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Where did the Miracle Come From? Exploring Institutional Formation in Botswana

The African Continent is multifaceted. It includes countries such as the Sudan, where deep poverty and misery occur in a framework of a seemingly ever-lasting civil conflict, and, at the same time, countries such as Botswana, which has reached the highest rate of economic growth in the world. According to the data available, Sub-Saharan Africa is the only region in the world that did not grow during the second half of the twentieth century (Gelb, 2000). This unfortunate situation has motivated several social scientists to explore the experiences of a few African countries that seem to be exceptional with the purpose of identifying the secret formula for growth in the continent. This is the case of Botswana. The economic performance of Botswana, however, is the result of an amalgamation of elements that include leadership, coincidence of economic interests, and particular characteristics of the country (such as ethnic homogeneity). This paper does not present the magic formula, but contributes to understand how the traditional (and cultural) structure of economic life in Botswana affected the implementation of macroeconomic policies (and the existence of institutions) that have been regarded as key in the performance of the country (Acemoglu *et al.*, 2003)[1], and fiscal and monetary policies (Beaulier, 2003) in particular.

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Large fiscal deficits can have negative consequences for short and long-term growth (Baldacci *et al.*, 2003), which is evidenced by the recent crises in public finance in emergent markets such as Argentina. In Botswana, coordinated monetary and fiscal policies and restrains on spending, have contributed to the accumulation of reserves that have been a key

[1] Acemoglu, Johnson and Robinson (2003) rightly identified important elements that have contributed to Botswana's social and economic improvement: "Our conjecture is that Botswana's institutions reflect a combination of factors. These include tribal institutions that encouraged broad-based participation [such as the *Kgotla*] and constraints on political leaders during the precolonial period; only limited effect of British colonization on these precolonial institutions because of the peripheral nature of Botswana to the British Empire; the fact that upon independence, the most important rural interests, chiefs and cattle owners, were politically powerful; the income from diamonds, and finally, a number of important and farsighted decisions by the post-independence political leaders, in particular Seretse Khama and Quett Masire" (p. 84).

element to palliate the volatility of the country's revenues, which have been recently generated by the diamond industry. My field research suggests that there is a generalized mystique shared by many public servants regarding fiscal frugality. Direct interviews suggest that public servants are concerned with the harmful consequences of overspending and budget deficits.[2] This was summarized by Dr. Clark Leith when he referred to the current government party (the BDP), and the incoming elections at the time:

> The BDP has almost certainly got a very long time horizon. And so even if they are at risk for loosing the election this year, and nobody has indicated that likely to happen, but even if they were, their time horizon would suggest that they are looking at the long term, they have a discount rate much like any other political party in a committed democracy.[3]

A senior officer of the Central Bank, regarding diamond revenues, supports this point:

> So they [the Twsana people in general, and the authorities in particular] managed to avoid these big white elephants … big national airports and jumbo jets … They said right from the very beginning, "we are going to use this money, put it into a fund and it would be managed for development purposes only." And then any recurrent spending budgets would have to be self-financed. In other words, if they built a hospital out of the funds, that they would have to have the income to be able to maintain it. So, they did not do anything unless they were sure they had the income and the means of running it on an ongoing base.[4]

Another official expressed a similar opinion:

> Since the beginning all the mineral revenues were meant to be used for investment, not current spending. The aim has been to replace one asset with another asset. The mineral assets that are underground instead of being used for current consumption should be used to purchase other assets: physical assets, such as roads, school, and clinics, etc.; financial assets in the form of foreign exchange reserves; and investment assets, like human capital to have better educated and healthier people.[5]

Although there is agreement in the literature that attributes Botswana's economic performance to the implementation of effective policies, little is known about the origin of such policies and of how these policies became institutionalized among public servants during the post-colonial period. An important exception can be found in Poteete and Marroquín (2005). They propose that the origin of current institutions is the overlapping interests of the government and cattle owners. This coincidence of interests has been instrumental in the avoidance of over-appreciation of the national currency (the real exchange rate), which is a requirement to avoid the so called Dutch Disease. In this article I build on this idea.

