that the politically power ethnicities were more likely to misbehave after independence if they ware stationed in their homelands. This finding could also be interpreted as patronage opportunities in the homelands lowering the cost of being dismissed.

The micro-evidence of this paper suggests that ethnic politics shape public service provision, not just through the direct allocation of public goods, but also through the behaviour of ethnic groups within the state's bureaucracy. The deep-rooted nature of the changes that took place in the aftermath of Kenya's independence could explain why ethnic tensions have continued to dominate politics in Kenya until today.

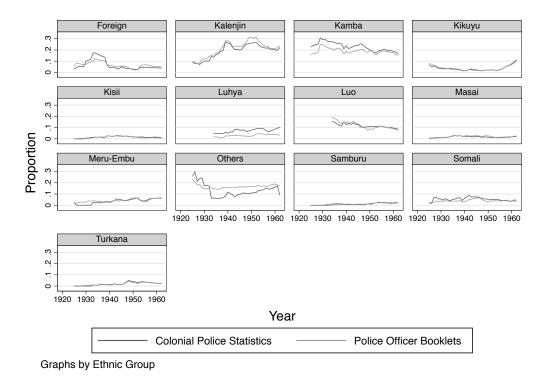
8 Figures

Figure 1: Provision of Police Services and Ethnic Dominance Over Time (1957, 1963, 1970)



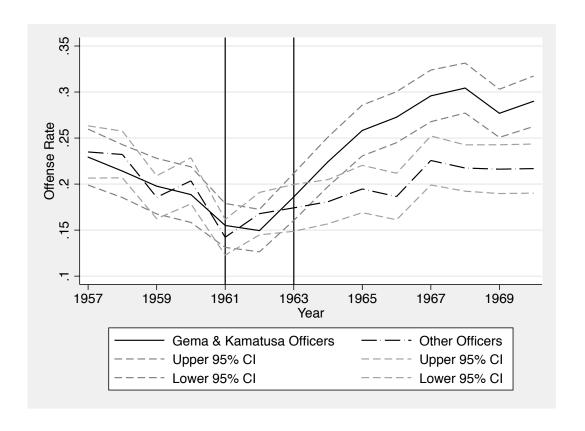
Notes: These maps show the number of policemen per 1,000 inhabitants by police division (as of 1962 Census). Labels indicate the ethnic group that is dominant in the police division. Mount Kenya (white area) had a population of nil in 1962.

Figure 2: Representativeness of Police Sample by Ethnicity Over Time



23

Figure 3: Offense Rate of Gema & Kamatusa and Other Police Officers by Year



Tables

Table 1: Summary Statistics

	Obs	Mean	Stdev	min	max
	(1)	(2)	(3)	(4)	(5)
Number of offenses	47699	0.24	0.55	0	11
Character at discharge (0-4)	36835	2.33	0.99	0	4
Tenure	47699	7.30	5.91	0	45
Rank index (1-4)	47699	1.17	0.90	1	4
Homeland ethnicity	38219	0.27	0.44	0	1
Dominant ethnicity in division	38219	0.34	0.47	0	1
Dominant ethnicity in higher ranks	38219	0.33	0.47	0	1
Ethnic diversity (ELF)	38219	0.81	0.05	0.59	0.93
Literacy (signed booklet)	47699	0.27	0.44	0	1
Years of education	47699	2.37	3.64	0	12
Fine (Ksh)	7910	15.60	17.50	0	200
Fine residual	7910	-0.02	0.67	-4.14	3.35241

Notes: Observations at the individual-year level for 6,725 officers who served between 1957 and 1970. Homeland is a dummy indicating whether a person serves in a division that is stationed in his ethnic homeland. The rank index is 1 for a constable and 4 for an Inspector or above. Homeland indicates whether a person's division is located in his ethnic homeland. Dominant ethnicity in the division indicates whether a person's ethnicity is the largest group in his division. A similar measure is constructed for whether the higher ranks are dominated by an individual's division. Literacy is approximated by whether the individual has signed his personnel booklet or given a thumbprint. "Fine residual" is the fine conditional on committing an offense, the fine residual is the component of the logarithmic fines unexplained by the type of offence, year, tenure, and rank.

