Mozambican Aggregate Consumption and Domestic Saving: Evolution and Strategic Relevance

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Abstract

This article aims at sharing some results of research on the economic growth strategy in Mozambique using a simple but relevant and operational concept of growth strategy: how an economy grows, secures benefits and asserts itself, regionally and internationally, combining the main sources of financing/ investment, namely: domestic savings (private and public) and foreign savings (foreign direct investment, debt and foreign aid). When Mozambique gained its political independence in 1975, it was consuming more than it produced due to the contribution of foreign saving. In the following four decades, the external dependence of the Mozambican economy worsened significantly and the substitution of domestic savings by foreign saving reached unprecedented levels in the 1980s. However, in the first decade of the current 21st century, Mozambique registered an annual average growth rate of the real GDP per capita relatively high (5.3%) and for the first time in fifty years achieved a positive 10-year average of domestic saving, thanks to the emergence of domestic savings and accumulation of private capital. It was an unprecedented decade for its break with the previous trend; but so far, the new trend does not correspond to a substantial change in growth strategy to ensure that foreign savings become complementary rather than a substitute for domestic savings.

Keywords: consumption, economic growth strategy, domestic saving, foreign savings, and investment, Mozambique

Sumário

Este artigo visa partilhar alguns resultados de pesquisa sobre a estratégia de crescimento económico em Moçambique, usando um conceito de estratégia de crescimento simples, mas relevante e operacional: como cresce uma economia, conquista benefícios e afirmaração, regional e internacionalmente, combinando as principais fontes de financiamento para o investimento, nomeadamente: poupança interna (privada e pública) e poupança externa (investimento directo

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estrangeiro, dívida e ajuda externa). Quando Moçambique conquistou a independência política em 1975, consumia mais do que produzia, graças ao contributo da poupança externa. Nas quatro décadas seguintes a dependência externa da economia moçambicana piorou significativamente e a substituição da poupança interna pela poupança externa atingiu níveis sem precedentes na década de 1980. Contudo, na primeira década do corrente século XXI, além de registar uma taxa de crescimento média anual do PIB real per capita relativamente elevada (5,3%), pela primeira vez em cinquenta anos Moçambique conseguiu uma taxa média decenal positiva de poupança interna, graças à emergência da poupança e acumulação de capital privado. Foi uma década sem precedentes pela ruptura com a tendência anterior; mas por enquanto nada indica que a nova tendência corresponda a uma mudança substancial na estratégia de crescimento, no sentido da poupança externa se tornar complemento em vez de substituto da poupança doméstica.

Palavras-chave: consumo, estratégia de crescimento económico, poupança doméstica, investimento. Mocambique, poupanca externa.

Introduction

When Mozambique won its political independence in 1975, it was consuming more than it produced. According to the data from version 7.1 of the Penn World Table (PWT 7.1), real consumption per capita increased from I\$3 344 to I\$ 490 between 1960 and 1975, and production, measured by Gross Domestic Product (GDP) per capita, increased from \$I 309 to \$I 403. Consumption grew at an average annual rate of 2.4%, against a 1.8% growth rate of per capita GDP; a doubling of the surplus of consumption over GDP from 11% to 21% in the last decade and a half of the colonial period (Heston *et al.* 2012).

In the first decade of independence, the new sovereign state, in an attempt to correct previous economic policies, failed by opting for a radical and destructive revolutionary path instead of a progressive transformation – seeking to expand national wealth, encourage individual, community and private initiatives, as well as innovation and productive entrepreneurship. But the most ironic of that historical process was that, despite the radical changes implemented, the Mozambican state opted to maintain the core strategy of economic growth, when it was critical to have changed it, in order to promote the accumulation of domestic surplus and savings aimed at freeing Mozambique

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^{3. &#}x27;I\$' is the abbreviation of 'International dollar', a currency referring to the purchasing power parity based conversion rates (PPP rates) for 189 countries/territories over 1950–2010 (2005 as base year). This is to make the monetary amounts more readily comparable on data provided by the University of Pennsylvania's world table (Penn World Table) used in this work. These conversions use the Geary–Khamis method, more commonly known as the international dollar (I\$), which is a hypothetical unit of currency that has the same PPP that the U.S. dollar had in the United States at a given point in time, meaning that one US dollar equals one International Dollar (Heston et al. 2008).

from its chronic dependence on external savings.

This statement might seem surprising, but only for those who believed or still believe in the wizardry of revolutionary utopias (and there were a lot of them!), and above all, those who fail to grasp or refuse to admit that the essence of the growth strategy of the colonial period was maintained and indeed strengthened, to unprecedented levels, after independence. In other words, in spite of the new economic options being ideological and politically different from the colonial regime, in practice, after independence, the new regime kept the essence of the growth strategy intact in the sense that instead of trying to expand domestic savings and capital accumulation, it attempted to promote economic growth with foreign saving mobilised from an alternative economic system – the former socialist system – precisely the economic system that a few years later would eventually collapse and disappear.

This paper seeks to help clear up some misunderstandings, centring attention on the evolution and relevance of aggregate consumption and domestic savings in relation to the GDP and the gross national product (GNP); the latter corresponds to the total income of the country, regardless of where the means of production are located (inside or outside the country). We will return to these and other key operational concepts to better qualify and specify their content.

