TANZANIA INSTITUTIONAL DIAGNOSTIC WP18/TID01

CHAPTER 1: POLITICAL AND ECONOMIC DEVELOPMENT OF TANZANIA: A BRIEF SURVEY

Tanzania Institutional Diagnostic

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Establishing a diagnosis of how political, social, and economic institutions in Tanzania may constrain, or, on the contrary, help its economic development requires as a first step getting a precise idea of the country's development achievements, the particular path that led to where it presently stands, and, most importantly for the purpose of this study, the general political context in which that development took place. This introductory chapter intends to summarise in a few pages the history of Tanzania from the end of the colonisation era to today, and to briefly review the evolution and main features of its economy. It concludes with a brief statement of what seem to be the strengths and weaknesses of the Tanzanian economy based on this first scrutiny.

1 A short account of the political history of Tanzania[1]

Two features are apparent in the short history of Tanzania since independence. The first is the extent to which it is intertwined with the economy. The course followed by Tanzania was strongly influenced by economic events, most noticeably the serious balance of payment crisis of the early 1980s, but it also had a huge impact on the economy itself, in particular the early choice of a socialist development strategy. The second feature is its clear periodicity. Unlike many African countries, politics in Tanzania have been fairly peaceful and respectful of the constitution. History since independence divides itself logically into four periods, each corresponding to a different personality on the presidential seat. Hence the organisation of the brief summary that follows, after a short reminder of the colonisation period.

1.1 The colonial era

The colonisation time of Tanzania divides quite naturally into two periods depending on the identity of the colonisers: Germany until World War I and Britain afterwards, although the latter was officially a 'protector' rather than a coloniser.

1.1.1 The German colonisation

German East Africa was created after the 1884–85 Berlin conference where European colonisers discussed how to share African territories. Overall, however, Germans had little time to leave their mark on their colony. They had to fight fierce rebellions by natives that lasted until the first years of the twentieth century – the Maji Maji uprising was finally defeated in 1907. And then WWI broke out, with intense local fighting against the British and Belgian forces in Africa.

Although of short duration, the German colonisation period nevertheless had a lasting impact on the territory that would be soon called Tanganyika: the development of major cash crops for exports (sisal, coffee, cotton), the beginning of the construction of the railroad network, an administrative structure based on 'communes' as collectors of revenue (in effect labour taxation), the start of an educational system. It also left an original structure of production of export crops where African peasant farming coexisted with a limited number of large plantations managed by European settlers. Yet the German colonisation also disrupted

[1] This short historical account relies heavily on several key references, in particular Coulson (2013), Lofchie (2014), Ndulu and Mwase (2017), Edwards (2012).

traditional agriculture, leading to impoverishment, population decline in some areas, and the spread of the tsetse fly.

1.1.2 The British mandate on Tanganyika

At the end of WWI, considering that Tanganyika's inhabitants were 'not yet able to stand by themselves under the strenuous conditions of the modern world', the recently created League of Nations gave Britain the mandate to administer the territory on its behalf. Britain thus had to report annually on the state of its 'protectorate' to the Permanent Mandates Commission of the League. This feature is important as it meant that Tanganyika was not managed in the same way as the neighbouring British colonies of Uganda and Kenya.

The British administrators found a country in a state of extreme underdevelopment, which moreover had been devastated by the most severe WW1 conflict on African land. Most of the population was barely surviving on subsistence agriculture. Yet their situation hardly improved during the British mandate. The primacy of big plantations was maintained, sisal exports being reinvigorated under the management of foreigners (Indians in particular), whereas a limited British settler population developed the exports of coffee and tea. Some African peasants also got involved in cash crops for export – i.e. the Chagga farmers producing highly praised Arabica coffee in the Kilimanjaro area – but they were a tiny minority.

Two major factors prevented an economic development in Tanganyika comparable to what could be observed in neighbouring countries. One was the relative infertility of a large area in the interior of the country invaded by the tsetse fly, particularly after the war campaigns. The other was the lack of attraction for European settlers of a territory whose political status was uncertain, neither a colony nor an independent state. These may also be the reasons why the British administration practised a rather unambitious management of the country. The only major development project they pushed forward was the Tanganyika Groundnut Scheme (1947–50), which failed miserably due to an erroneous strategic analysis and disastrous implementation.

