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State Formation and Governance in Botswana*

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Abstract

Our analysis begins with the puzzle: how did Botswana develop a legal-rational state? We suggest that three key interlinked factors were important. First, during the pre-colonial period the Tswana developed local states with relatively limited kingship or chiefship and with a political structure that was able to integrate people of other ethnic groups such as Kalanga. Second, facing the onslaught first of the Boers, next of the British South Africa Company, and finally of the Union of South Africa, Tswana political elites attempted to maintain a good measure of independence by defensively modernizing. (The Tswana were not unique in this in British Africa, either in the types of political institutions they evolved, or in their desire to modernize. What is unique about Botswana is the way that local state elites were coordinated in the whole of a colonial national territory, pursuing similar policies to fend off the most pernicious effects of colonialism.) Finally, the political elites in both local states before independence and the national state at independence heavily invested in the country's most important economic activity, ranching. This gave them a strong incentive to promote rational state institutions and private property. Moreover, the integrative nature of traditional Tswana political institutions reduced the likelihood that alternative groups would aggressively contest the power of the new unitary state.

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I. Introduction

The economic performance of African countries since independence has been poor. Despite the many hopes of the independence era many African countries are currently no richer or even poorer than they were in 1960. According to Angus Maddison's data (2001, Table C4) this is true of Angola, Chad, the Comoros, Côte d'Ivoire, Djibouti, Gabon, Ghana, Liberia, Madagascar, Mozambique, Niger, Senegal, Sierra Leone, Somalia, Uganda, and Zambia. Even in the remaining countries that have shown some progress, there are few signs of great advances. For example, Cameroon, Gabon, Kenya, Mauritania, Nigeria, Rwanda, and Tanzania have not experienced growth in per-capita income since the 1970's.

An overwhelming consensus of academic opinion attributes this poor economic performance to failures of 'governance' in African states. Governance is defined by Kaufman, Kraay and Zoido-Lobatón (1999, p. 1) as,

> "the traditions and institutions by which authority in a country is exercised. This includes (1) the process by which governments are selected, monitored and replaced, (2) the capacity of the government to effectively formulate and implement sound policies, and (3) the respect of citizens and the state for the institutions that govern economic and social interactions amongst them."

According to this view, poor economic performance stems from poor governance and either a desire or an inability to support the process of growth.

Why is governance poor in Africa? This is thought to stem from a particular style of politics, prevalent in much of the world, but endemic to Africa. Different people call this by different names; some name it 'neo-patrimonialism', some 'personal rule', some 'prebendalism'. By this however, all scholars basically mean the same thing. In the words of Bratton and van der Walle (1997, p. 62),

> "the right to rule in neopatrimonial regimes is ascribed to a person rather than to an office, despite the official existence of a written constitution. One individual..often a president for life, dominates the state apparatus and stands

> above its laws. Relationships of loyalty and dependence pervade a formal political and administrative system, and officials occupy bureaucratic positions less to perform public service..than to acquire personal wealth and status. Although state functionaries receive an official salary, they also enjoy access to various forms of illicit rents, prebends, and petty corruption, which constitute..an entitlement of office. The chief executive and his inner circle undermine the effectiveness of the nominally modern state administration by using it for systematic patronage and clientelist practices in order to maintain political order."

How does personal rule lead to poor economic policies or impede the creation of a developmental state? Perhaps the main mechanism, clear from the discussion by Bratton and van de Walle (1997) is that the mobilization of political support via clientelism and the introduction of patrimonial logic into the bureaucracy destroys the capacity of the state and creates an economic environment of unpredictability (see also Bates, 1981, Sandbrook, 1985, van de Walle, 2001).

This consensus about the roots of Africa's economic problems is not limited to political scientists. Most economists have now concluded that poor economic performance is caused by poor institutions and poor economic policies. Indeed, Collier and Gunning (1999, p. 100) after their wide-ranging discussion end up concluding that it is the perverse role of the state that has been the crucial factor behind poor economic performance in Africa, arguing that

> "Africa stagnated because its governments were captured by a narrow elite that undermined markets and used public services to deliver employment patronage. These policies reduced the returns on assets and increased the already high risks private agents faced. To cope, private agents moved both financial and human capital abroad and diverted their social capital into risk-reduction and risk-bearing mechanisms."

The notion of neo-patrimonialism can be traced back to the sociologist Max Weber who contrasted patrimonial with rational-legal authority. In his terms, the problem in Africa stems from the absence of rational-legal states.

There is broad agreement that neo-partrimonialism is the central explanation for poor African economic performance, but what factors make such rule especially attractive or effective in Africa? In essence, neo-patrimonialism is about the development of state institutions. As Weber discussed, all European state institutions were historically patrimonial. However, they were eventually rationalized. The conventional wisdom is that the main driving force behind this was incessant inter-state warfare (Tilly, 1990). To survive, European powers had to create efficient standing armies and adopt new military technology. To pay for this they had to develop fiscal systems and bureaucracies to run everything. Moreover, to get their citizens to agree to pay taxes, they had to make concessions to them, such as granting representative institutions.

An explanation of the incidence of neo-patrimonialism in Africa is therefore an explanation for why African states took a different path historically. This question has been addressed by Herbst (2000) and Bates (2001) (see also Hopkins, 1986). Their explanation emphasizes that the development of African states evolved differentially because of distinct initial conditions. First, in Africa population density has been historically low, leading to less inter-state warfare and less focus on defining territorial boundaries. Second, developing state capacity was undertaken neither during the colonial era nor since independence. Moreover, the colonizing powers did not fight for territory in Africa, on the other the international community has enforced the colonially created national boundaries since independence. Third, political elites never find it in their interests to develop rational state institutions unless forced to do so. Forth, African factor endowments, such as natural resources, oil and precious metals, and international aid, generate large rents for political leaders without necessitating the rationalization of state institutions.

Other scholars (e.g. Young, 1994, Leonard and Strauss, 2003) would extend this list of factors by adding that the autocratic aspects of colonialism left unfortunate institutional heritages which also help to make neo-patrimonialism an attractive and effective strategy. Others (Herbst, 2000) play down the institutional legacy of colonialism claiming that African countries were colonies for periods of time which were too short to have significantly influenced state formation.

In this paper we use the history and experience of Botswana to evaluate such theories of state formation in Africa. A study of Botswana is crucial in this context since, as is well know, Botswana is amongst the most successful economies in the world in the last 35 years. From being among the poorest of the poor at independence in 1966, it has experienced an average growth rate of around 7% in per-capita terms and witnessed large increases in human and social development. Moreover, it has been a relatively vibrant democracy and despite the hegemony of the Botswana Democratic Party (BDP) it has had a continual experience of openly contested elections and a free press. Tables 1 and 2 collect some relevant comparative economic facts.

Just as the academic consensus argues that Africa's failure is a failure of governance, it also argues that Botswana's success is a success of governance (Colclough and McCarthy, 1980, Picard, 1987, Parson, 1988, Harvey and Lewis, 1990, Leith, 1998, Samatar, 1999, Acemoglu, Johnson and Robinson, 2003a). In Botswana there has been little patrimonialism and corruption and the state has efficiently devised and implemented economic plans and policies. If there is one rational-legal state in Sub-Saharan Africa, then it is in Botswana.

Our analysis therefore begins with this puzzle; how did Botswana develop a legal-rational state? Our research suggests three key interlinked factors were important. First, during the pre-colonial period the Tswana developed a state with relatively limited chiefs and with a political structure that was able to integrate other groups, such as many Kalanga, into the state. Second, facing the onslaught, first of the Boers, next of the British South Africa Company, and finally of the Union of South Africa, Tswana political elites attempted to maintain their independence by defensively modernizing. The Tswana were not alone, either in the types of political institutions they evolved, or in their desire to modernize. However, what is unique about Botswana is the way that such a group came to occupy the whole of a national territory and managed to fend off the most pernicious effects of colonialism. Finally, political elites in control of the state, both before and at independence, were heavily invested in the country's most important economic activity, ranching. This gave them a strong incentive to promote rational state institutions and private property. Moreover, the integrative nature of Tswana political institutions reduced the likelihood that alternative groups would emerge to contest the power of the state.

In our reading of the evidence it was the state institutions in Botswana that led to the apparently ethnically homogeneous society that we see today, and it was these same institutions that allowed the vast diamond wealth which came on stream in the 1970's to be rationally allocated to promote the development of the economy.

Our interpretation of Botswana clashes with much of the conventional wisdom on modern nation-state formation. First, it suggests that colonialism, far from being irrelevant because of its relatively short duration, played a key role in stunting or inducing African state formation. Secondly, as in recent accounts of state formation in Europe (Brenner, 1993, Pincus, 2002, Acemoglu, Johnson and Robinson, 2002b) and Latin America (Mazzuca, 2002), it suggests that political elites may find it in their own interests to build a state. They do not necessarily have to be pushed by the threat of warfare. Thirdly, as pointed out by Acemoglu, Johnson and Robinson (2002a) and Robinson (2002), once colonialism comes into the picture, as it must, the relationship between population density and state formation is probably the opposite of that conjectured by the conventional wisdom.