Tiebout (1956) proposed that economic agents could move from one state to another to flee from excessive fiscal burdens. This implied that for states to

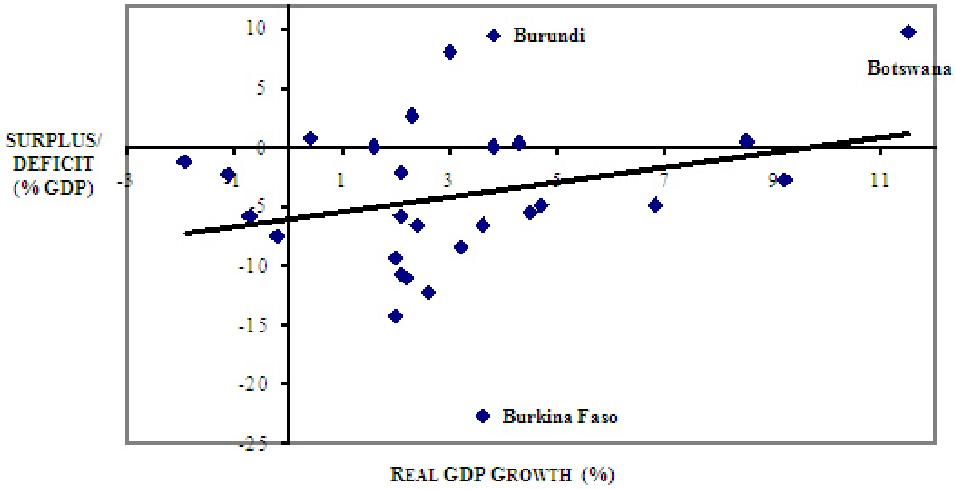
[2]Interviews conducted at the Department of Corruption and Economic Crime (Gaborone, Botswana, July 2004).

[3]*ibid*.

[4]*ibid*.

[5]*ibid*.

Figure 1 – REAL GDP GROWTH VS GOVERNMENT SURPLUS/DEFICIT (1975-84) SUB-SAHARAN AFRICAN COUNTRIES



keep their taxable base they have to implement adequate fiscal policies, such as reasonable tax rates (including the "inflation tax") that do not encourage individuals to move out of their jurisdiction looking for better tax treatments. Based on Tiebout's idea, I develop a simple game-theoretic model to shed light on the fiscal policy path that has been followed by Botswana's authorities. For clarity, in some instances I also include and discuss data from Ghana as a suitable comparison country. The model explains the formation of institutions regarding two elements: 1) the movable characteristic of assets in pre- and post-colonial Botswana; and 2) the overlapping economic interests of the government and the private sector. The overlapping of interests between the social elites and the bureaucracy was fundamental in the creation of a sound institutional capacity (Poteete and Marroquín, 2005). The coincidence of interests suggests why the government implemented policies that favor the private sector elites, which had positive spill-over effects for the whole country.

The two elements reinforce each other and have contributed to create the current mystique, widespread among Botswana officials, who tend to avoid government deficits.

FISCAL DISCIPLINE AND GROWTH

Fiscal deficits and economic growth are self-reinforcing (Easterly and Schmidt-Hebbel, 1993). This means that higher rates of economic growth are usually associated with budget surpluses. Although a quantitative relationship does not mean causality, as Figure 1 shows, there is a positive association between the result of the budget and the real growth of the economy in Sub-Saharan Africa.[6] Between 1975 and 1984 none of the countries in the sample had negative growth and government surpluses; budget

[6]The source for Figure 1 is World Bank (2005).

surpluses in all cases where related with positive real growth rates.