On the administrative side, the British administration applied the principle of 'indirect rule', by which most administrative tasks, including tax collection, were under the responsibility of Native Authorities. In many instances, this required restructuring power in some communities to make explicit and undisputable who were the interlocutors of the central administration. At the centre, a Legislative Council was created in 1926, but its members were essentially selected within the European and Asian minority. In practical terms, the Native Authorities became the agencies of the central government with no say whatsoever in its decisions.

Things started to change after World War II. Two educated African chiefs were appointed to the Legislative Council in 1945. The newly created United Nations strengthened its control on territories under protectorate, recommending more participation by natives. The 'indirect rule' in Tanganyika was replaced by formal local governments with a multi-tier structure, from region to district to village level, and with more African involvement. Subject to various internal and external pressures, the British administration had to widen the recruitment of Legislative Council members, formally allowing for elections. A young elite of 'westernised' Africans appeared, transforming the old African Association, mostly a social club for educated African civil servants, into a politically effective entity with the goal of progressively winning power in the Legislative Council and accessing independence.

1.2 Independence

The African Association, which became the Tanganyika African Association (TAA) after splitting from Zanzibar, initially had weak political ambition. Yet a land dispute between settlers and natives in two Meru villages in the 1950s led the local TAA secretary, Kyrilo Japhet, to launch a vigorous anti-government campaign and to seek support from the Trusteeship Council, responsible for the supervision of territories under mandate in the United Nations. This triggered the politicising of the TAA.

Julius Nyerere, who had studied in the UK and was the first African in Tanganyika to get a university degree, accelerated this process when he became the president of TAA in 1953. He transformed it into a real political party with local bases throughout the territory and links with trade unions, cooperative societies, and tribal unions. The explicit goal of this newly labelled Tanganyika African National Union (TANU) was independence.

It was obtained in a peaceful way after TANU won practically all the seats of the Legislative Council that were open to election in 1958, and then again when all the seats in the Council were open to election in 1960. The British colonial secretary then acceded to the demand for a 'responsible government' by Africans. One year later, independence was declared with TANU as the party of government and Nyerere as prime minister.

Three years later, the new Republic of Tanganyika united with Zanzibar, two islands off its coast where a violent revolution against the Arab minority that was ruling the islands had just brought to power an African-dominated party. Together the two countries formed the United Republic of Tanzania, with Julius Nyerere as president and Abeid Amani Karume from Zanzibar as vice-president. The new country was a federation, with both members having their own autonomous government. Yet the size imbalance between the two members of the federation must be stressed. The population of Zanzibar never represented more than 3% of the whole population of the United Republic.

1.3 Forging a nation: the Nyerere socialist era

Although Nyerere had been at the helm since 1964, and in fact earlier as prime minister, it was not before 1967 that his strategy for the development of Tanzania was made explicit. A first five-year development plan with emphasis on poverty reduction and agricultural development proved disappointing. The frustration born from it, as well as the views about development that Nyerere developed during the time TANU was preparing for independence and that he shared with some other African leaders, led him to elaborate a strategy very much inspired by the example of socialist countries in the Soviet sphere of influence but meant to fit the African context. This strategy was exposed in the so-called 'Arusha Declaration', still very vividly recalled today, not so much because of its economic aspects but because it was in some sense foundational of the Tanzanian nation (Nyerere, 1967; United Republic of Tanzania, 1967).

The Arusha declaration announced a very clear socialist-oriented development programme adapted to the African context under the label of 'Ujamaa', or 'family-hood' in Swahili. It comprised three dominant strategies. First, an emphasis on the agricultural sector and the urgent need to improve its productivity, most importantly through regrouping dispersed subsistence farms. Second, State control of the means of production and exchange, and thus nationalisation of part of the non-agricultural sector. And, third, addressing the social demand in terms of education, health, equality, and participation in public decision making.