We proceed as follows. In the next section we review some of the relevant facts about governance and its relationship to economic development in Africa and in Botswana. Both the aggregate facts and case studies suggest that governance in Botswana is superb and this is because of the institutional structure of the state. In section 3 we then present our theory of the historical emergence of the state in Botswana. In section 4 we present an analytical model of state formation designed to illustrate the workings of some of the mechanisms we have discussed. The final section concludes by discussing what we feel are the general lessons about state formation that one can learn by studying Botswana. We argue that Botswana demonstrates that there are important weaknesses in the conventional wisdom about state formation in Africa and that other lessons from the history of state formation from Europe and Latin America need to be absorbed.

II. Evidence

How do we know that poor governance can explain poor economic performance in Africa? How do we know that governance is good in Botswana and that it can account for why the economic performance of the country has been so outstanding? In this section we present some comparative data on the state of governance in Africa and relate it to the relevant economic outcomes.

Let's first look at some raw data. Tables 3 and 4 present the numbers on six different indices of governance from Kaufman, Kraay and Zoido-Lobatón (2002). We ordered the African countries by their score on Voice and Accountability, where Botswana comes third after Mauritius and South Africa. Nevertheless, as far as government effectiveness, regulatory quality, and control of corruption are concerned, Botswana scores highest in Africa. Comparing Tables 3 and 4 in fact one sees that Botswana scores better in regulatory quality than France and Japan and far ahead of developing countries in Asia, such as India or Vietnam, or in Latin America, such as Argentina, Brazil and Colombia, in every category. The results in Table 5, Transparency International's Corruption Perceptions Index show the same thing. Botswana is perceived to be the least corrupt country in Africa and has about the same level of corruption as Western European countries such as France, Ireland or Portugal.

We think these numbers tell the basic story. However, we need statistical analysis to explore the extent to which good governance can actually explain economic performance and we also need to worry about the issue of whether economic performance determines good governance (reverse causation).

Economists who confront the well-known and depressing facts about African development have emphasized many factors that might help to account for such economic performance. For instance, in cross-country empirical work, every variable that is found to be a statistically significant determinant of growth is a potential explanation of African performance. If a high level of a variable x leads to rapid development, perhaps Africa is short on x. In one study of this kind specifically focused on Africa, Sachs and Warner (1997) emphasize that the most important factors accounting for relatively low growth in Africa are lack of economic openness to international trade, poor institutions, dependence on natural resource exports, low life expectancy, rapid population growth and the fact that much of Africa is tropical and landlocked.

The role found for institutions in this study is particularly interesting. Sachs and Warner use data on five sources of institutional quality from Political Risk Services. These variables are a rule of law index that reflects 'the degree to which the citizens of a country are willing to accept the established institutions to make and implement laws and adjudicate disputes.' A bureaucratic quality index that measures 'autonomy from political pressure' and 'strength and expertise to govern without drastic changes in policy or interruptions in government services.' An index of corruption in government measures whether 'illegal payments are generally expected throughout government' in the form of 'bribes connected with import and export licenses, exchange controls, tax assessments, police protection or loans.' The risk of expropriation index measures the risk of 'outright confiscation' or 'forced nationalization.' Finally, there is the government repudiation of contracts index that measures the 'risk of a modification of a contract taking the form of a repudiation, postponement or scaling down.'

In the context of Africa other variables argued to be of key importance are ethnolinguistic fragmentation (Easterly and Levine, 1997), bad economic policies (such as exchange rate overvaluation) and political instability, (Barro, 1991) and financial development (Levine, 2004).

This list of variables hardly establishes that it is governance that matters even though the institutional variables that Sachs and Warner find to be statistically significant may capture several aspects of what one might mean by governance. Nevertheless, they end up emphasizing openness and others factors, such as geography. In his most recent work Sachs (e.g. Gallup, Mellinger and Sachs, 1998, Sachs, 2002) has emphasized geographical factors to the exclusion of everything else.

One might ask however, to the extent that a variable such as financial development or political instability can account for poor growth in Africa, does this constitute a convincing explanation of this growth? After all, why is it that financial development differs across countries? Why are some countries more politically unstable than others? Though Levine and Barro are willing to treat these variables as exogenous, it is not clear that this is legitimate.

Though capturing interesting conditional correlations in the data, drawing causal inferences from this cross-country empirical work is difficult. Many of the variables which Sachs and Warner emphasize as explanations for poor development in Africa - for example, the fact that natural resource exports are large as a proportion of national income, the fact that African countries have poor institutions, low life expectancy or high rates of population growth, are potentially endogenous. It is not clear if they cause poor growth or are instead caused by poor growth. The modern approach to the demographic transition, for instance, would suggest that poverty causes high rates of population growth, not the other way round. Moreover, countries whose manufacturing and agricultural sectors have collapsed would naturally tend to be dominated by natural resource exports, yet these exports are not themselves the cause of the collapse. There are also severe problems of omitted variables bias since poor institutions and slow growth could both be caused by an omitted factor.

These issues have been addressed most comprehensively by the empirical research of Acemoglu, Johnson and Robinson (2001,2002a, 2003a,b). These scholars used data from former European colonies to try to identify the casual effect of institutions on economic development (levels of per-capita income). In particular they investigated the role of security of property rights, using the same data as Sachs and Warner on expropriation risk. Their main argument is that Europeans created different institutions in different colonies depending on the initial institutional environment. In places where European mortality was low and where initial population density and urbanization low, it was feasible or attractive to create 'settler colonies.' In places without these characteristics, it was more likely that 'extractive colonies' would be created. Settler colonies quickly developed a very different political economy with much more representative institutions which constrained the colonial state and widespread respect for property rights and the rule of law. Acemoglu, Johnson and Robinson (2001,2002a) therefore used initial conditions in the colonies as an exogenous source of institutional variation. They find that once the potential endogeneity of institutions and the issue of omitted variables are thus taken into account, institutional differences account for the majority of income differences across countries. Interestingly they find that geographical factors, such as whether or not a country is landlocked or in the tropics, have little explanatory power. They also find no role for the contemporary disease environment or the endowment of natural resources (they use more exogenous ways of measuring this than the approach adopted by Sachs and Warner, 1997).

Though the empirical findings of Acemoglu, Johnson and Robinson are not directly about governance, they do speak to this issue. First, stable property rights are something that good governance certainly needs to deliver. Moreover, the Kaufman, Kraay and

Zoido-Lobatón governance data includes variables such as the rule of law and political stability which are highly correlated with the variables used by Acemoglu, Johnson and Robinson. Most recently Kaufman and Kraay (2002) have investigated the explanatory power of governance for per-capita income using the Acemoglu, Johnson and Robinson framework with similar findings.

A. Case Studies in Botswana

The numbers of Tables 3, 4 and 5 demonstrate that governance, measured in various ways, is very good in Botswana. Is this data consistent with other things we know about the country? We now briefly discuss some examples that suggest that the answer to this is yes. Though some scholars (e.g. Good, 1992, 1994) have to some extent questioned the conventional wisdom, there is in fact an overwhelming preponderance of evidence suggesting that governance in Botswana is outstanding.

The story of its development planning since independence is a case in point; it is now entering its eighth five-year planning period. Another case is that of its skill in negotiating contracts for the renegotiation of the Southern African Customs Union in 1969, its negotiations with De Beers for a favorable share of profits in 1970 and subsequent renegotiations which gave Botswana a major shareholding and a place on the board of De Beers. (Botswana has also managed to bridge the downs as well as ups in diamond income without fiscal cuts.) Botswana also makes the proud boast that, thanks to school feeding and famine relief programs, despite persistent droughts it has never as an independent country suffered deaths from famine (Harvey and Lewis, 1990). As for its parastatal corporations they have in general been models of rational key infrastructual growth rather than being undermined by patrimonialism and its twin, populism. The Botswana Meat Commission may be upheld as a model of rational management relatively autonomous from political interference by the cattle ranching elite (Samatar, 1999, pp. 104-30). Despite the vicissitudes of international airline transport, Air Botswana has never been allowed to become a constant drain on state resources as experienced with the national airlines of neighboring Zimbabwe, Namibia, and Zambia.

III. Explaining Good Governance in Botswana

In our argument, good governance arises as the result of a conscious strategy of institution building. The question then becomes why did Tswana political elites, starting in the nineteenth century and running all the way through to Seretse Khama, come together to build a modern unitary state? In this section we attempt to answer this question.