The paper draws inspiration from our ongoing research and a few recently published articles, including the one that forms part of the book *Desafios para Moçambique 2015 (Challenges for Mozambique 2015)* on the same topic (Francisco and Siúta, 2015; Francisco and Siúta, 2014b; Francisco and Siúta, 2014a). The results shared here are part of ongoing research carried out by the Research Group 'Poverty and Social Protection' of the Institute for Social and Economic Studies (IESE). It is an investigation into the economic and demographic foundations of social protection mechanisms in Mozambique, focusing mainly on the behaviour of consumption, savings, investment and economic growth (Francisco and Siúta, 2014b; Francisco and Siúta, 2014c; Francisco and Siúta, 2014a; Francisco, 2015).

The rest of the paper is organised in five sections. The second section deals with the key relevant concepts and operational definitions as well as briefly outlines the conceptual rationale behind the concept of 'growth strategy'. The third section formulates the methodological approach and identifies the main data source used in this paper. The fourth section comprises the core of the paper, articulating the conceptual rationale and empirical analysis applied to the data. In short, this section identifies and briefly characterises five main phases in the evolution of long-term Mozambican consumption and saving trends, covered by the data. Furthermore, the birth of the domestic savings in Mozambique occurred at the turn of the 20th century and is highlighted as the onset of an unprecedented decade, in the first decade of the current 21st century – the first decade with positive domestic savings in half a century. The paper ends with the fifth section, which draws some conclusive remarks and a set of inferences for reflection and future research.

Consumption and Saving: Concepts and Rationale

Just as it is important for a person or a family to have financial or non-financial reserves to cope with any eventuality in life, or simply to consume and invest them in the future, in macro terms, society also needs to create reserves, assets and wealth accumulation. Society creates reserves, refraining from consuming a portion of the national income, in this case represented by the GDP or the gross national product (GNP). This aggregate and residual reserve is called 'internal saving', or more commonly, 'domestic saving'.

Private saving is the sum of the share of income of individuals and companies that is not consumed in a given period. It results from the savings of three main protagonists: individuals, families and businesses (including private banks). In turn, domestic saving is the sum of private and public saving or the government's. The latter is obtained by the difference between the revenues of the State and other public entities (taxes, fee earnings, capital gains and others). It is represented by the surplus or deficit, depending on whether the outcome is positive or negative. But overall, in a closed or in the overall world economy, investments are equal to savings. In turn, if the public sector or government 'dis-saves' or runs deficits, it takes away potential savings from private investments, which ultimately increases productivity, produces jobs and generates growth (Bresser-Pereira and Gala, 2007, pp.6-10; Dornbusch *et al.*, 1998, pp.298-314; Figueiredo *et al.*, 2005; Oliveira *et al.*, 1998; Ramos, 2013).

Besides the internal or domestic saving, total or national saving integrates another source called 'foreign saving'. Foreign saving is justified in at least two situations: when domestic saving is insufficient or even non-existent, as has happened in Mozambique, or to expand the productive capacity beyond the financial resources provided by domestic saving. It is roughly obtained by the current account deficit of the balance of payments (the algebraic sum of the trade balance, balance of services and unilateral transfers) resulting from the flow of capital to finance the current account deficit through loans, grants, foreign direct investment (FDI), market investment, and other sources of external resource inflows (Bresser-Pereira and Gala, 2007; Dornbusch *et al.*, 1998, pp.298-314; Oliveira *et al.*, 1998).

In addition to the key operational concepts and definitions mentioned above, it seems useful to make clear the rationale behind the concept of 'growth strategy' put forward at the beginning and used throughout this paper, by making explicit some criteria beforehand (Francisco, 2015). First, the concept of 'strategy' is understood here as an incessant search for advantages and success, in a conflictual or competitive context, instead of the common notion of intent, finality and objective oriented towards a certain action (Fernandes and Abreu, 2004, pp.28-30; Abreu, 2002, pp.23-28). Second, the questioning of the growth strategy is based on the way in which a country seeks to gain advantages and to affirm itself, regionally or internationally, by putting together its main sources of investment finance, namely internal saving, corresponding to that part of revenue not consumed by other countries and made available to the country that imports it. Third, economic development is understood as the process of increasing productivity and improving

the average living standards of the population, resulting from capital accumulation and technical progress in a given society (Bresser-Pereira and Gala, 2007; Bresser-Pereira and Gala, 2008; Figueiredo *et al.*, 2005, pp.16-20; Kuznets, 1971)current account deficits (foreign savings. Fourth, what makes economies move is not savings but expenditure, particularly expenditure on capital goods that can expand production in the future. But that does not mean that savings are irrelevant. Saving is a form of deferred consumption, converted into a necessary condition for productive investment, while consumption is what guarantees the welfare of the population (Figueiredo *et al.*, 2005, pp.49-56; Ramos, 2013, pp.77-105). Fifth, the identification of a development strategy, described below, takes the rates of savings (internal and external) as the main criterion and of investment as percentages of the GDP.