Table 2: Main Result

	(1)	(2)	(3)
Outcome:	# of O	ffenses (mean=0.216; se	=0.551)
Gema & Kamatusa	-0.005	-0.003	-0.018
	(0.010)	(0.010)	(0.016)
First Election (1962-63)	-0.030***		
	(0.011)		
Gema & Kamatusa \times	0.001	-0.001	-0.001
First Election	(0.015)	(0.015)	(0.015)
Independence (1964-70)	0.005		
	(0.008)		
Gema & Kamatusa ×	0.075***	0.072***	0.072***
Independence	(0.013)	(0.013)	(0.013)
Year Fixed Effects	No	Yes	Yes
Ethnic Fixed Effects	No	No	Yes
R-Squared	0.005	0.007	0.007
Observations	46821	46821	46821
Clusters	6645	6645	6645

Notes: Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table 3: Selection Effects

	(1)	(2)	(3)	(4)	(5)
	Entry S	election		Exit Selection	
Outcome:	# Offenses	# Offenses	# Offenses	# Offenses	Conduct
	All Years	First Year	All Years	Last Year	Last Year
Gema & Kamatusa	0.033***	-0.006	0.027***	-0.055	-0.022
	(0.007)	(0.010)	(0.007)	(0.047)	(0.051)
Enlisted post-Independence	0.068***				
	(0.014)				
Gema & Kamatusa \times	-0.007	-0.011			
Enlisted post-Independence	(0.017)	(0.016)			
Exit post-Independence			0.109***		
			(0.011)		
Gema & Kamatusa \times			0.029*	0.217***	-0.232***
Exit post-Independence			(0.016)	(0.072)	(0.078)
R-Squared	0.007	0.012	0.013	0.019	0.021
Observations	46821	3787	46821	2879	2779
Clusters	6645	3787	6645	2879	2779

Notes: All regressions include year fixed effects. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table 4: Behavioral Effect

	(1)	(2)	(3)	(4)	(5)			
		Outcome: # Offenses						
Panel A: Overlapping	Panel A: Overlapping Cohort Samples of Police Officers							
	All Cohorts	Entry ≤ 1957	Entry ≤ 1959	Entry ≤ 1961	Entry ≤ 1963			
		Exit > 1965	Exit > 1965	Exit > 1965	Exit > 1965			
Independence (1964-70)	0.143***	0.011	0.014	0.017	0.012			
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)			
Gema & Kamatusa \times	0.074***	0.017	0.024	0.046***	0.064***			
Independence	(0.014)	(0.017)	(0.015)	(0.014)	(0.013)			
R-Squared	0.260	0.139	0.141	0.145	0.157			
Observations	46821	19875	23793	26704	29229			
Clusters	6645	1501	1824	2115	2422			
Panel B: Split Cohort	Samples of Po	lice Officers						
	Entry ≤ 1955	Entry	Entry	Entry	Entry			
		[1956, 1957]	[1958, 1959]	[1960, 1961]	[1962, 1963]			
	Exit > 1965	Exit > 1965	Exit > 1965	Exit > 1967	Exit > 1969			
Independence (1964-70)	-0.007	0.091**	0.184***	0.213***	0.079			
	(0.018)	(0.042)	(0.044)	(0.057)	(0.063)			
Gema & Kamatusa \times	0.010	0.019	0.028	0.114**	0.170***			
Independence	(0.018)	(0.039)	(0.037)	(0.045)	(0.057)			
R-Squared	0.134	0.155	0.160	0.163	0.208			
Observations	15833	4042	3918	2755	2235			
Clusters	1198	303	323	269	259			

Notes: All regressions include individual fixed effects. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table 5: Division FE

	(1)	(2)	(3)	(4)
	Entered ≤ 1957	Entered ≤ 1959	Entered ≤ 1961	Entered ≤ 1963
		Exit >	> 1965	
Gema & Kamatusa ×	0.020	0.022	0.039**	0.057***
Independence	(0.021)	(0.019)	(0.018)	(0.017)
R-Squared	0.168	0.164	0.170	0.180
Observations	15632	18936	21202	23322
Clusters	1359	1669	1917	2203

Notes: All regressions include individual and year fixed effects and division-year fixed effects. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table 6: Homelands