A. Narrative

The earliest Tswana state in the area of modern Botswana was that of the Ngwaketse in south-eastern Botswana, which grew into a powerful military state after about 1750, controlling Kalahari hunting and cattle raiding, and copper production west of Kanye (see Parsons, 1983, 1999, Tlou and Campbell, 1997). Meanwhile other related Tswana chiefdoms settled further north: Kwena around Molepolole, Ngwato further north at Shoshong among Kalanga and other groups, and Tawana by about 1770 in the far north-west around Lake Ngami, in country occupied by Yeyi people.

Southern Africa as a whole saw an increasing tempo of disruption, migration and war from about 1750 onwards, as trading and raiding for ivory, cattle and slaves spread inland from the coasts of Mozambique, the Cape Colony and Angola. By 1826 the Ngwaketse were being attacked by the Kololo, an army of Sotho refugees under the dynamic leadership of Sebetwane, but the Kololo were pushed northwards by counter-attacks. In about 1835 they settled on the Chobe River, from which the Kololo state stretched northwards until its final defeat by its Lozi subjects on the upper Zambezi in 1864. Meanwhile the Kololo were followed in their tracks by the Ndebele, a raiding army led by Mzilikazi, who settled in western Zimbabwe in 1838-40 after the conquest of the Rozvi ruling elite of the Kalanga.

The Tswana states of the Ngwaketse, Kwena, Ngwato and Tawana were reconstituted in the 1840s after the wars passed. The states took firm control of commoners and subject peoples, organized in wards under their own chiefs paying tribute to the king. The states competed with each other to benefit from the increasing trade in ivory and ostrich feathers being carried by wagons down new roads to Cape Colony in the south. Those roads also brought Christian missionaries to Botswana, and Boer trekkers who settled in the

Transvaal to the east of Botswana.

The most remarkable Tswana king of this period was Sechele (ruled 1829-92) of the Kwena around Molepolole. He allied himself with British traders and missionaries, and fought with the Boers of the Transvaal, who tried to seize African refugees who fled from the Transvaal to join Sechele's state. But by the later 1870's the Kwena had lost control of trade to the Ngwato, under Khama III (ruled 1875-1923), whose power extended to the frontiers of the Tawana in the north-west, the Lozi in the north and the Ndebele in the north-east.

The Scramble for Africa in the 1880s resulted in the German colony of South West Africa, which threatened to expand across the Kalahari to the borders of the Transvaal. The British in Cape Colony responded by proclaiming a protectorate over their Tswana allies, as far north as the Ngwato; and the protectorate was extended to the Tawana and the Chobe River in 1890.

British colonial expansion was then privatized, in the form of the British South Africa (BSA) Company, which used the road through the Bechuanaland Protectorate to colonize Zimbabwe (soon to be called Rhodesia) in 1890. But the protectorate itself remained under the British crown, and white settlement remained restricted to a few border areas, after an attempt to hand it over to the BSA Company was foiled by the delegation of three Tswana kings to London in 1895 (see Parsons, 1998). The kings, however, had to concede to the company the right to build a railway to Rhodesia through their lands.

The British government continued to regard the protectorate as a temporary expedient, until it could be handed over to Rhodesia or, after 1910, to the new Union of South Africa. Hence the administrative capital remained at Mafeking (Mafikeng), actually outside the protectorate's borders in South Africa, from 1895 until 1964. Investment and administrative development within the territory were kept to a minimum. It declined into a mere economic appendage of South Africa, for which it provided migrant labor and the rail transit route to Rhodesia. Short-lived attempts to reform administration and to initiate mining and commercial agricultural development in the 1930s were hotly disputed by leading Tswana chiefs, on the grounds that they would only enhance colonial control and white settlement. The territory remained divided into eight largely self-administering tribal reserves, five relatively small white settler farm blocks, and the remainder classified as crown (i.e. state) lands.

The extent of Bechuanaland Protectorate's subordination to the interests of South Africa was revealed in 1950. The British government barred Seretse Khama from the chieftainship of the Ngwato and exiled him for six years. This, as secret documents have since confirmed, was in order to satisfy white politicians in South Africa and Rhodesia who objected to Seretse Khama's marriage to a white woman, at a time when racial segregation was being reinforced in South Africa under apartheid.

From 1954 it became clearer and clearer that Bechuanaland could no longer be handed over to South Africa, and it must be developed towards political and economic self-sufficiency, though the idea of independence only grew as the chance of joining the Central African Federation (based on Rhodesia) declined. The supporters of Seretse Khama began to organize political movements from 1952 onwards, and there was a nationalist spirit even among older 'tribal' leaders. Ngwato 'tribal' negotiations for the start of copper mining reached agreement with a mining company in 1959. A legislative council drawn from all the 'tribal' states was eventually set up in 1961 after limited national elections. The Bechuanaland People's Party (BPP) was founded in 1960 (Ramsay and Parsons, 1998), and the Bechuanaland Democratic Party (later the Botswana Democratic Party, BDP) - led by Seretse Khama - was formed by members of the legislative council in 1962.

After initial resistance by Britain to constitutional advance before economic development could pay for it, the British began to push political change in 1964. A new administrative capital was rapidly built at Gaborone. Bechuanaland became self-governing in 1965, under an elected BDP government with Seretse Khama as prime minister. In 1966 the country became the Republic of Botswana, with Seretse Khama as its first president.

For its first five years of political independence, Botswana remained financially dependent on Britain to cover the full cost of administration and development. The planning and execution of economic development took off in 1967-71 after the discovery of diamonds at Orapa. The essential precondition of this was renegotiation of the customs union with South Africa, so that state revenue would benefit from rising capital imports and mineral exports - rather than remaining a fixed percentage of total customs union income. This renegotiation was achieved in 1969.

From 1969 onwards Botswana began to play a more significant role in international politics, putting itself forward as a non-racial, liberal democratic alternative to South African apartheid. South Africa tried to stop Botswana opening direct connections by road and ferry to Zambia across the Zambezi that would avoid the established rail and road route through Rhodesia. From 1974 Botswana was, together with Zambia and Tanzania, soon joined by Mozambique and Angola, one of the "Front Line States" seeking to bring majority rule to Zimbabwe, Namibia and South Africa.

With an economy growing annually between 12 and 13 percent, Botswana extended basic infrastructure for mining development and basic social services for its population. More diamond mines were opened, on relatively favorable terms of income to the state, and less economically successful nickel-copper mining commenced at Selebi-Phikwe. The BDP was consistently re-elected with a large majority, though the Botswana National Front (BNF, founded 1965) became a significant threat after 1969, when "tribal" conservatives joined the socialists in BNF ranks attacking the "bourgeois" policies of government.

The later 1970s saw civil war in Rhodesia, and urban insurrection in South Africa, from which refugees flowed into Botswana. When Botswana began to form its own army, the Botswana Defence Force, the Rhodesian army crossed the border and massacred 15 Botswana soldiers in a surprise attack at Leshoma (February 1978). Botswana played its part in the final settlement of the Rhodesian war, resulting in Zimbabwe independence in 1980. But its main contribution was in leading the formation of the Southern African Development Coordination Conference, to look to the future of the region.

The idea behind SADCC, as expounded by Seretse Khama, was to coordinate disparate economies rather than to create a unified market for the biggest producers in southern Africa. All the states of southern Africa, except South Africa (and Namibia), formed SADCC in 1980, to work together in developing identified sectors of their economies - particularly the transport network to the ports of Mozambique.

Seretse Khama died in July 1980 and was succeeded as president by his deputy since 1965, vice-president Quett (aka Sir Ketumile) Masire. The economy continued to expand rapidly after a temporary slump in diamond and beef exports at the beginning of the 1980s. The expansion of mining output slowed in the 1990s, but was compensated for by the growth of manufacturing industry producing vehicles and foodstuffs for the South African market. In April 1998, Masire retired as president, and was succeeded by his vice-president Festus Mogae. Since then the main opposition party, the BNF, which had begun to approach parity with the ruling BDP in the elections of 1994, has been split in half by a leadership dispute. Botswana handed over leadership of SADCC, now the Southern African Development Community (SADC), to South Africa in 1994. But the secretariat of SADC remains housed in the capital of Botswana, Gaborone.

As well as SADC, the Republic of Botswana is a member of the United Nations, the Organization of African Unity (OAU), the Non-Aligned Movement, and the Commonwealth. Botswana is also a member (with Lesotho, Namibia, South Africa, and Swaziland) of the Southern African Customs Union (SACU).

B. Modernization

What is distinct about the process described above is the way that a succession of Tswana leaders attempted a form of autonomous modernization. What is extraordinary is the extent to which they succeeded.