Obviously, much of the interpretations of the above rationale behind the economic growth strategies depend on the theoretical approach followed (Harrod, 1939; Hayek, 2008; Keynes, 1996; Kalecki, 1977; Mises, 1990; Soto, 2012). Such a debate goes far beyond the scope of this paper, aiming mainly at sharing the empirical findings on the dynamics, composition and trends of the processes associated with the relationships among the composite variables that determine economic growth, both as a real process and as a policy strategy.

Methodological Specification and Data

Although the empirical facts regarding economic growth and patterns in Mozambique are often known, the literature shows that they have not merited due analytical recognition to inspire the explanatory power that the current approaches to the economic development of Mozambique lack. In this section, we briefly outline the methodological approach to the measurement of consumption, saving and investment applied chiefly to the empirical data drawn from version 7.1 of the Penn World Table (PWT 7.1), an international database described below. Before moving further, let's quickly look at the meaning of the two complementary key economic concepts mentioned above; that is, GDP and GNP.

GDP is usually calculated in three ways depending on whether one takes into consideration the value of the economic activities within a given country, or alternatively either all income earned or all expenditures within the country. In the end, the outcome of the alternative approaches should approximately be the same. Here, we follow the expenditure approach because this is the most adequate approach to better explore the dataset we have been investigating.

GDP is defined as being equal to consumption (private consumer, government spending and business) + investment + net exports of goods and services (exports – imports). Thus, the basic economic equation of GDP is:

$$GDP = C + I + Net Export (X - M) (1)$$

The sum of consumption and investment corresponds to the so-called internal demand, while the sum of the latter with the exports corresponds to the total demand. In turn, GNP is a broad measure

of a country's total economic activity corresponding to the value of GDP, with the difference adding income from foreign sources and subtracting income paid to foreign citizens and entities. In other words, the value of the GNP comprises all finished goods and services produced in a country in a given period (e.g. one year) by its nationals. From the viewpoint of national expenditure, the formula for GNP comprises consumption (C) (private and public) + investment (I) + exports of goods and services (X) + net income inflow from assets abroad or net receipts (NR) - net payment outflows to foreign assets (NP):

$$GNP = C + I + X + NR - NP (2)$$

GNP is an estimated value of the total worth of production and services or the total income owned by citizens of a country, in its country or in foreign countries, calculated for a given period – usually one year. As *The Economist* (1996, p.44) pointed out, while GNP is probably more useful to compare relative levels of income per capita in different countries, GDP better reflects the changes in domestic production and is thus the best tool to guide economic policy. On the other hand, because the net foreign incomes tends to be relatively fickle, the two measures can often move in completely different directions in the short run, though in the long run, they usually go hand in hand (*The Economist* 1996, pp.41-55; Diniz, 2006, pp.44-47; Figueiredo, *et al.* 2005, pp.25-29; Heston, *et al.* 2008).

As to the rationale of the study with the empirical analysis, the methodology applied here comprises a set of formal relations of national accounts from an open economy – focusing specifically on the Mozambican economy. Operational definitions mentioned above are illustrated empirically throughout this text, with the specific case of Mozambique. In particular, consumption and saving are measured as flows – one of the approaches to the measurement of saving (the other approaches being the stock measure and the equity injection approach). As a flow, saving can be defined as the difference between income and consumption. Moreover, because we are dealing with a flow instead of a stock, we use the term 'saving' rather than 'savings'; while the former refers to disposable personal income minus consumption and implies addition to the value of any asset, the latter represents a stock, or a part of a particular asset. Hence, 'saving' is a flow concept and 'savings' a stock concept (Gorman et al., 2013).

Methodological and technical challenges emerge whenever we try to decide what to include in the variables chosen, an issue we will not get into much detail in order to keep it simple. We accept the conventional formal relationship between investment and saving, assumed to be equal in accounting terms, *ex-post* and considering that an open economy comprises in and outflows between domestic and foreign savings. The assumption that the investment (I) is equal to saving (S) implies that the former determines the latter on the demand side or *ex-ante*, and vice versa, saving finances investment *ex-post*. Therefore, expenses in consumption and investment determine the income (Y) level according to the following formal expressions:

$$Y = C + I + X - M (3)$$

 $I = S = S_i + S_v (4)$

Saving (S) is the sum of internal saving (S_i) and external saving (S_x). In turn, foreign saving, that is, saving that a country imports from abroad, is equal to the current account deficit, which, in turn, corresponds to the trade balance plus net returns sent abroad.

$$S_y = M - X + RLE$$
 [Foreign savings] (4.1)

As to the empirical application of the key concepts, rationale and methodology, the main source of data used for constructing the flow measures of income, consumption, saving and investment is the Penn World Tables 7.1 (PWT7.1) (Heston *et al.*, 2012). This is the most comprehensive and longest macroeconomic time series, internationally available, particularly for countries such as Mozambique, which lack systematic and long-term empirical time series. Compared to other databases such as the World Bank's World Development Indicators or the IMF's data series, but most importantly, the databases provided by national sources like the National Statistical Institute (INE) or the Bank of Mozambique, the time period covered by the PWT is larger and the methodological harmonisation and consistency among the variables seem to be more robust for comparisons across countries and over time.