	(1)	(2)	(3)	(4)	(5)	(6)
	En	$tered \leq 19$	959	Er	$tered \le 196$	3
			Exit	> 1965		
Gema & Kamatusa ×	0.036*	0.026	0.015	0.068***	0.054***	0.040**
Independence	(0.018)	(0.019)	(0.022)	(0.016)	(0.017)	(0.020)
Homeland	-0.019	-0.030	0.001	-0.012	-0.030*	0.005
	(0.018)	(0.020)	(0.031)	(0.016)	(0.018)	(0.030)
Homeland ×		0.026	-0.013		0.037*	-0.018
Independence		(0.023)	(0.030)		(0.020)	(0.030)
Homeland ×			-0.046			-0.047
Gema & Kamatusa \times			(0.040)			(0.037)
Gema & Kamatusa ×			0.058			0.074*
${\rm Homeland} \times {\rm Independence}$			(0.044)			(0.039)
R-Squared	0.146	0.146	0.146	0.165	0.165	0.165
Observations	18936	18936	18936	23322	23322	23322
Clusters	1669	1669	1669	2203	2203	2203

Notes: All regressions include individual and year fixed effects. Homeland is a dummy indicating whether a person serves in a division that is stationed in his ethnic homeland. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table 7: Rank

	(1)	(2)	(3)	(4)	(5)	(6)
	En	$tered \le 195$	59	E:	$ntered \le 19$	63
				> 1965		
Gema & Kamatusa ×	0.022	0.019	0.062**	0.061***	0.056***	0.133***
Independence	(0.015)	(0.015)	(0.032)	(0.014)	(0.014)	(0.029)
Rank	-0.024**	0.005	-0.012	-0.020	0.018	0.009
	(0.012)	(0.013)	(0.015)	(0.013)	(0.014)	(0.020)
Rank ×	-0.033***	-0.022**		-0.043***	-0.022**	
Independence		(0.008)	(0.009)		(0.008)	(0.009)
Gema & Kamatusa \times			0.052*			0.040
Rank			(0.030)			(0.029)
Gema & Kamatusa ×			-0.038**			-0.065***
${\rm Rank} \times {\rm Independence}$			(0.018)			(0.017)
R-Squared	0.143	0.143	0.143	0.160	0.161	0.161
Observations	23360	23360	23360	28621	28621	28621
Clusters	1806	1806	1806	2395	2395	2395

Notes: All regressions include individual and year fixed effects. Estimates significant at the 0.05 $(0.10,\,0.01)$ level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table 8: Signed booklet (versus thumbprint)

	(1)	(2)	(3)	(4)	(5)	(6)
	En	$tered \leq 19$. ,		$ntered \leq 19$	
			Exi	t > 1965		
Gema & Kamatusa ×	0.024	0.024	0.013	0.064***	0.062***	0.047***
Independence	(0.015)	(0.015)	(0.017)	(0.013)	(0.013)	(0.015)
Literacy ×		0.005	-0.018		0.024	-0.011
Independence		(0.018)	(0.021)		(0.015)	(0.020)
Gema & Kamatusa \times			0.063			0.071**
${\rm Literacy}\times{\rm Independence}$			(0.039)			(0.031)
R-Squared	0.141	0.141	0.141	0.157	0.157	0.158
Observations	23793	23793	23793	29229	29229	29229
Clusters	1824	1824	1824	2422	2422	2422

Notes: All regressions include individual and year fixed effects. Literacy is approximated by whether the individual has signed his booklet or provided a thumbprint. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table 9: Years of Education

	(1)	(2)	(3)	(4)	(5)	(6)
	l E	$Entered \leq 19$	959	E	$ntered \le 19$	63
			Exit	> 1965		
Gema & Kamatusa ×	0.024	0.019	0.019	0.064***	0.049***	0.043***
Education (year)	(0.015)	(0.015)	(0.017)	(0.013)	(0.014)	(0.016)
Education \times		0.066***	0.067***		0.086***	0.070***
Independence		(0.020)	(0.026)		(0.016)	(0.023)
Gema & Kamatusa \times			-0.002			0.027
Education \times Independence			(0.040)			(0.032)
R-Squared	0.141	0.142	0.142	0.157	0.159	0.159
Observations	23793	23793	23793	29229	29229	29229
Clusters	1824	1824	1824	2422	2422	2422

Notes: All regressions include individual and year fixed effects. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table 10: Promotion conditional on conduct