The key figures in this process were Sechele and Khama III in the 19th century, and Seepapitso, Isang, Tshekedi and Bathoen in the 20th. All of these chiefs took to Western ideas of religion, education and social progress, but were determined that their lands and peoples should not to be taken over by Westerners. As part of their strategy they had to co-opt and recruit enough of their own indigenous elites to maintain the consensus of their peoples. This process goes back at least to the 19th century, and took the form of resistance to modernization as conceived by white settlers. They resisted labor export so far as possible, and resisted mining on their land so long as it was not under 'tribal' control (see Parsons, 1975, Crowder, 1985). This policy was followed very effectively by Tshekedi Khama, Seretse's uncle and guardian (see Khama, 1955, 1956, Benson, 1960, Wylie, 1984).

> "Tshekedi's policy is obvious. It is to make the Bamangwato economically self-supporting, to develop a healthy cultural interest and provide, within the tribes own territory, a modernized tribal life which will prevent the drift of young men and women to the Union." (quotation from 1948 in Parsons, Tlou, Henderson, 1995, p.73)

This process of defensive modernization was not unique. Ranger (1965) has studied other examples of this in the Lozi/Barotse kingdom in Zambia and the Buganda in Uganda (see also Apter, 1961, and Curtin, 2000). However, all of these experiments were checked by the time of the First World War, restrained by the subsequent imposition of indirect rule, and finally strangled by the late colonial and early independent state apparatus.

This was also to some extent the case in Botswana, but what is unusual is that there was a second round of autonomous innovation in the 1940s in the two major 'tribal' reserves on the part of Tshekedi Khama and Bathoen. But their 'enlightened despotism' was financed by a level of appropriation of cattle and other property that was unacceptable to Western-educated members of the political elites within their states, who espoused liberal ideas of 'democratic' rule by consent of property holders. Such elites, including Kalanga as well as Tswana intellectuals opposed Tshekedi and supported Seretse Khama, and promoted ideas of 'Botswana' or pan-Tswana nationalism within a modern federal or unitary state.

British intervention, deposing both Seretse and Tshekedi from local state chieftainship, made Botswana nationalists of both men. The country as a whole had been stunted by the fact that in the post-war period it reverted back to being a subservient territory of South Africa. Tshekedi Khama single-handedly negotiated with non-South African capitalists for a copper mining concession signed in 1959, to be the economic base for an autonomous national state. But the idea of such a state as a federation of 'tribal' states passed with the death of Tshekedi in 1959, and the idea of a unitary state was adopted by Seretse Khama's BDP in cooperation with leading progressive elements of the late colonial regime.

Here it is interesting to note that Bathoen underwent a similar change to Tshekedi ten or fifteen years later. His 'enlightened despotism' was opposed by democrats such as Ketumile Masire who joined the BDP, and eventually resulted in Bathoen resigning from chieftainship in 1969 to ally with the socialist national opposition (see Somolakae and Lekorwe, 1998).

We may also note that the two local Tswana states that remained the least 'democratic' and the least guided by legal-rational ideas in the later 20th century, the Kwena and the Tawana, were the two 'tribal' reserves in which the British had interposed and replaced clever dissident chiefs in 1906 and 1931 by more pliant individuals of their choice. Subsequent chiefs were dependent on colonial sponsorship rather than popular legitimacy, and tended to concentrate on feathering their own nests rather than developing their 'tribal' states. (A parallel may be drawn here with the Tswana states of 'Bophuthatswana' in South Africa, where there was similar colonial interference in chiefly succession and resultant corrupt patrimonialism.)

C. Tswana States

This process of defensive modernization took place in the context of genuine state structures (Tlou, 1985, 1998). Traditional Tswana polities have been denied the status of statehood in some anthropological literature on grounds of having too low population density (Stevenson, 1968). But this is to ignore the extraordinary nucleation at the heart of low-density zonage, in the towns that have characterized Tswana polities since at least the 18th century. Out of the *stadt*, grew the state. These state capitals may be seen as hierarchical agglomerations of lower level polities. The town with its central Kgotla (judicial court and assembly place) and royal cattle kraal, is a combination of two or more villages, each with its own kgotla and kraal; each village combines two or more hamlets, each with kgotla and kraal; and each hamlet combines a number of extended families. A few exceptional conurbations like Serowe and Kanye may even be seen from the 19th century (like Great Zimbabwe five centuries earlier) as cities combining towns, with five levels of political authority ranging from king (city) through great chief (town), chief (village), headman (hamlet), and patriarch (family) (on this see Huffman, 1986)

Political disputes and new alliances within such agglomerated states help to explain the phenomenons of fission and fusion which Schapera (1967) found so characteristic of Tswana polities. Such state structures may also explain why, in terms of Gluckman's critical population density theory, the Tswana were able to absorb the 18th century rise of population (possibly due to the importation of maize as a second crop, planted and harvested separately, doubling grain supplies in good years) that caused chaos and militarism among the scattered hamlets of Zululand (Gluckman, 1963).

The Tswana town also shows how different levels and sizes of other communities, both Tswana and non-Tswana, could be incorporated retaining their own leaders and their own identity while coming to increasing associate themselves with the nation as a whole. The 1946 census, for example, revealed that the Ngwato state under Tshekedi Khama contained 43 different ethnic communities divided into 310 hamlets or 'wards'. A sample of such wards then revealed that each ward might contain many different ethnicities within its sub-wards (extended families). Thus Ward 8 (true Ngwato) actually contained seven ethnicities in 9 sub-wards, Ward 94 (Kaa-Kalanga) contained twelve ethnicities in 18 sub-wards, and Ward 96 (Kubung) had five ethnicities in 9 sub-wards (Schapera 1952, pp. 65-87)

D. The Beefocracy

Tswana elites did not want to develop their traditional states, and later their combination into a modern nation state, simply to fend off the British. As Botswana integrated into the world economy from the 19th century onwards, they saw the possibility of accumulating new wealth. Wealth from the proceeds of wildlife hunting and cattle sales was useful to buy guns to aid defence, but it was also desirable in itself. Put simplistically, we would argue that Tswana elites, because of their control of the cattle economy, has a vested interest in institutions which would help them make money. They also shared this vested interest with notable white cattle ranchers who had built up their fortunes in the pre-1960 period of white racial affirmation and racial discrimination against black entrepreneurs. This community of interest helps to explain the relatively benign state of 'race relations' in Botswana by Southern African standards.

The Beefocracy of Botswana at independence was led by large ranchers such as Seretse Khama within the national elite, who provided the model of personal accumulation for the small but growing salariat of people in government service and commerce (Cohen, 1979). This model, propagated through the institutions of the old 'tribal' ideologies, helps to explain widespread appreciation of the rationality of the market tempered by the vagaries of nature, with cattle seen as accessible capital which can as necessary be converted into cash. Early economic planning assumed that every family shared this model. Not until 1974 did a national survey of rural incomes distribution highlight gross inequities in cattle distribution, and challenged patriarchal assumptions about the family by pointing to the large number of female-headed households with no access to cattle. But it did not change the fact that the priority given by the newly independent state to the development of cattle exports did result in more widespread 'trickle down' of economic benefits than any form of sectional patrimonialism in other African countries, and it was cattle production that first gave the Botswana economy and government revenue the lift-off that was to continue with the spectacular development of diamond mining. The early development strategy was no doubt fostered by the fact that, given the structure of the economy, there were no vested interests in a different model.

An interesting contrast is the development strategy of Zambia. Zambia could have developed the cattle economy in the same rational way that Botswana did but the key difference was that the cattle were owned by the Tonga (and Ila) of Southern Province (with good rail and road connections to market) who supported the Zambia African National Congress of Harry Nkumbula rather than Kenneth Kaunda's UNIP. To have developed the cattle industry would therefore have been to economically strengthen opponents of the regime, something that Kaunda and the were UNIP not prepared to do. Instead the new state was driven to reward UNIP voters in the remote North-West Province by setting up an expensive pineapple processing plant which rusted in disuse as no pineapples were locally produced.

IV. Some Simple Analytics of State Formation

We now develop a simple model to investigate more carefully some of the mechanisms and trade-offs we isolated in the last section. The model lasts for two periods, denoted $t = 1, 2$ and consists of two countries, Botswana and Britain. There are three types of Batswana, an incumbent elite, superscripted by T, an alternative ('potential') elite, superscripted by P, and a mass of L citizens. We normalize the total population size to 1, and let λ be the fraction of the population in groups T and P so that $L = 1 - 2\lambda$. We treat Britain as a single agent and its only decision is whether or not to colonize Botswana at the start of the first period. Making Botswana a colony costs Britain c and lasts for the first period only. In $t = 2$ Botswana becomes independent.