The implementation of the programme sketched in the Arusha declaration was quick in terms of nationalisation of banks, import–export companies and several major industries. It was slower in agriculture, where the gains in productivity as well as generalised access to social services, including education and health, were supposed to go through 'villagisation' and, in part, collective farming. The so-called Ujamaa villages undoubtedly represented the most original part of the whole development strategy put forward by the Nyerere government. Yet some resistance built against the villagisation process in various parts of the country and it proved necessary in several cases to move people by force.

The results of the strategy spelled out in Arusha were far from spectacular. In a rather candid evaluation 10 years later, Nyerere himself gave a lukewarm account of it, acknowledging that growth had slowed down since the new development strategy had been put in place and results in the agricultural sector were particularly disappointing (Nyerere, 1977).

Nationalisations did not hold on the Arusha promises. In fact, they led to disastrous results a few years later, very much due to incompetent management by bureaucrats at the head of nationalised companies and an extremely high level of corruption. Even the most obvious economic strengths of Tanzania, like sisal exports, progressively weakened, leading the economy to the edge of bankruptcy.

Results were especially bad in the agricultural sector. The villagisation seems to have badly disrupted production processes. Productivity gains had been obtained in the extensive cultivation of some export cash crops like tea and tobacco, but this had been at the expense of food crops. In a few years, Tanzania had gone from being a net exporter to a net importer of food, the progress in export crops being insufficient to cover the cost of these imports. Without the aid of the World Bank and the International Monetary Fund (IMF), the country would have been bankrupt and doomed to famine. After slowing down, gross domestic product (GDP) per capita started to fall after 1976, at the same time as severe balance of payment problems developed. Nyerere refused the conditions imposed by the international financial institutions for helping the country out of its foreign payment difficulties. A National Economic Survival Programme and then a home-grown Structural Adjustment Programme were launched in the early 1980s. They came too late and failed to get the economy out of the crisis. After having expelled an IMF mission in 1981, Nyerere was finally forced to accept a stand-by agreement with that institution in 1985. This agreement was a preliminary step towards a Structural Adjustment Programme to be signed with the World Bank, the aim of which was to move the economy back to a market-led economic system and, as a matter of fact, to undo much of Nyerere's effort to build a socialist economy. He left power in 1985, leaving to his successor the task of managing this change in economic regime.

If the economic achievement of the Nyerere era were disappointing, the same cannot be said in the non-economic sphere. A key success, and a consequence of the villagisation process, has been to unify the more than 100 tribes in the Tanzanian territory into a nation, not only through moving people, but also by developing the schooling system and literacy programmes and imposing Swahili as the single official language. In comparison with many other African countries, Tanzania is also exceptional in the political stability it has shown since independence, under the influence of Nyerere's probity and respect of constitutional rules. Both legacies are closely linked, for political stability would have been difficult to achieve in the presence of tribal rivalry.

Another aspect of Nyerere's action that made him a major political figure in Africa was his pan-Africanism and his view that African states were most often too small to develop in an autonomous way. Here, too, however, he was not successful, whether at the level of the continent or the region. As far as the latter is concerned, he was a strong promoter of the East Africa Community that would federate Kenya, Tanzania, and Uganda. Yet, after some years, western-oriented Kenya's leadership sought to isolate itself from the socialist regime in Tanzania, whereas Uganda, under Amin Dada, aggressively invaded the northern region of Tanzania in 1978. Nyerere chased the invaders and then entered Uganda, where he was able to oust Amin Dada after a long war, the cost of which was sizeable for Tanzania and may have contributed to the difficult economic situation that caused the end of the socialist strategy.

1.4 The difficult transition to the market: 1980–95 (Nyerere–Mwinyi)

Ali Hassan Mwinyi, who was the vice-president of Tanzania and also the president of Zanzibar, was elected president in 1985 with the explicit support of Nyerere, who was still in control of TANU, constitutionally the single political party in Tanzania. His objective was quite explicitly to re-establish the primacy of market mechanisms and to put the Tanzanian economy back on a positive growth path. This was done in a somewhat disordered way over his two presidential mandates, and under a strong influence, but not without domestic resistance, of bilateral donors and the Bretton Woods institutions.