	(1)	(2)	(3)
	Entered ≤ 1959	Entered ≤ 1963	Dismissed
		Exit > 1965	
Cumulative offenses	-0.167***	-0.197***	0.311***
	(0.041)	(0.039)	(0.034)
Gema & Kamatusa ×	0.089	0.123**	-0.050
Cumulative offenses	(0.055)	(0.049)	(0.045)
Cumulative offenses \times	-0.344***	-0.251***	-0.055
Independence	(0.067)	(0.065)	(0.037)
Gema & Kamatusa ×	0.022	0.052***	0.014
Independence	(0.025)	(0.019)	(0.013)
Gema & Kamatusa	0.035	0.187**	0.050
Cumulative offenses \times Independence	(0.108)	(0.074)	(0.049)
R-Squared	0.206	0.195	0.081
Observations	23360	28621	46821
Clusters	1806	2395	6645

Notes: All regressions include year fixed effects effects. The outcome in columns (1) and (2) is a rank index taking values between 1 and 4. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table 11: Punishment conditional on offense

	(1)	(2)	(3)	(4)		
	Log(Fine)	Fine Residual	Log(Fine)	Fine Residual		
	Enter	$ed \le 1959$	Enter	$red \le 1963$		
		Exit >	> 1965	· 1965		
Gema & Kamatusa	0.005	-0.005	0.007	0.002		
	(0.055)	(0.035)	(0.052)	(0.033)		
Gema & Kamatusa \times	0.073	0.032	0.040	0.024		
Independence	(0.070)	(0.050)	(0.062)	(0.043)		
R-Squared	0.019	0.007	0.015	0.005		
Observations	2211	3036	3025	3995		
Clusters	1089	1286	1498	1725		

Notes: All regressions are limited to individual-year observations with at least one offense. "Fine residual" is the fine conditional on committing an offense, the fine residual is the component of the logarithmic fines unexplained by the type of offence, year, tenure, and rank. They include year fixed effects. Estimates significant at the 0.05~(0.10,~0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

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A Appendix Tables

Table A.12: Pre-independence differences between Gema & Kamatusa and other groups

	(1)	(2)	(3)
	Gema & Kamatusa	Other groups	T-stat (2)-(1)
Offenses	0.19	0.24	3.5
Character at discharge (0-4)	2.24	2.35	3.4
Maximum tenure	5.85	8.43	16.23
Maximum rank index (1-4)	1.13	1.25	7.29
Literacy (signed booklet)	0.23	0.18	3.74
Years of education	2.23	0.93	-13.63
Observations	2268	2028	

Notes: Observations for officers who served between 1957 and 1963. Literacy is approximated by whether the individual has signed his personnel booklet or given a thumbprint. The observations reported to not reflect missing values for individual variables.

Table A.13: Main Result with Placebo Control and Split-up of Treatment Groups

Outcome:	(1)	(2) ffenses (mean=0.216; se:	(3)
Panel A: Gema & Kamatus			=0.551)
Gema & Kamatusa	-0.004	-0.004	-0.020
	(0.013)	(0.013)	(0.018)
Placebo (1959-61)	-0.044***	(0.013)	,
1 140000 (1000 01)	(0.011)		
Gema & Kamatusa ×	0.002	0.003	0.003
Placebo	(0.018)	(0.018)	(0.018)
First Election (1962-63)	-0.047***	(0.010)	,
That Election (1802 00)	(0.012)		
Gema & Kamatusa ×	0.001	-0.001	-0.001
First Election	(0.018)	(0.018)	(0.018)
Independence (1964-70)	-0.012	(0.010)	,
independence (1904-70)	(0.012)		
Gema & Kamatusa ×	0.075***	0.074***	0.074***
Independence	(0.015)	(0.015)	(0.015)
Year Fixed Effects	No	Yes	Yes
Ethnic Fixed Effects	No No	yes No	Yes Yes
R-Squared	0.005	0.007	0.007
Observations	46821	46821	46821
Clusters	6645	6645	6645
Panel B: Gema & Kamatus	a Groups Separate	ly	
Gema	-0.027	-0.025	-0.040*
	(0.019)	(0.019)	(0.023)
Placebo (1959-61)	-0.044***		
	(0.011)		
Gema × Placebo	0.044	0.045	0.045
	(0.028)	(0.028)	(0.028)
First Election (1962-63)	-0.047***		
	(0.012)		
Gema × First Election	0.030	0.028	0.028
	(0.027)	(0.027)	(0.027)
Independent (1964-70)	-0.012		
	(0.010)		
Gema × Independence	0.099***	0.095***	0.095***
	(0.022)	(0.022)	(0.022)
Kamatusa	0.004	0.004	-0.012
	(0.014)	(0.014)	(0.018)
Kamatusa × Placebo	-0.016	-0.014	-0.014
	(0.019)	(0.019)	(0.019)
Kamatusa × First Election	-0.011	-0.011	-0.010
	(0.020)	(0.020)	(0.020)
Kamatusa × Independence	0.065***	0.066***	0.066***
	(0.017)	(0.017)	(0.017)
Year Fixed Effects	No	Yes	Yes
Ethnic Fixed Effects	No	No	Yes
R-Squared	0.005	0.007	0.007
Observations	46821	46821	46821
Clusters	6645	6645	6645