FISCAL CONDUCT IN BOTSWANA

In terms of its rate of growth, and the government surplus as percentage of GDP, Botswana stands out as exceptional. High rates of growth have been associated with budget surpluses. This result illustrates the effectiveness of macroeconomic policies that have been discussed in the literature on Botswana (Acemoglu *et al.*, 2003; Poteete and Marroquin, 2005). There are different elements that might account for this rare result. The absence of predatory practices is usually associated with the figure of the first president of the republic, Seretse Khama, who, according to several civil servants, set the initial path towards good management and low corruption.[7] This culture of frugality has been present in Botswana since independence from Britain in 1965, and helps explain Botswana's economic performance compared with other African countries (see Table 1).[8]

TABLE 1 — PER CAPITA GNP IN FIVE AFRICAN COUNTRIES

	Annual Growth Rate	
	1960-80	1980-91
Ghana	-0.8	-0.3
Cote d'Ivoire	2.8	-4.6
Nigeria	4.2	-2.3
Kenya	3.1	-0.3
Botswana	**9.9**	**5.5**

Source: Samatar (1999), p. 2.

MODEL

To understand fiscal frugality in Botswana a simple model based on a decision tree is set up. Two arguments justify the use of this model: 1) Tiebout's theory of state competition, and 2) the fact that the main assets in Botswana before independence were cattle, which is a movable commodity. In fact, cattle have been the main agricultural assets of the inhabitants of Botswana since pre-colonial times. Isaac Schapera, an anthropologist who studied the Tswana People, indicates in his classic *A Handbook of Tswana Law and Custom* that before the coming of the Europeans cattle were the most important medium of exchange, being accepted more readily in barter than any other commodity. They constituted the *bogadi* paid to a woman's family at marriage. They were also the most suitable objects of sacrifice to the ancestral spirits, and so the means of securing supernatural protection and guidance. And probably most importantly, the mere possession of cattle was in itself a source of status, for a man's wealth was estimated by the size

[7]Set of interviews conducted with retired civil servants in Gaborone, Botswana, June and July 2004.

[8]Before independence, however, there is evidence that without grants from the U.K. and the Colonial Development and Welfare Office, the government would have incurred in high deficits (Republic of Botswana, 1966, p. 8, cited in Samatar, 1999).

of his herds, and a wealthy man was generally respected and able to exercise much influence in tribal affairs. For all of these reasons, cattle were sought after more eagerly than any other commodity, and their slaughter was normally reserved for festive or other special occasions, the importance of which was enhanced by the magnitude of this sacrifice (Schapera, 2004, p. 214).[9]

The game-theoretical model presented below can best be illustrated if we consider some similarities and differences between Botswana and Ghana.

BOTSWANA AND GHANA

At independence, an impartial observer would have envisioned higher economic growth for Ghana than for Botswana. The actual results, however, have been quite the opposite. In the case of Botswana, the different economic indicators, especially the data on economic growth, have been very favorable, especially since the mid-1980's (Good, 2000, criticizes this result). Ghana's economy, on the other hand, shows economic statistics that have not had a significant improvement since the mid-1970's. Comparative fiscal performance in recent decades is as follows (government surplus/deficit, excluding grants, as % of GDP):

	Botswana	Ghana
1975-84	– 0.2	– 5.9
1985-89	18.0	– 0.4
1990 to most recent	10.7	– 2.5

(Source: WDI, 2004)

At the time of independence, members of Botswana's dominant class were largely from chiefly families who were among the largest traditional cattle owners. Indeed, while land was collectively owned, cattle were privately owned, and the chiefs and aristocracy were large owners. Samatar (1999, pp. 69-67) shows that as many as two-thirds of members of the National Assembly in the early years were "large or medium size cattle owners". This group was closely affiliated with the colonial administration and a small number of white settlers. This class has been able to dominate public life, imposing a capitalist development strategy on society. In fact, Samatar suggests that the cohesion of the dominant class and its single-minded pursuit of economic growth is one of the features that distinguish this Botswana class from their counterparts in the continent.