The PWT 7.1 is a database of national accounts for 189 countries' data developed and maintained by a scholar at the University of California, with the objective to measure real GDP across countries and over time. In many cases, the data covers the period 1950-2010, though in the particular case of Mozambique, with the exception of variables like population and the exchange rate, the remaining variables cover the period 1960-2010. The most recent version (PWT 8.1) and its update (PWT 8.1) haven't been taken into account in the analysis and findings presented here (Heston *et al.*, 2012). The selected variables are presented in international dollars (\$1), converted at Purchasing Power Parity (PPP) relative to the US dollar (USD) and the year 2005 constant prices (see footnote 3). For further details on the operational definitions and technical specifications, see the Appendix for a space-time system of national accounts (Heston *et al.*, 2008).

This study has some limitations related chiefly to the methodological option made according to our main objective for this work. Firstly, we abstract ourselves from a set of variables and intrinsic relationships to the above numerical formal expressions, namely: the gross income as the sum of workers' wages, salaries of the professional middle class and profits; and the fact that foreign saving in a given country corresponds to the deficit in the current account and varies with the real exchange rate. We are currently focusing on these research issues, undertaking work similar to the work of authors like Boskin (1988), Bresser-Pereira e Gala (2007), and Gorman (2013). Secondly, in spite of abstracting ourselves from the exchange rate and other macroeconomic variables relevant for the dynamics of the current account balance, we believe that from the point of the view of the main objective of this work, our methodological option has offset possible

limitations. In order to highlight the main empirical relationships on the economic growth strategies implemented in Mozambique, we find it important to drawing attention for relations that distinguish the periods in which Mozambique has experienced a real economic development, based upon foreign savings, as opposed to periods in which most probably it has contributed more towards a sort of underdevelopment. That is, an economic process with no true economic development because the use of foreign savings has encouraged more the final consumption than the productive investment that is able to expand and strengthen the national production capacity.

Evolution of Consumption and Saving in Mozambique

Mozambican independence, and above all, the building of the new Sovereign State, began by being led and dominated by politicians who were partly or wholly convinced that the true modernisation of Mozambican society would involve a radical break with the international capitalist system and attempt to join the former international socialist system. Many analysts believe that a new economic growth strategy emerged in Mozambique after 1975. However, as very often occurs in many aspects of nature and of human life, appearances are deceptive.

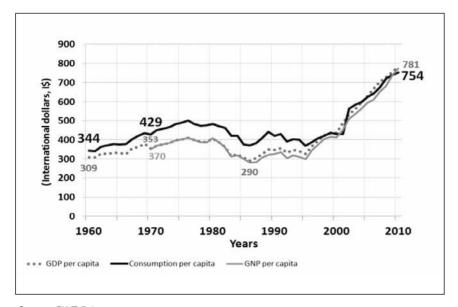
Knowing that consumption is the main macroeconomic aggregate among the components of domestic demand, it is worth considering in some detail the evolution of the stylised facts and long-term trends, to understand the size, depth and implications of maintaining a growth strategy dependent mainly on foreign savings instead of domestic savings, as has happened in Mozambique before and especially after independence. So, we then move forward to briefly present the development of consumption and eventually the birth of domestic saving, identifying five phases defined by the characteristics and links with investment and economic growth.

1960-1974: Consuming Little but More than was Produced

When Mozambique gained its political independence in 1975, it inherited a decade or so of domestic consumption that grew at a faster rate than domestic production. As Figure 1 illustrates, between 1960 and 1975, real consumption per capita increased from I\$ 344 to I\$ 490, while production, measured by GDP per capita, increased from I\$ 309 to I\$ 403. That is, consumption grew at an annual average rate of 2.4%, against a 1.8% growth rate of per capita GDP – a doubling of the surplus of consumption over GDP from 11% to 21%, in the last decade and a half of the colonial period.

The last two decades of the Portuguese colonial administration registered the most important progress in the transformation and structural transition of the Mozambican economy towards gradual integration of the population into the capitalist market economy. The Project of the IV Development Plan, outlined by the Portuguese colonial government, estimated that between 1963 and 1971, the percentage of non-monetary flows decreased from 41% to 23%; during the same period, the growth of cash flows at the rate of 10% and the decreasing expression of non-monetary flows in gross domestic product showed the progressive monetisation of the Mozambican market economy (Presidência do Conselho 1973, p.63).

Figure 1: Consumption, GDP and GNP per Capita, Mozambique, 1960-2010



However, the III Development Plan (1968-1973) had already recognised that the organisation of savings mobilisation system was inadequate to the needs of a rapid development of the economy, especially because of insufficient means of collecting small savings and the near absence of these means for a population experiencing a double process of transition – demographic and economic. Hence, the III Development Plan saw investment financed chiefly by the foreign savings as the easiest, if not the best alternative and answer to the shortage of local savings, regardless of the benefits brought by the imported technology, often simultaneously (Presidência do Conselho 1968, pp.10-11). Furthermore, the IV Development Plan Project identified the effort of extending the internal market as its primary aim, predicting that the current deficit would decline progressively and eventually would reach equilibrium around the years of 1983-1984 (Presidência do Conselho 1973, pp.53, 67).