Notes: Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level. 39

Table A.14: Balanced panel results for different cohorts

	(1)	(2)	(3)	(4)	(5)			
	Outcome: Offenses							
Panel A: Balanced panel for overlapping cohort samples								
	All Cohorts	Entry ≤ 1957	Entry ≤ 1959	Entry ≤ 1961	Entry ≤ 1963			
		Exit > 1967	Exit > 1967	Exit > 1967	Exit > 1967			
Independence (1964-70)	0.143***	0.035*	0.056***	0.096***	0.081***			
	(0.017)	(0.019)	(0.018)	(0.017)	(0.019)			
Gema & Kamatusa \times	0.074***	0.007	0.011	0.033*	0.054**			
Independence	(0.014)	(0.019)	(0.018)	(0.018)	(0.023)			
First sample year	1957	1957	1959	1961	1963			
Last sample year	1970	1967	1967	1967	1967			
Observations	46821	13948	14103	12852	10600			
Clusters	6645	1268	1567	1836	2120			
Panel B: Balanced par	nel for split col	nort samples						
	Entry ≤ 1955	Entry	Entry	Entry	Entry			
		[1956, 1957]	[1958, 1959]	[1960, 1961]	[1962, 1963]			
	Exit > 1967							
Independence (1964-70)	0.010	0.139***	0.164***	0.189***	0.084			
	(0.021)	(0.043)	(0.049)	(0.061)	(0.081)			
Gema & Kamatusa \times	-0.005	0.030	0.019	0.103**	0.195**			
Independence	(0.021)	(0.045)	(0.040)	(0.052)	(0.080)			
First sample year	1957	1957	1959	1961	1963			
Last sample year	1970	1967	1967	1967	1967			
Observations	11077	2871	2691	1883	1420			
Clusters	1007	261	299	269	284			

Notes: All regressions include individual and year fixed effects. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table A.15: Ethnic diversity

	(1)	(2)	(3)	(4)	(5)	(6)
	Entered ≤ 1959			Entered ≤ 1963		
			Exit	> 1965		
Gema & Kamatusa ×	0.035*	0.029	0.033*	0.068***	0.063***	0.065***
Independence	(0.018)	(0.019)	(0.019)	(0.016)	(0.016)	(0.017)
ELF \times	-0.027 (0.110)	0.162 (0.124)	0.112 (0.151)	0.000	0.184 (0.112)	0.118 (0.148)
$\begin{array}{l} {\rm ELF} \times \\ {\rm Independence} \end{array}$		-0.393** (0.169)	-0.474** (0.206)		-0.317** (0.151)	-0.371* (0.200)
Gema & Kamatusa \times ELF			0.114 (0.249)			0.131 (0.217)
Gema & Kamatusa \times ELF \times Independence			0.192 (0.349)			0.099 (0.298)
R-Squared	0.146	0.146	0.146	0.165	0.165	0.165
Observations	18936	18936	18936	23322	23322	23322
Clusters	1669	1669	1669	2203	2203	2203

Notes: All regressions include individual and year fixed effects. Ethnic diversity is measured as fractionalisation at the division level. Estimates significant at the $0.05~(0.10,\,0.01)$ level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table A.16: Ethnic dominance in division