There are two productive sectors, 'output' and 'resources.' A key distinction between these sectors is that only the rents from resources can be expropriated by a colonial power. A richer model would distinguish between natural resources, such as oil or gold, and agriculture. In the colonial period both were important sources of rents for colonial powers and here we bundle them into one. We take output to be numeraire and let p be the relative price of resources which we take as fixed by world markets. Both sectors use labor as an input, and output also uses capital and public goods. The two technologies are represented by the production functions $F(K, G, L^O)$ and $AR(L^R)$ where $L^O + L^R = L$. Here K is the stock of physical capital used to produce output, G is the amount of public goods provided, and L^O and L^R are the levels of employment used to produce output and resources respectively. We assume that each of the citizens is endowed with one unit of labor and that there is no disutility of labor so that L will represent both total population and total labor supply. A is a positive parameter which we can vary to investigate the comparative statics. For simplicity we shall abstract from the issue of labor migration even though this was clearly an important issue in colonial policy in Southern Africa, including Botswana. We assume that $F : \Re^3_+ \to \Re_+$ is differentiable, exhibits constant returns to scale in K and L, and that all marginal products are positive but diminishing. We further assume that all cross-partial derivatives are positive so that factors of production are complements. Similarly we assume that $R : \Re_+ \to \Re_+$ is differentiable, strictly increasing and strictly concave. We shall assume that labor is perfectly mobile between sectors and that all factor markets are perfectly competitive.

All agents have linear utility functions and aim to maximize income where period two payoffs are discounted by the factor $\beta \in (0, 1)$. In addition, citizens have ideological preferences over which of the elites are in power, and for the elite being in power generates a 'benefit' of B (as in the 'ego rents' of the standard Downsian model of democratic political competition). Let the indirect utility of a citizen, indexed by i, if the incumbent Tswana elite are in power in period T be be $W^T + \omega^i + \delta$. Now let the indirect utility experienced by a citizen i if the alternative elite wins power be W^P. We shall be more explicit about the exact forms of these indirect utilities after we have calculated the probability of different political outcomes. Here ω^i and δ capture the ideological bias of the citizens for the incumbent. ω^i captures individual level heterogeneity and δ an aggregate shock experienced by all citizens. We assume that ω^i is uniformly distributed on the interval $\left[-\frac{1}{2\phi} + \gamma, \frac{1}{2\phi} + \gamma\right]$ where γ is the mean of the distribution and is a measure of incumbency advantage. When γ is large, there is a very strong bias in favor of the incumbent. We can also think of γ as a measure of the extent of political competition. When γ is large, incumbency advantage is large, and political competition is low. We finally assume that δ is uniformly distributed on the interval $\left[-\frac{1}{2\psi}, \frac{1}{2\psi}\right]$ and therefore has zero mean.

We assume that the capital stock is divided between the two factions of the indigenous elite with the Tswana owning a fraction θ. G, which is indivisible, can only be provided by the government and only if a state has been created. Public goods raise the productivity of private factors of production in producing output and we can think of G as representing roads and infrastructure, or more generally law and order, enforced property rights and a functioning legal system. G must be provided afresh in each period (roads deteriorate, judges salaries must be paid).

To build a state costs σ and we assume that if a state is created the rents from resources are used to provide public goods with any remaining being redistributed lump-sum to both elites and all citizens. Thus the state has a budget constraint,

$$G + X = pAR(L^R) - wL^R. \tag{1}$$

where X is the total amount redistributed via lump-sum transfers (recall that total population is normalized to one).

For simplicity we assume that the rents from resources are always at least G. The assumptions underlying (1) are meant to capture the idea that when a rational-legal state is created, discretionary use of resources is no longer allowed. The benefit of creating a state is that it is now feasible to provide public goods and we shall assume that public goods are sufficiently productive that after a state has been created it is always optimal to provide them.[1] If no state is created then we assume that resource rents accrue directly to the governing elite (the 'personalization' of state revenues). This creates a political advantage for neo-patrimonialism because we shall further assume that the personalization of state finances allows the incumbent elite to make offers of income to citizens in exchange for their support. Let τ be such a transfer which we assume must be given to all agents. We shall proceed by assuming that τ is fixed (transfers must be zero or τ) and that if a

[1] A sufficient condition for this is that $F(K, G, 0) - F(K, 0, 0) > G$.

state has not been created then ex post it is always optimal to offer the transfer.

A. Timing of the Game

The timing over the two periods is as follows.

- $t = 1$: The Tswana elite decide whether or not to create a state.
- Britain decides on whether or not to colonize Botswana. If they colonize they decide whether or not to create a state.
- If a state is created G is supplied. Production and consumption takes place.
- $t = 2$: At independence there is an election ('contest') between the Tswana and the alternative elite and if a state has not been created the Tswana make a transfer τ to citizens in exchange for support.
- Voting takes place as does production and consumption.

B. Analysis of the Game

We will now characterize the pure strategy subgame perfect Nash equilibria of the above game. To do so we proceed by backward induction. To simplify the analysis it is useful first to make some key observations.

First consider the outcome of the election/contest. Citizen i votes/supports for the Tswana elite if,

$$W^T + \omega^i + \delta > W^P.$$

Thus to attract the vote of individual i the policy offered by T, plus the ideological utility for T, must be more attractive than the utility offered by the policy of the alternative elite.

For given δ, we can define a critical value of ω^i, denoted $\widetilde{\omega}^i$

$$\widetilde{\omega}^i = W^P - W^T - \delta,$$

such that any agent with a value of $\omega^i \geq \widetilde{\omega}^i$ votes for the Tswana. The proportion of citizens who vote for T, is denoted π^j for $j = S, NS$ where the notation emphasizes that, as we shall see, this proportion depends on whether or not a state has been created. We now have,

$$\pi^j = \int_{W^P - W^T - \delta}^{\frac{1}{2\phi}+\gamma} \phi di = \frac{1}{2} + \phi \left[W^T - W^P + \delta + \gamma \right]. \quad (2)$$

From this we can calculate the probability that the incumbent wins the election, which we denote $\mathcal{P}^j$ for $j = S, NS$. $\mathcal{P}^j$ is the probability that $\Pr \left\{ \pi^j \geq \frac{1}{2} \right\}$,or noting that it is δ that is a random variable and using the formula for π^j,

$$\begin{aligned} \mathcal{P}^j &= \Pr \left\{ \delta > W^P - W^T - \gamma \right\} \\ &= \int_{W^P - W^T - \gamma}^{\frac{1}{2\psi}} \psi di = \frac{1}{2} + \psi \left[W^T - W^P + \gamma \right]. \end{aligned}$$

Now when $j = S$, the indirect utilities of citizens will simply be equal to the real wage w^S plus the fiscal transfer X, hence, $W^T = w^S + X = W^P$ and from this it follows that $\mathcal{P}^S = \frac{1}{2} + \psi\gamma$. When $j = NS$, we have $W^T = w^{NS} + \tau$ while $W^P = w^{NS}$ and hence we find $\mathcal{P}^{NS} = \frac{1}{2} + \psi [\tau + \gamma] > \mathcal{P}^S$. Thus the probability that the Tswana elite maintain power is greater when there is no rational-legal state. Here the ability to use discretionary revenues to buy political support, in essence to engage in clientelism, makes it easier to maintain power.

Having determined the outcome of the election, we now consider the allocation of labor in different scenarios. Since the labor market is competitive and labor is freely mobile between the two sectors, the real wage must be equal to the marginal product of labor which must be identical in each sector. These marginal productivities, and hence the real wage, will depend on whether or not a state has been created because the provision of public goods will influence the allocation of labor.

If a state is created, the equilibrium allocation of labor between sectors therefore satisfies

$$F_L(K, G, L - L^S) = pAR'(L^S). \quad (3)$$

where L^S is the amount of labor used in the resource sector when a state has been created. On the other hand, if a state is not created then we have,

$$F_L(K, 0, L - L^{NS}) = pAR'(L^{NS}).$$

It is immediate that since $F_{LG} > 0$, $L^{NS} > L^S$.

From this it follows that, since the British can only expropriate resource rents, colonization is less attractive when an indigenous state forms. Intuitively, building a state increases the productivity of activities that the colonial power cannot control to its benefit. This increases wages and makes colonialism less profitable. To see this more formally, note that resource rents in these two cases are,

$$\begin{aligned} \text{Colonial rents with state} &: \quad pA\left(R(L^S) - R'(L^S)L^S\right), \\ \text{Colonial rents without state} &: \quad pA\left(R(L^{NS}) - R'(L^{NS})L^{NS}\right). \end{aligned}$$

where we have used the fact that wages are equal to their marginal productivities evaluated at the equilibrium allocation of resources. It is easy to check that total rents are increasing in L so they are higher when there is no state. In reality, colonial powers used coercion in order to extract resources from subject people. In Dutch Indonesia, French West Africa and the Belgian Congo, forced labor was used to grow agricultural crops for export. Nevertheless, our simple formalization of the impact of state building on the profitability of colonialism captures some part of the reality.