In practice, though, the Portuguese administration refused to acknowledge that the colonial political regime was the most important threat and indeed enemy of the emerging capitalist market economy in Mozambique. In the coming decades, instead of reducing the imbalances of the current account, the overall macro and microeconomic system was called into question immediately after the 1974 revolution in Portugal. The Project of the IV Development Plan (Presidência do Conselho 1973, pp.115-116, 120), for the period 1973-1979, was completely abandoned after the independence of Mozambique. Likewise, the perception that domestic savings and capital accumulation needed to be expanded, strengthened and increasingly oriented for investment

rather than consumption in order to diminish distortions in the savings-investment nexus, was completely abandoned by the new sovereign state.

1974-1984: Rely on One's Own Forces? When?

In the decade 1974-1984, Mozambican consumption increased to around 124% of the GDP. Of this, 115% was private consumption and 9% was public consumption. In this decade, the average annual rate of growth per capita consumption was negative (-0.9%), while the real growth rate of the GDP per capita fell to (-1.6%) a year (Figure 1).

This regressive economic trend was in sharp contrast to the enormous hope that independence had generated in terms of the expectation that freedom would bring about effective opportunities for Mozambicans to finally begin to benefit directly from the available natural resources in the country. Consciously or not, the new political and government leadership accepted, in an uncritical and mistaken manner, the inevitability of low, or practically non-existent, domestic savings inherited from the colonial period. Hence, in an attempt to promote and speed up economic growth, the Mozambican state resorted to ever larger current account deficits, internal dissavings (public and private), uncompetitive exchange rates, and investment mostly based on external saving.

This was the growth strategy followed by the Portuguese administration, at least in the last decade and a half of the colonial period, although with two important differences. First, despite the limitations imposed by the Portuguese central government on the internalisation of capital in the colonies, the colonial state was increasingly promoting the accumulation of internal surpluses. On the contrary, the new state radicalised and took to extremes internal dissavings in favour of consumption and against the accumulation of national capital. This is confirmed by the acceleration in the pace of consumption compared with the GDP. Between 1975 and 1983, as a proportion of the GDP, according to the data used here, consumption increased from 121% to 134%. In the same period, investment, as a proportion of the GDP, fell from 12% to 7% (Heston et al., 2012). This means that in less than a decade, the option for growth with negative saving or internal dissaving worsened to such an extent that in 1984, Mozambique was technically bankrupt.

The above data should be sufficient to support the initial statement in this paper that the true independent spirit was, in practice contradicted, not to say betrayed, by the Sovereign State banking on a growth with internal dissavings and disaccumulation of national capital. It is not surprising that famous slogans, repeated and exalted insistently in the revolutionary period, such as 'rely on our own forces', were soon shown to be empty and deceitful. If we understand 'own forces' as meaning the endogenous capacity to generate savings and the accumulation of surpluses, then never before had Mozambique been so dependent on 'the forces of others' as in the first decade of independence. The political leadership tried to camouflage and legitimise this dependence with ideological rhetoric, and resorted to external savings from ex-socialist countries, but in the end this was a purely parochial substitution of sources, lasting for only a short period, instead of a substantive and progressive change in the economic growth strategy, aiming at really freeing the country from its chronic dependence on external savings.

1984-1994: Break... of What Type?

In the mid-1980s, bankruptcy had become inevitable, with the worsening civil war threatening to push Mozambique into the situation of a failed state. Fortunately, this state of affairs spurred the then President of Mozambique, Samora Machel, to accept liberalising economic reforms, under the tutelage of the Bretton Woods institutions. It was not long before positive results could be seen.

After joining the International Monetary Fund (IMF) in 1984 and the beginning of the Economic Recovery Programme (PRE) in 1987 – a programme mixing liberalisation and intervention – the previous economic involution was halted and reversed. In the decade 1984-1994, average consumption reached 123% of the GDP, of which 114% was private and 8% public. Consumption reached its peak in 1983 (136% of the GDP), while the levels of per capita production reached their lowest point in 1986: I\$ 290, a level lower than that of 1960 (Figure 1). However, after 1987, the GDP growth resumed positive rates (an annual average of 0.7%, in 1984-1994), but the rate of growth of per capita consumption still remained negative (-0.5%), for some time (Table 1).

Faced with these facts, we consider the years 1984-1987 as the period of the most important break in post-independence economic history and the start of a new trend in the dynamic of Mozambican capital accumulation. But what kind of break was this? Something that might indicate a substantive change in the economic growth strategy itself or was it a change in the growth trend that maintained dependence on external savings?