	(1)	(2)	(3)	(4)	(5)	(6)
	En	$tered \leq 1$	959	Entered ≤ 1963		
			Exi	t > 1965		
Gema & Kamatusa \times	0.035*	0.042*	0.019	0.068***	0.069***	0.048**
Independence	(0.018)	(0.023)	(0.027)	(0.016)	(0.020)	(0.023)
Dominant	0.002	0.007	0.039*	0.000	0.002	0.041*
	(0.013)	(0.016)	(0.023)	(0.012)	(0.015)	(0.023)
Dominant ×		-0.014	-0.068*		-0.002	-0.061*
Independence		(0.025)	(0.035)		(0.022)	(0.034)
Gema & Kamatusa ×			-0.055*			-0.062**
Dominant			(0.033)			(0.030)
Gema & Kamatusa ×			0.085*			0.086*
${\bf Dominant} \times {\bf Independence}$			(0.049)			(0.044)
R-Squared	0.146	0.146	0.146	0.165	0.165	0.165
Observations	18936	18936	18936	23322	23322	23322
Clusters	1669	1669	1669	2203	2203	2203

Notes: All regressions include individual and year fixed effects. Dominant indicates whether a person's ethnicity is the largest group in his division. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). "Dominant" indicates Standard errors are clustered at the individual level.

Table A.17: Ethnic dominance in higher ranks

	(1)	(2)	(3)	(4)	(5)	(6)
	Er	$atered \leq 19$	959	Entered ≤ 1963		
			Exit	> 1965		
Gema & Kamatusa ×	0.033*	0.035*	0.035	0.065***	0.068***	0.062***
Independence	(0.018)	(0.019)	(0.023)	(0.016)	(0.016)	(0.020)
Dominant senior	0.014	0.025**	0.038**	0.011	0.026**	0.040**
	(0.010)	(0.012)	(0.016)	(0.009)	(0.012)	(0.016)
Dominant senior \times		-0.026	-0.025		-0.029*	-0.035
Independence		(0.018)	(0.023)		(0.017)	(0.022)
Gema & Kamatusa ×			-0.030			-0.031
Dominant senior			(0.025)			(0.024)
Gema & Kamatusa \times			0.003			0.019
Dominant senior \times Independence			(0.039)			(0.034)
R-Squared	0.146	0.146	0.146	0.165	0.165	0.165
Observations	18936	18936	18936	23322	23322	23322
Clusters	1669	1669	1669	2203	2203	2203

Notes: All regressions include individual and year fixed effects. Estimates significant at the 0.05 $(0.10,\,0.01)$ level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table A.18: General Service Unit

	(1)	(2)	(3)	(4)	(5)	(6)	
	Entered ≤ 1959			Entered ≤ 1963			
			Exi	t > 1965			
Gema & Kamatusa ×	0.035*	0.034*	0.036*	0.068***	0.066***	0.066***	
Independence	(0.018)	(0.018)	(0.019)	(0.016)	(0.016)	(0.017)	
GSU	0.002 (0.026)	-0.019 (0.028)	-0.024 (0.039)	-0.005 (0.021)	-0.029 (0.025)	-0.019 (0.038)	
$\begin{array}{l} {\rm GSU} \times \\ {\rm Independence} \end{array}$	(0.020)	0.053 (0.042)	0.077 (0.061)	(0.021)	0.049 (0.033)	0.051 (0.060)	
Gema & Kamatusa \times GSU			$0.008 \ (0.057)$			-0.017 (0.050)	
Gema & Kamatusa \times GSU \times Independence			-0.049 (0.083)			-0.002 (0.072)	
R-Squared	0.146	0.146	0.146	0.165	0.165	0.165	
Observations	18936	18936	18936	23322	23322	23322	
Clusters	1669	1669	1669	2203	2203	2203	

Notes: All regressions include individual and year fixed effects. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.

Table A.19: Type of offenses

	(1)	(2)	(3)	(4)
	Entere	$d \le 1959$	Entere	$d \le 1963$
		Exit >	> 1965	
	Absenteeism	Other offenses	Absenteeism	Other offenses
Gema & Kamatusa ×	0.016**	0.008	0.029***	0.034***
Independence	(0.008)	(0.011)	(0.007)	(0.010)
R-Squared	0.113	0.119	0.125	0.133
Observations	23793	23793	29229	29229
Clusters	1824	1824	2422	2422

Notes: All regressions include individual and year fixed effects. Estimates significant at the 0.05 (0.10, 0.01) level are marked with ** (*, ***). Standard errors are clustered at the individual level.