Note that it is never attractive for the British to create a state after they have colonized. This is for two reasons, first they cannot expropriate the productivity gains from providing public goods because they accrue to the output sector. Secondly, developing an indigenous state raises wages and actually makes extracting resources less profitable for the British.

Colonization is attractive to the British if $pA\left(R(L) - R'(L)L\right) > c$. Now define, $\mathcal{R}(L) \equiv p\left(R(L) - R'(L)L\right)$. There are several interesting cases to consider. We know that $\mathcal{R}(L^{NS}) > \mathcal{R}(L^S)$. If

$$A\mathcal{R}(L^S) > c, \tag{4}$$

then colonization occurs no matter what the Tswana do. If

$$A\mathcal{R}(L^{NS}) < c, \tag{5}$$

then colonization is never attractive, even if there is no state. Finally, if

$$A\mathcal{R}(L^S) < c < A\mathcal{R}(L^{NS}), \tag{6}$$

then colonization is profitable if there is no state but not if there is one. The case described by (6) is perhaps the most interesting one. In this case defensive modernization really pays off since it foils colonization. As we shall see, in this case the threat of colonization can create a state where otherwise there would not have been one. On the other hand, whether or not this is the relevant case depends on the characteristics of the society. If the society is so well endowed with expropriable assets that (4) applies, then defensive modernization will not work. Indeed, in this case colonialism, since it reduces the payoff to state formation, may stall the creation of an indigenous state which otherwise would have been created.

We can use the above analysis to define two critical values of the cost of colonialism, $c^{NS}(A, L) = A\mathcal{R}(L^{NS})$ and $c^{S}(A, L) = A\mathcal{R}(L^{S})$ where $c^{NS}(A, L) > c^{S}(A, L)$. If $c \leq c^{S}(A, L)$ then colonialism is sufficiently cheap that it will happen, whatever the indigenous elites do. If $c \in (c^{S}(A, L), c^{NS}(A, L)]$ then defensive modernization dissuades colonialism. Finally, if $c > c^{NS}(A, L)$ then colonization is so expensive relative to the benefits that it is never a threat. The comparative statics of these critical values are interesting. Note first that they are both increasing in A. This follows because a higher amount of resources increases the rents generated by colonization and therefore makes it more attractive. This being the case colonization is worthwhile even if it is more costly. Note also that the critical values are increasing in L, total labor supply. To see this return to (3) and implicitly differentiate. Letting $L^{S}(L)$ be employment in the resource sector as a function of total labor supply, we have,

$$F_{LL}(K, G, L - L^{S})(1 - \frac{dL^{S}}{dL}) = pAR''(L^{S})\frac{dL^{S}}{dL},$$

solving,

$$\frac{dL^{S}}{dL} = \frac{F_{LL}(K, G, L - L^{S})}{pAR''(L^{S}) + F_{LL}(K, G, L - L^{S})} > 0,$$

since $F_{LL} < 0$ and $R'' < 0$. This comparative static, to which we return later, shows that higher employment, corresponding to higher population density, increases the attractiveness of colonialism because it increases the rents which can be extracted by the colonial power.

We now consider the payoffs to different strategies by indigenous elites under these different cases. First begin with the simplest case where (5) holds and there is no threat from the British Empire. In this case the payoff to the Tswana elite from building a state is,

$$V(S,NC) = (1+\beta)\left(r^S\theta K + X\right) + \beta\mathcal{P}^S B - \sigma \tag{7}$$

where the arguments of the payoff function $V(S,NC)$ indicate that a state has been created, S, but that Botswana has not been colonized, NC. Recalling that all factor markets are competitive we know that capital will receive the value of its marginal product, hence $r^S = F_K(K,G,L^S)$.

To interpret (7) notice first that when a state is created, public goods are provided in each period and the rate of return on capital is r^S, the discounted sum of capital income is therefore $(1+\beta)r^S\theta K$. When the British do not colonize, the elite also receive transfers in both periods $((1+\beta)X)$. Next, with probability $\mathcal{P}^S$ the Tswana stay in power after independence and received benefit B. Finally recall that σ is the cost of building the state.

The payoff from not building a state in these circumstances is,

$$V(NS,NC) = (1+\beta)r^{NS}\theta K + A\mathcal{R}(L^{NS}) - \tau L + \beta\mathcal{P}^{NS}\left(B + A\mathcal{R}(L^{NS})\right) \tag{8}$$

where $r^{NS} = F_K(K,0,L^{NS})$. When a state has not been created, no public goods are ever supplied and the discounted sum of capital income $(1+\beta)r^{NS}\theta K$, the first term in (8) is less than that in (7). This follows from the fact that $F_K(K,0,L^{NS}) < F_K(K,G,L^S)$. However, in the absence of colonization, the Tswana get to keep the resource rents $A\mathcal{R}(L^{NS})$ in the first period, make transfers to voters τL and stay in power with probability $\mathcal{P}^{NS} > \mathcal{P}^S$. When in power they get not only the benefit B but also the resource rents $A\mathcal{R}(L^{NS})$.

In this case, formally, the Tswana find it optimal to create a state if $V(S,NC) \geq V(NS,NC)$ which implies,

$$(1+\beta)\left(\left(r^S - r^{NS}\right)\theta K + X\right) - \left(1+\beta\mathcal{P}^{NS}\right)A\mathcal{R}(L^{NS}) + \tau L + \beta\left(\mathcal{P}^S - \mathcal{P}^{NS}\right)B \geq \sigma. \tag{9}$$

Since $r^S - r^{NS} > 0$ it is immediate that the left side of (9) is increasing in θ. The greater the share of capital owned by the Tswana elite, the more they benefit from the public goods which only a state can provide, and, other things equal, the more attractive it is to create a state. Since $\mathcal{P}^S - \mathcal{P}^{NS} < 0$ however, the greater is B, the benefit from power, the less attractive it is to create a state. Though a rational-legal state may provide public goods, it also reduces the discretion that leaders have for allocating spoils in exchange for support. The more attractive are the benefits from power, the more alluring is the prospect of being able to use such clientelism to increase the chances of maintaining power in the second period. What about the effect of A? The derivative of the left side of (9) with respect to A is

$$(1+\beta)\,\mathcal{R}(L^{S})-\left(1+\beta\mathcal{P}^{NS}\right)\mathcal{R}(L^{NS}) \tag{10}$$

where we have used the fact that from the government budget constraint $X=A\mathcal{R}(L^{S})-G$, and also the fact that the envelope theorem allows us to ignore terms in $\frac{dL}{dA}$ (the indirect effects of changes in A on the allocation of labor). Now $\mathcal{R}(L^{S})<\mathcal{R}(L^{NS})$ but $(1+\beta)>\left(1+\beta\mathcal{P}^{NS}\right)$ since $\mathcal{P}^{NS}<1$. Hence from (10), a priori, increases in A may either increase or reduce the incentive to form a state. On the plus side, as A increases, with G fixed, the marginal effect is to increase transfers once a state has been created. In the second period the Tswana elite can benefit from this, even if they are out of power. In a sense, creating a legal-rational state becomes like an insurance policy since it guarantees a flow of resource rents to those both in and out of power. The greater are these rents, the more attractive it may be to create a state to guarantee part of these rents. On the negative side, higher A increases the benefit to neo-patrimonialism since in this case the resource rents become the personal income of the Tswana when they in power. The attractiveness of neo-patrimonialism is reduced by the fact that the Tswana may lose power in the second period.

Now consider the case where (4) holds and there is no way to deter the British Empire from colonizing Botswana. The payoff from state building when colonization takes place is,

$$V(S,C)=\left(r^{NS}+\beta r^{S}\right)\theta K+\beta X+\beta\mathcal{P}^{S}B-\sigma$$

where note that since Britain has no incentive to allocate any resources to providing public goods, even if there is a state, no public goods are provided during the colonial period.

The payoff from not building a state in the face of certain colonialism is,

$$V(NS,C)=(1+\beta)r^{NS}\theta K-\tau L+\beta\mathcal{P}^{NS}\left(B+A\mathcal{R}(L^{NS})\right)$$

We have that $V(S,C)\geq V(NS,C)$ if,

$$\beta\left(r^{S}-r^{NS}\right)\theta K+\beta X-\beta\mathcal{P}^{NS}A\mathcal{R}(L^{NS})+\tau L+\beta\left(\mathcal{P}^{S}-\mathcal{P}^{NS}\right)B\geq\sigma. \tag{11}$$

The comparative statics of this condition are identical to those we discussed in the case of (9) above.