Table 1: Consumption, GDP, and GNP, Mozambique 1960-2010

Years/ periods	Consumption		GDP		GNP		Consumption as percetange of GDP			
	per capita	Growth rate	per capita	Growth rate	per capita	Growth rate	Total	Private	Public	Invest.
1960-74	407	2.4%	350	1.8%			116	109	7	9
1974-84	470	-0.9%	381	-1.6%	379	-1.7%	124	115	9	11
1984-94	405	-0.5%	330	0.7%	310	-0.1%	123	114	8	13
1994-04	457	3.6%	445	4.9%	420	5.2%	103	96	8	19
2004-10	680	3.7%	694	4.8%	659	5.3%	98	89	9	15
1975-2010	486	1.2%	442	1.9%	423	1.9%	113	105	8	15
1997-2010	574	4.8%	581	5.4%	551	5.8%	99	91	8	18
2000-2010	615	4.9%	625	5.3%	593	5.7%	98	90	8	17
1960-2010	463	1.6%	415	1.9%	417	2.0%	114	106	8	13

Source: PWT 7.1

Our answer inclines to the second question, for the following reasons. Firstly, halting and reversing the regressive trend of the Mozambican economy became a question of survival for the very state that had provoked it. Secondly, the political leadership who continued to control the state,

showed that at various times and in various ways, they were uncomfortable and resentful about the reforms that they had to introduce. Even today, some of the protagonists believe that they were coerced into making economic reforms; a remarkable confession of pessimism and cynicism that has involved the return to the dependence of the economic system on external savings, which it had hoped to eliminate. Thirdly, under the fragile conditions in which the Mozambican economy found itself, it is not surprising that external savings generated economic growth, considering their massive volume, prolonged duration and active involvement in the national economy. Fourthly, with more redistributive than productive and thus progressive political forces and economic actors, it is doubtful whether the international partners of the Mozambican State believe that Mozambique is capable of guaranteeing a more stable and robust macroeconomic framework than that which it has achieved with growth anchored on external savings. Fifthly, if the focus on the exploitation of mineral and energy resources goes ahead, dependence on the growth of external savings will very probably increase and worsen alongside higher current account deficits.

1994-2000: The Birth of Domestic Saving

The birth of domestic saving means, in this case, the emergence of a positive value for the part of income not consumed in a certain period. In other words, the portion retained and waiting to be consumed or invested in the near term.

In general, it is not possible to determine when domestic saving was born in a specific country. However, in the specific case of Mozambique, perhaps because modern economic growth was structured in the context of a colonial economy, built on a simple environment of commodity economy and predominantly for subsistence, the formal economy began to grow, thanks to the investment of financial, technological and even human resources financed by foreign saving.

How did the Mozambican domestic saving emerge? According to the data used here (Table 2), domestic private saving mainly created domestic saving in Mozambique. Since private consumption has become smaller than the GDP, in 1997, at least nine of the 12 years to 2010 (actually until now, although the data series does not include the last three years), domestic savings was mostly positive.

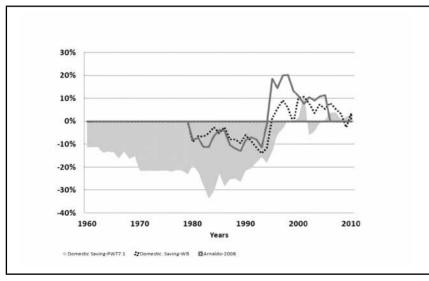
The remaining four years turned out to be negative, although such negative values did not influence the average annual rate to the point of becoming negative domestic saving. Between 1998 and 2010, the average annual domestic savings rate stood at 1.5% of the GDP.

Although the time series used in this text are publicly available, it is unknown whether it has received due attention from researchers who previously analysed the behaviour of the Mozambican savings. However, as illustrated in Figure 2, some authors have resorted to different sources to corroborate the findings presented here about the birth and emergence of domestic savings. The specific years mentioned by these sources differ, mainly for methodological reasons, but in one respect, they all converge: they identify the last five years of the twentieth century, the years between 1995 and 1998, as the period when domestic savings was born in Mozambique (Arnaldo *et al.*, 2008, p.45; BdM, 2014, p.26; Heston, *et al.*, 2012; The World Bank, 2014).

Table 2: Rates of Consumption and Savings in Mozambigue, 1960-2010

	Con	sumptio	n	Savings			
Year & Period	Private	Public	Total	Domestic	Foreign	Total (Invest.)	
				(Percen	tage of G	DP)	
1960	105	6	111	-11	18	7	
1970	113	8	122	-22	34	12	
1975	113	8	121	-21	34	12	
1980	112	8	119	-19	31	12	
1990	113	9	121	-21	37	15	
1997	97	6	103	-3	18	15	
1998	93	6	100	0	18	18	
1999	94	7	101	-1	29	28	
2000	91	7	98	2	24	25	
2010	88	9	97	3	16	19	
1960-70	107	7	114	-14	22	8	
1970-80	113	8	121	-21	34	12	
1980-90	117	8	126	-26	37	11	
1990-2000	103	8	110	-10	28	18	
2000-2010	90	8	98	2	15	17	
1997-2010	91	8	99	1	17	18	
1960-2010	106	8	114	-14	27	13	

Figure 2: Evolution of Domestic Saving, Foreign Saving and Investment in Mozambique, 1960-2010



Source: Arnaldo et al., 2008; Heston et al., 2012; WB, 2014

Furthermore, the recent study of the Bank of Mozambique advances two important details in order to understand, at least in part, the recent dynamics of private savings. Firstly, only 2% of households have positive savings, while about 98% of families continue to have negative savings. Similarly, the fiscal position of the State, measured by the fiscal balance before grants, is also negative in about 12% of the GDP. Secondly, the increase in national savings has been secured mainly by the private sector, especially commercial enterprises, contributing on average 63% of the GDP in the period 1996-2012.