Cattle have the important characteristic of being movable, which means that if overtaxed, cattle owners have freedom of movement to migrate and relocate in a different geographic area where a lower fiscal burden exists. This paper hypothesizes that a political leader (probably the chief of the tribe) concerned about this possibility, would set tax rates that were lower than the cattle owners' transaction cost of moving plus the tax rates in the new location. This sets a constraint on spending. Given these incentives the tax rates fixed were relatively lower in Botswana than they were in other countries, such as Ghana. This dynamic might explain the origin of Botswana's fiscal conduct.

Indeed, in the case of Ghana, the political leader confronted a different set of incentives. As opposed to Botswana, the main agricultural asset in Ghana was cocoa, which is not easy movable, therefore

[9] Schapera's research in the Bechuanaland Protectorate lasted from 1929 to 1950.

over-taxation was more feasible for Ghanaian political leaders (Figure 2).

The payoffs are defined as the income of the political leader of the region, and the income of the cattle owner respectively. The income is net of taxes, for example ψ_{co} = *income**(1 – r)*, where *r* represents that tax rate (which includes an inflation tax). Before setting the tax rate, political leaders anticipate that under over-taxation, a higher *r,* cattle owner will earn a lower (real) income if they stay in the region compared to the income they would earn in a different geographic area ($\psi_{co} > \delta_{co}$), therefore over-taxation would erode the public revenues. Similarly, if political leaders charge a moderate tax they expect the cattle owners to earn a higher income if they stay ($\varphi_{co} > \gamma_{co}$), and pay their taxes. Therefore, public revenues under a moderate tax regime are higher than those under over-taxation ($\varphi_{pl} > \delta_{pl}$). The Nash equilibrium occurs when political leaders charge a moderate tax and cattle owners choose to stay.

On the other hand, in the case of Ghana, since the transaction costs of moving were relatively higher than in Botswana, the cocoa farmers did not have a feasible exit option, and over-taxation was then more likely to occur. This suggests that the Nash equilibrium in countries such as Ghana occurs when the political leaders overtax and the cocoa farmers stay. Here it is suggested that over-taxation was avoided because: 1), the political leaders and cattle owners overlap[10]; and 2), the movable character of cattle. I suggest that

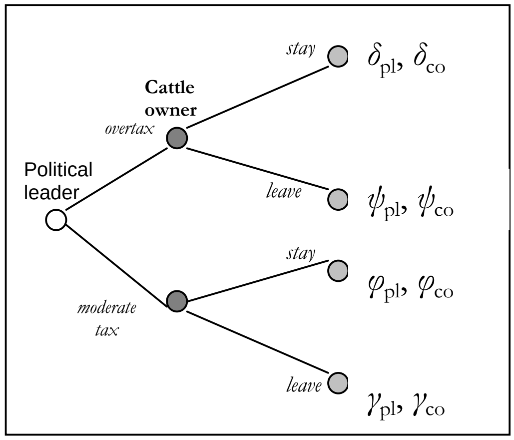


Figure 2: Decision tree of political leaders and cattle owners.

this combination was an important element that shaped the cultural pattern in the current macroeconomic management of Botswana, which has been considered necessary for economic success.

The game presented above suggests that there is a certain threshold (ρ) in the level of the tax rate beyond which an increase in the tax rate will induce cattle owners to migrate, and the public revenues to decrease. This threshold also existed in Ghana but at a much higher level. Indeed, taxation would have had to be very high to force cocoa owners to move to a different location and possibly adopt a new economic activity to make a living. In Botswana, the level of taxation was set at a level of equilibrium where the local government will reach higher levels of