The final case is where defensive modernization deters colonialism. Here the payoffs from the different strategies are,

$$V(S,NC) = (1+\beta)\left(r^{S}\theta K + X\right) + \beta\mathcal{P}^{S}B - \sigma$$

The payoff from not building a state is,

$$V(NS,C) = (1+\beta)r^{NS}\theta K - \tau L + \beta\mathcal{P}^{NS}\left(B + A\mathcal{R}(L^{NS})\right)$$

We have that $V(S,NC) \geq V(NS,C)$ if,

$$(1+\beta)\left(\left(r^{S}-r^{NS}\right)\theta K + X\right) - \beta\mathcal{P}^{NS}A\mathcal{R}(L^{NS}) + \tau L + \beta\left(\mathcal{P}^{S}-\mathcal{P}^{NS}\right)B \geq \sigma. \quad (12)$$

From (9), (11) and (12) we can define three critical values for the cost of state formation. These are denoted $\sigma^{NC}(\theta,A,B)$, $\sigma^{C}(\theta,A,B)$, and $\sigma^{DM}(\theta,A,B)$, and are derived respectively by assuming that (9), (11) and (12) hold as equalities. The interpretation of these critical values is as follows; for instance, if $\sigma \leq \sigma^{DM}(\theta,A,B)$ then the Tswana build a state in the case where building it avoids colonization (we assume that a state is built if there is indifference), while if $\sigma > \sigma^{DM}(\theta,A,B)$ then it is too costly to build a state.

It is easy to check the relationship between these critical values. Note first that $\sigma^{DM}(\theta,A,B) = \sigma^{NC}(\theta,A,B) + A\mathcal{R}(L^{NS})$, hence $\sigma^{DM}(\theta,A,B) > \sigma^{NC}(\theta,A,B)$ which implies that when defensive modernization is effective the Tswana are prepared to build a state when it is more costly. This shows that the threat of colonialism, if it can be deterred by modernization, can lead to state formation which otherwise would not have occurred. This will be true if $\sigma \in (\sigma^{NC}(\theta,A,B), \sigma^{DM}(\theta,A,B)]$.

Next note that $\sigma^{DM}(\theta,A,B) - X - \left(r^{S}-r^{NS}\right)\theta K = \sigma^{C}(\theta,A,B)$, hence $\sigma^{DM}(\theta,A,B) > \sigma^{C}(\theta,A,B)$. Finally,

$$\sigma^{NC}(\theta,A,B) + A\mathcal{R}(L^{NS}) - X - \left(r^{S}-r^{NS}\right)\theta K = \sigma^{C}(\theta,A,B),$$

establishing $\sigma^{NC}(\theta,A,B) > \sigma^{C}(\theta,A,B)$ if $A\mathcal{R}(L^{NS}) - X - \left(r^{S}-r^{NS}\right)\theta K < 0$. The sign of this is ambiguous. On the one hand, if colonialism comes, the colonial power expropriates the resource rents and this actually encourages state formation since being able to grab the rents oneself is an incentive not to build a state. On the other hand, if colonialism comes, then no resources are allocated to public goods during the colonial period and this causes a loss in the returns to capital and thus a fall in the incentive to build a state. A priori one cannot say which of these effects dominates. Note however that on the one hand the larger is θ, the more likely it is that $\sigma^{NC}(\theta, A, B) > \sigma^{C}(\theta, A, B)$, while on the other hand the greater is A, the more likely is the reverse. During the colonial period in Botswana there was a situation with high θ and low A and thus we proceed by assuming that $\sigma^{NC}(\theta, A, B) > \sigma^{C}(\theta, A, B)$.

Therefore we find the inequalities,

$$\sigma^{DM}(\theta, A, B) > \sigma^{NC}(\theta, A, B) > \sigma^{C}(\theta, A, B).$$

We can now sum up the nature of equilibria in the model with the following proposition.

Proposition: (1) If $c > c^{NS}(A, L)$ then colonialism does not occur and a state forms if $\sigma \leq \sigma^{NC}(\theta, A, B)$. (2) If $c \in (c^{S}(A, L), c^{NS}(A, L)]$ then if $\sigma > \sigma^{DM}(\theta, A, B)$, no state is formed and colonialism occurs, while if $\sigma \leq \sigma^{DM}(\theta, A, B)$, a state forms and colonialism is deterred. (3) If $c \leq c^{S}(A, L)$ then colonialism occurs and a state forms if $\sigma \leq \sigma^{C}(\theta, A, B)$.

The main interest of the Proposition is in understanding the comparative statics of the critical values of the costs of colonialism or state formation. Before summing these up let's consider the implications of population density for the model.

C. Population Density

It is interesting to investigate the implications of population density for state formation in the context of this model. We showed already that higher L increases the inducement to colonize a country. What about the effects of L on the decision to form a state? This is easily seen by differentiating the cut-off levels for σ. There are two types of effects. On the one hand, since all factors of production are complementary, higher L drives up the rate of return on capital and this makes it more attractive to build a state and provide public goods. On the other hand, higher L generates more resource rents which can be expropriated by the elite in the absence of a state. These countervailing effects cannot in general be signed. However, even if the productivity effect dominates, this does not imply that higher population density promotes state formation. Indeed, since the benefits of colonialism are increasing in L higher population density can induce colonialism when otherwise it would not have taken place and this can stunt state formation when $\sigma \in \left(\sigma^{C}(\theta, A, B), \sigma^{NC}(\theta, A, B)\right)$.

D. Lessons from the Model

Overall the model captures some of the distinctive features of state formation in Botswana and provides some interesting perspectives on the current literature. The main messages are;

- The threat of colonialism may promote state formation when it otherwise would not have happened (this happens when $\sigma \in \left(\sigma^{NC}(\theta, A, B), \sigma^{DM}(\theta, A, B)\right)$).
- When defensive modernization is not viable, colonialism may abort the formation of a state which would otherwise have arisen (this happens in the case where $\sigma \in \left(\sigma^{C}(\theta, A, B), \sigma^{NC}(\theta, A, B)\right)$).
- High population density may promote state formation in the absence of colonialism (though even this is not certain) but, by making colonialism more attractive it can induce colonialism that would otherwise not have occurred, potentially blocking state formation.
- High natural resource endowments do not necessarily decrease the attractiveness of state formation. First, elites may be encouraged to build a state to lock-in a part of the rents. Second, greater resources do encourage colonialism but this in general has ambiguous effects on the incentive to form a state - it may block it if $\sigma \in \left(\sigma^{C}(\theta, A, B), \sigma^{NC}(\theta, A, B)\right)$ but it may encourage it in cases where $\sigma \in \left(\sigma^{NC}(\theta, A, B), \sigma^{DM}(\theta, A, B)\right)$.
- The lower are the stakes from power (captured by B) the more likely is state formation.

These results seem to fit the case of Botswana well, but are at odds with much of the conventional wisdom. First they suggest a very important role for colonialism in understanding the pattern of state formation in twentieth century Africa. Second, they suggest that the effects of population density on state formation are conditional on colonialism and that high population density can lead to aborted state formation. Third, they show that natural resource wealth is not necessarily bad for state formation and again the interaction with colonialism is important. Finally, the results suggests a neglected role for indigenous political institutions for instance the limited powers of the Tswana chieftainship.

V. Conclusion

In this paper we have accepted the conventional, and convincing, wisdom that the key to the economic success of Botswana has been good governance. Admittedly, Botswana was fortunate to discover vast diamond reserves, the richest in the world, and these have played an important role. Yet exploiting the diamonds rationally and allocating the resulting rents to developing the economy has been a major achievement. Moreover, even before the diamond wealth came on stream, it is clear that Botswana had moved onto a track radically different in nature from most sub-Saharan African countries. We therefore focused on why governance has been good in Botswana.

In our view, good governance does not happen by chance, but rather results from a process of institutional creation, in particular state formation. In the starkest terms, one can follow Max Weber in distinguishing "patrimonial" from "rational-legal" state institutions. Good governance is associated with the transformation of state institutions from patrimonialism to the rational legal form. Such a perspective chimes with the conventional wisdom about economic decline in Africa which attributes it to personalistic or neo-patrimonialistic political strategies of control. Such strategies arise in the context of a patrimonial state and indeed are complementary to it.

Why therefore did rational-legal state institutions evolve in Botswana? We believe this to be the key question. Our reading of the evidence suggests this happened because of a juxtaposition of circumstances. Firstly, traditional Tswana political institutions integrated non-Tswana groups into the polity and these pre-colonial societies had genuine states, though perhaps not nation states. The Tswana were not unique in this but they were unique in the sense that Botswana was the only African nation which at independence was so dominated by such a homogenizing set of political institutions. In neighboring Zambia among the Barotse, and in Bophutatswana, these institutions collapsed under the pressures of colonial rule. Second, facing the onslaught first of the Boers, next of the British South Africa Company, and finally of the Union of South Africa, Tswana political elites attempted to maintain a good measure of independence by defensively modernizing. Finally, the political elites in both local states before independence and the national state at independence heavily invested in the country's most important economic activity, ranching. This gave them a strong incentive to promote rational state institutions and private property. Moreover, the integrative nature of traditional Tswana political institutions reduced the likelihood that alternative groups would aggressively contest the power of the new unitary state.