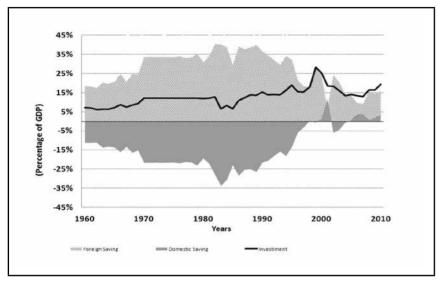
Perhaps more important than the identification of the specific year in which domestic savings was born is the fact that, over the last decade, its tendency became predominantly positive. Time will tell whether it is a sustainable trend, a doubt that at least indirectly is shared by other researchers, including some that pay no explicit attention to the role of domestic saving; for instance, looking at the period 1980-2004, Jones (2006) found that the total factor productivity (TFP) in Mozambique became robust from 1992, but he also admitted that it is yet unclear whether such growth was robust enough to continue supporting high rates of economic growth into the future.

2000-2010: An Unprecedented Decade

As from 1994, the average annual rate of growth of per capita consumption became persistently positive; but unlike the last colonial and the first post-independence decades, it became lower than the GDP and GNP growth rates. At the beginning of the 21st century, Mozambique finally managed to attain and surpass the average levels of per capita production and consumption of 1975. Furthermore, in this first decade of the new century, the Mozambican economy attained two unprecedented achievements. Average internal savings were positive for the first time in 50 years. At the same time, real per capita consumption grew at an average annual rate of 4.9%, compared with growth rates of 5.3% and 5.7% of the GDP and GNP respectively (Table 1). Although consumption had relatively high rates, unlike previous decades, these remained lower than the growth rates of production, that is, of the GDP and the GNP.

At the turn of the twentieth century, Mozambique enjoyed an unprecedented economic phenomenon, at least in relation to the half century (1960-2010) for which reliable macroeconomic data are available. For the first time in the last five years of the previous century, private and domestic savings in Mozambique were positive. Over 37 consecutive years, private saving was persistently negative. However, since 1997, private consumption became lower than production. This allowed that in 1998 for the first time, the Mozambican domestic savings also stopped being negative (Figure 3).

Figure 3: Evolution of Savings in Mozambique, 1960-2010: Domestic Saving, Foreigner Saving and Investment



Unless new data appears to show otherwise, historically, the decade of 2000-2010 emerges as the first in half a century to record a positive ten-year average. This finding led us to consider in recent papers, the first decade of this 21st century as an unprecedented decade in the modern economic history of Mozambique.

In 2010, total Mozambican consumption (private and public) was 97% of the GDP, but that was only the sixth consecutive year that showed consumption less than 100% of the GDP, despite several decades in which Mozambique was one of those countries where consumption was greater than the GDP (Figure 1). It is worth noting that, in general, consumption represents the greater proportion of the income produced. For example, in 2010, world consumption reached 83% of the GDP in a total of 189 countries considered in PWT 7.1; that is, at world level, savings amounted to 17% of the GDP (Francisco and Siúta, 2014a).

The average annual total savings rate in Mozambique was around 13% of the GDP in the last half century. The average annual value corresponds in accounting terms to national investments. It increased to 18% throughout the first four decades, having declined slightly to around 17% in the last decade. However, this slight decrease in value hides more important structural changes in the composition and components of total savings.

Between 1960 and 1997, the value of the average total savings rate, i.e. 13% of the GDP, represented the positive contribution of foreign savings alone, since other sources were negative

(Table 1). This historical trend has changed significantly since 1997, the year when the average rate of private consumption became less than 3% of the GDP. Meanwhile, the rate of public consumption increased from 6% to 9% of the GDP between 1997 and 2010, respectively. On the other hand, the rate of external savings stood at 27% of the GDP in the half century covered by the data, a value that has served to compensate for the systematic negative domestic savings, or 'dissavings' at around 14% of the GDP, and ensured an average annual investment rate of 13% of the GDP in the period 1960-2010.

Concluding Remarks

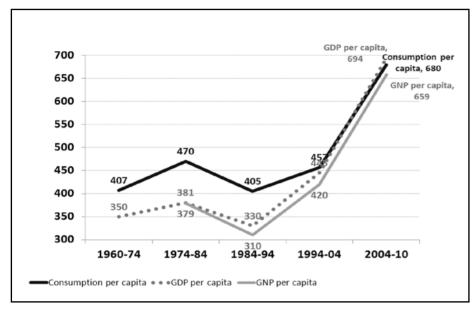
Time will tell whether, in the long term, the strategy of growth based on external savings can free the Mozambican economic transformation, turning it into economic development instead of a mere 'underdeveloped economy'. However, our empirical evidence shows a process of underdevelopment rather than a developing economy, in the sense that the Mozambican economy has been structured, has grown and has been dependent mostly on external financing, very often oriented more towards consumption than investment, which in the long run most probably will jeopardise the objective of expanding the productive capacity and capital accumulation as well as contribute towards a broad economic development.