[10]Samatar (1999, p. 70) lists the first three Parliament's members and shows their educational and economic status. In terms of wealth, twenty-seven were large or medium cattle owners, one had a small herd, and we know little about fourteen MPs (Samatar, 1999). After independence the public sector in Botswana expanded. Some of the enterprises that were created still dominate the economy. One of these was the Botswana Meat Commission, the entity in charge of meat exports to Europe. The commissioners where also cattle owners: twenty-five out of the fifty-two commissioners were very large, large, or medium cattle owners, and six were small owners (Samatar, 1999, p. 116).

public revenues (Figure 3). The non-movable character of cocoa probably explains the current taxation regime. Indeed, the cocoa export tax has always been much higher than optimal in light of Ghana's limited power in the world market (Leith, 2004). A relatively lower taxation in Botswana was encompassed by parallel administrative efforts that increased efficiency in the cattle industry. For example, the Bechuanaland Meat Commission created a secured market for all livestock owners and particularly the wealthy class.

The results of the model are in line with similar findings in Africa. Policies that benefit farmers are supplied not as the result of legislator's responses to electoral incentives, but by decision makers who have property rights in agriculture and who can themselves capture the benefits of a favorable policy environment (Bates 1983; Poteete and Marroquin 2005; Widner 1994). In the case of Kenya and Ivory Coast, for example, members of the government had important investments in the agricultural sector. As a result, price policies benefiting the farming sector were implemented. Widner (1994) and Bates (1983) identified a similar situation in Ghana.

The question that remains open is the interconnection between incentives and the role of good leadership. Our simple model suggests that in Botswana incentives and leadership were aligned in the same direction and were probably reinforcing each other. Furthermore, the model provides a rationale for the conduct of leadership in Botswana regarding fiscal frugality. Government officials have internalized this conduct, which has been instrumental in the formation of good leadership.

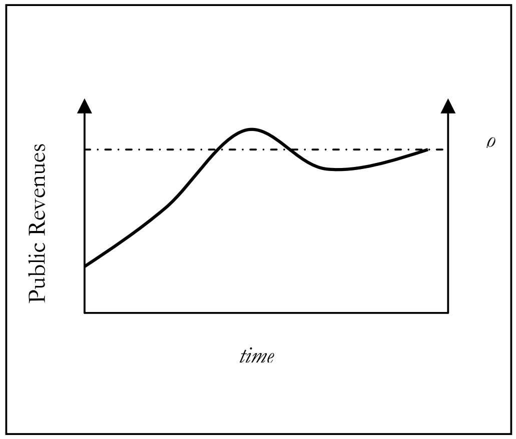
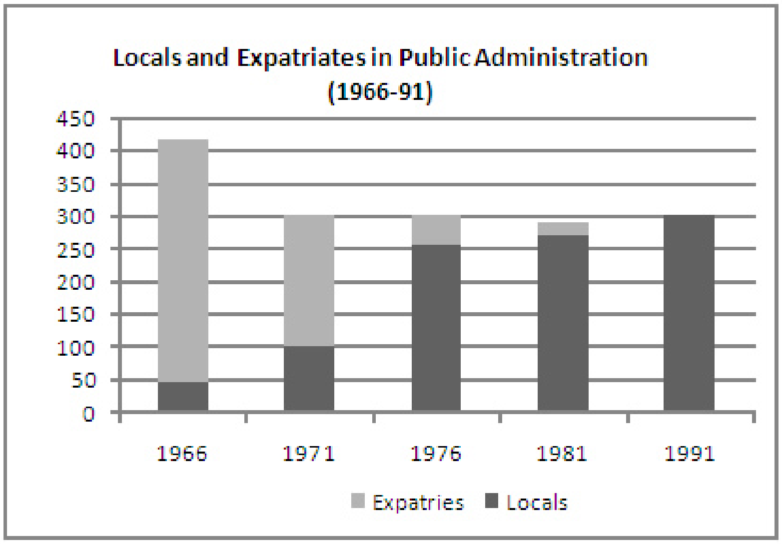


Figure 3: Evolution of public revenues at different levels of taxation.