The argument that we provided is in many ways inconsistent with an emerging consensus on state formation in Africa. Scholars such as Herbst (2000) and Bates (2001) have argued that patterns of state formation and the prevalence of patrimonial institutions reflects certain underlying features of the socio-economic reality of Africa. These are, foremost, low population density and factor endowments. Our reading of the Botswana evidence and the analysis of the model we developed are not really consistent with these emphases.

We have sought in this essay to provide a coherent explanation for the uniqueness of Botswana. We believe that the value in this is in moving scholars towards a more nuanced theory of state formation and institutional development in Africa. But what lessons are there for other countries? Since many of the factors we have isolated lie deep in history, they provide no simple message for Africans intent on building their own states. Yet there are some interesting and simple lessons. It is significant in Botswana that there has never been an independent development project administered by a foreign doner agency rather than coming under the strict control of a line ministry. All such projects are integrated into the development plans of the state. One could argue that this is an outcome, not a cause of state capacity, yet it seems plausible that in Botswana this has been significant in bolstering and developing state capacity.

Botswana's historical uniqueness lies in its organic growth of a new national order out of the contradictions of the old 'tribal' order in the districts. The contradictions of progressive but autocratic local chieftainship gave birth to the political elite that adopted liberal democracy at a national level. The maturation of this national movement was delayed by the perceived impracticality, because of regional politics in Southern Africa and the lack of a viable economic base in prospect for a national state, of eventual political independence until around 1960. But the delay served to give the national political elite a key role together with late colonial administrators in setting up the new unitary state, and the political elite was further shaped and conditioned into responsible government by that process (see Fawcus and Tilbury, 2000). Other newly independent African countries inherited essentially aline state institutions created by late colonial adiminstrators. In Botswana, by contrast, the ruling elite had played a much greater role in creating the new state structure.

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Table 1: Comparative Development – Some Facts

	GDP per-capita 1998 US $	GDP per-capita 1998 PPP $	Avg. Growth rate GDP per-capita 1965-98	% Labor Force in Agri 1990	% Total Pop. Urban 1998	Primary Enroll. Rate 1997	Secondary Enrollment Rate 1997	Life Expectancy at Birth 1997
World	4,890	6,300	1.4	49	46	87.6	65.4	66.7
Sub-Saharan Africa	510	1,440	-0.3	68	33	56.2	41.4	48.9
Low Income Countries	520	2,170	3.7	68	30	60.4	31.2	51.7
East Asia and Pacific	990	3,280	5.7	68	34	97.8	58.3	70.0
Latin America and Caribbean	3,860	6,340	1.3	25	75	93.3	65.3	69.5

Source: Columns 1-5 World Development Indicators 2000, Columns 6-8 Human Development Report 1999, in this case Low Income is the LDCs, East Asia and Pacific is South-East Asia and Pacific.

Table 2: Botswana in Comparative Perspective

	GDP per-capita 1998 US $	GDP per-capita 1998 PPP $	Avg. growth rate of GDP per-capita 65-98	% Labor Force in Agri. 1990	% Total Pop. Urban 1970	% Total Pop. Urban 1998	Prim. Enroll Rate 1997	Second Enroll Rate 1997	Life Expectancy at Birth 1997
Botswana	3,070	5,796	7.7	46	8	49	80	89	47
Zaire	110	733	-3.8	68	30	30	58	37	51
Côte d'Ivoire	700	1,484	-0.8	60	27	45	58	34	47
Ethiopia	100	566	-0.5	86	9	17	35	25	43
Ghana	390	1,735	-0.8	59	29	37	43	-	60
Lesotho	570	2,194	3.1	40	9	26	68	73	56
Zambia	330	678	-2.0	75	30	39	72	42	40
South Korea	8,600	13,286	6.6	18	41	80	99	99	72
Mauritius	3,730	8,236	3.8	17	42	41	96	68	71
Singapore	30,170	25,295	6.4	0	100	100	91	75	77

Source: Columns 1-6 World Development Indicators 2000, Columns 7-9 Human Development Report 1999.

Table 3: Estimates of Governance – Sub-Saharan Africa

	Voice and Accountability	Political Stability	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Mauritius	1.27	1.12	0.76	0.41	1.00	0.49
South Africa	1.17	0.07	0.25	0.07	-0.05	0.35
Botswana	0.8	0.71	0.83	1.02	0.68	0.89
Senegal	0.12	-0.68	0.16	-0.38	-0.13	-0.39
Ghana	0.02	-0.11	-0.06	0.24	-0.08	-0.28
Tanzania	-0.07	-0.34	-0.43	-0.02	0.16	-0.92
Malawi	-0.14	0.03	-0.77	0.28	-0.36	0.10
Zambia	-0.17	-0.42	-0.75	0.49	-0.39	-0.87
Nigeria	-0.44	-1.36	-1.0	-0.39	-1.13	-1.05
Kenya	-0.68	-0.83	-0.76	-0.26	-1.21	-1.11
Uganda	-0.79	-1.31	-0.32	-0.2	-0.65	-0.92
Cameroon	-0.82	-0.13	-0.40	0.05	-1.02	-1.11
Ethiopia	-0.85	-0.55	-1.01	-0.71	-0.24	-0.40
Zimbabwe	-0.9	-1.25	-1.03	-1.66	-0.94	-1.08
Côte d'Ivoire	-1.19	-0.95	-0.81	-0.30	-0.54	-0.71
Angola	-1.26	-1.98	-1.31	-1.39	-1.49	-1.14
Burundi	-1.35	-1.54	-1.14	-0.59	-1.07	-1.40

Table 4: Estimates of Governance – Some Comparisons

	Voice and Accountability	Political Stability	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Argentina	0.57	0.55	0.18	0.25	0.22	-0.36
Belgium	1.24	0.87	1.29	0.58	1.34	1.05
Brazil	0.53	0.47	-0.27	0.13	-0.26	-0.02
Colombia	-0.41	-1.36	-0.38	0.02	-0.77	-0.39
France	1.11	1.04	1.24	0.59	1.22	1.15
India	0.66	-0.05	-0.17	-0.16	0.23	-0.39
Japan	1.03	1.20	0.93	0.64	1.59	1.20
Singapore	0.11	1.44	2.16	1.82	1.85	2.13
Spain	1.15	1.01	1.57	1.08	1.12	1.45
United Kingdom	1.46	1.10	1.77	1.32	1.61	1.86
United States	1.24	1.18	1.58	1.19	1.58	1.45
Vietnam	-1.29	0.44	-0.30	-0.50	-0.57	-0.76

Table 5: Transparency International Corruption Perceptions Index 2002

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Country Rank	Country	CPI 2002 score	Surveys used	Standard deviation	High-low Range
20	Belgium	7.1	8	0.9	5.5 - 8.7
	Japan	7.1	12	0.9	5.5 - 7.9
	Spain	7.1	10	1.0	5.2 - 8.9
23	Ireland	6.9	8	0.9	5.5 - 8.1
24	Botswana	6.4	5	1.5	5.3 - 8.9
25	France	6.3	10	0.9	4.8 - 7.8
	Portugal	6.3	9	1.0	5.5 - 8.0
28	Namibia	5.7	5	2.2	3.6 - 8.9
36	South Africa	4.8	11	0.5	3.9 - 5.5
40	Mauritius	4.5	6	0.8	3.5 - 5.5
	South Korea	4.5	12	1.3	2.1 - 7.1
50	Ghana	3.9	4	1.4	2.7 - 5.9
59	Ethiopia	3.5	3	0.5	3.0 - 4.0
66	Senegal	3.1	4	1.7	1.7 - 5.5
68	Malawi	2.9	4	0.9	2.0 - 4.0
71	Cote d'Ivoire	2.7	4	0.8	2.0 - 3.4
	Tanzania	2.7	4	0.7	2.0 - 3.4
	Zimbabwe	2.7	6	0.5	2.0 - 3.3
89	Cameroon	2.2	4	0.7	1.7 - 3.2
93	Uganda	2.1	4	0.3	1.9 - 2.6
96	Kenya	1.9	5	0.3	1.7 - 2.5
98	Angola	1.7	3	0.2	1.6 - 2.0
	Madagascar	1.7	3	0.7	1.3 - 2.5
101	Nigeria	1.6	6	0.6	0.9 - 2.5

Explanatory notes

A more detailed description of the CPI 2002 methodology is available at http://www.transparency.org/cpi/index.html#cpi or at www.gwdg.de/~uwvw/2002.html