Between 1960 and 2010, the annual rate of external savings was, on average, about 27% of GDP (about I\$. 1.6 billion, per year), of which 52% went to consumption and the remaining 48% to investment (about I\$ 780 million, per year). Obviously, such averages hide important variations over time. For example, between 1960 and 1997, average annual dissavings were around 19% of the GDP, while in the last 12 years of the series under consideration, internal savings became slightly positive (1.3% of the GDP per year).

Encourage What: Consumption, Saving or Both?

It would be difficult to expect, much less expect, that Mozambicans should reduce their current levels of per capita consumption, which remain among the lowest in the world, and way below the world average (in 2010, that was about I\$ 9266). In any case, four decades after independence, Mozambicans are still faced with the same dilemma: to remain hostage to external savings, or to opt for a growth strategy that guarantees the current consumption pace of growth is sustained by economic growth resting on improvement in the productivity of the factors of production. As Figure 4 shows, although the difference between the GDP and GNP is relatively small, the GDP has exceeded consumption but the GNP has not.

Figure 4: Decade Average of Consumption of GDP and of the GNP per Capita, Mozambique 1960-2010



There is by now abundant empirical evidence, as Edwards (1995, p.2) pointed out two decades ago, suggesting that domestic savings are highly correlated to aggregate investment and that, on average and over long periods of time, changes in capital accumulation responds mostly to changes in domestic savings. Furthermore, still Edwards, referring to a paper of Young (1994), argued that capital accumulation, not technological progress, explains the splendid growth performance of the East Asian 'tigers' – Korea, Hong Kong, Singapore and Taiwan.

More recently, several authors have added new empirical evidence and more compelling interpretations and explanations. For instance, Bresser-Pereira and Gala (2007; 2008) current account deficits (foreign savings have challenged the type of 'growth strategy' that has been offered to developing countries; that is, 'growth with foreign savings and opening of the capital account strategy' standing on two main assumptions: first, "it is natural for capital-rich countries to transfer their capital to capital-poor countries", and, second, foreign savings received by a country will automatically be transformed into productive investment. The criticism of these authors is diametrically opposed to this, arguing that in spite of some exceptions, foreign savings will very often result in increased consumption and financial or equity indebtedness, without an increase in the country's ability to invest and export. This explains why the Asian countries so strongly defend their exchange rate, keeping it competitive, avoiding the growth with foreign savings strategy, and growing with current account surpluses or foreign dis-savings. This critique contradicts conventional economic assumption that capital-rich countries should transfer their resources to

capital-poor countries, though it does not, however, contradict countries' growth experience that demonstrate that, except in exceptional moments, capital is made at home.

Furthermore, Okafor and Tyrowick (2008; 2010) addressed the question of potential causality between foreign debt and domestic savings within the context of developing countries. They found a negative link between debt and domestic savings, especially in the long run. This implies, according to the authors, that, on average, large amounts of foreign loans to developing countries associated with huge debt service payments hamper development and discourage private savings. "The results are not susceptible to the choice of countries or outlier", write Okafor and Tyrowicz (2008, pp.198-190) and concluded: "However, the relationship between foreign debt and savings seems to depend on debt accumulation gaining significance only after surpassing a country's specific threshold".

In short, both economic theory (at least critical theory) and above all, the experience of countries that have achieved growth and sustainable economic development over the past century, have shown that external savings play an important role in an open economy; but in the long run, that role will only be useful for the national economy if external savings complement internal savings instead of replace them, as has been the case in Mozambique, since the middle of the 20th century.

Brief Inferences for Reflection and Future Research

Much can be inferred, debated and concluded from the empirical findings presented in this paper and in the articles that inspired it. Since we cannot do justice to them in this space, we can nevertheless present some points for further reflection and future research:

- It is known that in open and highly integrated economies, domestic savings may no longer be the determining factor in capital formation and economic growth. However, it is not common or normal that foreign savings replace domestic savings for as long and as massively as has happened in Mozambique over the past half century.
- The historical trajectory of the components of total savings suggests that economic growth
 in Mozambique has been anchored in foreign savings, regardless of the prevailing political
 regime over time: colonial, socialist or interventionist (more or less) liberalising.
- Why have both supporters and critics of the prevailing model of economic growth in Mozambique proven so indifferent to the changes highlighted in this paper regarding the composition and structure of the Mozambican savings? Does the emergence of positive domestic savings not reflect a progressive capacity of the Mozambican economy to retain and accumulate capital?
- The birth of domestic savings results from the emergence of private savings though, as recently revealed by the Bank of Mozambique (BdM, 2014), national savings were derived from private companies and 2% of households. Moreover, in the last decade, while foreign savings showed a tendency to decrease, private savings seem to have been able to compensate for the total deficit of public savings and complement the contribution of foreign savings.

• Considering the historical trajectory of state interventionism, characterised in many cases by a strong state monopoly on the production factors, it is surprising and disturbing that the public sector continues to be so deficient and contributes negatively to domestic savings. In fact, as is well known, Mozambique has experienced serious crises and eminent public bankruptcies (1984, 1998) arising from the risk of blocking the flow of foreign savings debt. Considering the recent trend of increased public debt and the worsening of the current account deficit, a new Mozambican debt crisis seems in sight, which is not surprising given that the debt is one of the inevitable consequences of the growth strategy with foreign saving.

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