There might be, however, some aspects of leadership that escape a rationalization in a simple game theory model. As explained by Robert Bates (1983), chiefs can play an agency role to coordinate the interests of the different sectors of the inhabitants of the village. Bates argues that this was the case among the Nuer of southern Sudan. In Botswana, Seretse Khama played that role: "1), for the peasants, he is a chief; 2), for the small group of educated Africans, he is one of them; 3), for the chiefs, he is one of them; and, 4), for the Europeans, by dress, language, behavior and experience, he has much in common with them" (Parsons, 1979; cited in Samatar, 1999). Seretse Khama's leadership cemented a national coalition, dominated by large cattle owners, European interests, and the small but growing African bureaucratic middle class.[11]

[11]For a comprehensive biography of Seretse Khama see Parsons, Henderson and Tlou (1995).

FIGURE 4 – LOCAL AND FOREIGN LABOR IN BOTSWANA



Source: Republic of Botswana, *Transitional Plan for Social and Economic Development* (Gaborone, 1966, p. 33); table in Samatar (1999), p. 64.

OTHER FACTORS THAT EXPLAIN BOTSWANA'S PERFORMANCE

Foreign aid. There are other factors that are the result of good policies and efficient management. One of those is the efficient utilization of foreign aid. Botswana managed foreign aid so as to benefit a broad base of the population. According to Van de Walle (2001):

> Thanks in part to a remarkably strong Ministry of Finance and Development, the government was able to institute and enforce a disciplined system in which all aid was carefully integrated into the indicative planning process. Since independence, the Ministry of Finance established that a development project must be in the national plan before the government spends on it; or a preliminary resolution must be passed, making explicit the estimates of the sums required for the projects. As a result, all aid activities become integrated into the planning and budgeting process, which enhances the prospects for project sustainability and local ownership. The result has been relatively effective foreign aid, which has contributed to a record of sustained economic growth that is unrivaled in the region (p. 206).

Foreign Human Capital. After independence, the local political leaders agreed on keeping the expatriates who wanted to stay in the country. This was a key decision, considering that local human capital was scarce. The secondary school system produced only sixteen students in 1965 capable of undertaking higher education.[12] Expatriates had the managerial expertise and international exposure that contributed to the overall good management. In fact, without expatriates the im–

[12] Republic of Botswana, *Transitional Plan for Social and Economic Development* (1966, p. 8; cited in Samatar 1999, pp. 64-65).

plementation of growth enhancing policies would have been much more difficult, or might have not happened at all.[13] The amount of expatriates in the administration however is declining as more local human capital is accumulated (Figure 4).

Other key factors that have been considered in the literature are: 1) a relatively homogeneous ethnic population, and the related absence of conflict and tribal fragmentation, 2) the relatively small population, 3) the absence of an indirect colonial rule, 4) a tradition of participatory democracy, and 5) the effective enforcement of the government's development plans, among others.

Finally, there are main concerns that Botswana is confronting in recent times. AIDs crises, and the increasing poverty and inequality in the rural areas are some of those (Good, 1992).

DISCUSSION

I have briefly described how the structure of the traditional economy based on cattle helps explain fiscal policy and economic success in Botswana. The main argument is that it was in the best interest of the tax authorities to charge low taxes, given the mobility of cattle (Tiebout, 1956). This conduct is nowadays part of the formal and informal institutional arrangements regarding fiscal policies in Botswana: formally,[14] because effective budget administration is required by law; and more importantly, informally, because government authorities have internalized that conduct, which has been instrumental for the consolidation of good leadership. In Botswana, however, there were additional factors that left a positive mark and complemented each other.

[13]A senior researcher of a Botswana research institution suggested this idea. The interview took place in Gaborone, Botswana, July 2004.

[14]Budget surpluses might be enhancing economic growth through strategic spending, which seems to be the case of Botswana (Good, 1992; Samatar, 1999).

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