The first set of reforms consisted of trying to align prices to supply–demand conditions so that they would give the right incentives to economic agents. Agricultural marketing, including the supply of agricultural inputs, was liberalised, prices and wages were deregulated, the currency was massively devalued, and import tariffs were rationalised. Initially, growth reacted positively to the reforms, mostly because of the agricultural sector recovering some dynamism after years of paralysis. However, growth then stagnated, as it was becoming obvious that several institutional factors prevented it really taking off.

Another set of structural reforms was launched during the second mandate of Mwinyi from 1990 onwards, the most important one being the dismantlement and privatisation of the numerous state-owned companies that ran the economy during the socialist era and were still operating. Other reforms included the opening of the financial sector to private domestic and foreign actors, the concentration of tax collection within a single Tanzanian Revenue

Authority[2], the dismantling of monopolies in the trading of agricultural output, and a reform of the civil service aimed at reducing the number of civil servants and making them more effective.

Other reforms were undertaken in the political sphere. Constitutional changes had been passed in 1985 that defined more precisely the prerogatives of the president and limited his mandate to two five-year terms. Most importantly, a multi-party system was established in 1992, formally ending the legal monopoly of the so-called 'party of the revolution', the Chama Cha Mapinduzi (CCM), which resulted from the union of TANU and the revolutionary party in power in Zanzibar. Consequently, the political scene became much more active and the political unity of Tanzanian people began to weaken as the 1995 general election approached.

The end of the Mwinyi second term was marked by various corruption scandals. The most notorious one was revealed by the World Bank in November 1994. The embezzlement, amounting to some 3% of annual GDP, involved senior officials in the Ministry of Finance and caused donors to temporarily stop all disbursements (Lofchie, 2014, pp. 127–128).

This event was the culmination of a rampant crisis between the executive and the donors that ran throughout practically the whole Mwinyi presidency. Its root lay in the fundamental opposition of a large part of the Tanzanian elite, including in some instances cabinet ministers, to moving away from the socialist regime. Some held such a view for ideological reasons, but others clearly tried to protect the rents they were able to create during the socialist era. As a result, the reforms imposed by the international financial institutions slowed down and had little impact on the economy. Corruption was rising, whereas growth would not take off. The crisis that culminated with donors withdrawing a big part of their aid in 1995 was finally overcome thanks to the work of a consultative group, which was able to pacify the donor–recipient relationship (Edwards, 2012, pp. 27-40; Lofchie, 2014, Chapter 4).

It is hardly surprising that such a transition from socialism to market was so difficult and conflictive, both with the donors and within Tanzania. It is not surprising either that corruption practices spread in such a period of disruptive reforms, especially starting from a regime where corruption was already widespread among the elite. Some time was necessary for the economy and the society to stabilise and growth to pick up. Quite revelatory in this respect is the 'Mzee Rukhsa' or 'Everything goes' nickname given by Tanzanians to the Mwinyi era. Although this occurred some 25 years ago, it will be seen that this period left durable marks in the society and the economy.

The economy and society started to settle down and growth started to pick up under the presidency of Benjamin Mkapa, the first president elected in multi-party elections.

1.5 The market era: 1995– (Mkapa–Kikwete)

The evolution of Tanzania over the last 20 years under the successive presidencies of Benjamin Mkapa and Jakaya Kikwete may be described as the actual implementation and deepening of the reforms passed under the presidency of Mwinyi. Despite the underlying tension mentioned above, this took place with a remarkable political stability, at least on the

[2] Implemented under President Mkapa in 1996.

mainland, due in part to the single party (CCM) that had ruled the country since independence, remaining the dominant party after the move to a multi-party system. As a matter of fact, it took some time for the opposition to strengthen and it is only recently that it has started to represent a possible threat to the CCM, at least on the mainland.

The same cannot be said of Zanzibar, where the confrontation between the CCM and the local opposition party (CUF) has been extremely conflictive, with several upsurges of violence. Rigged elections, a partisan electoral commission, harsh repression of protests, and reneging on union government commitments created a climate of mutual distrust that proved difficult to calm down. A constitutional reform of the relationship between the two members of the United Republic of Tanzania that could reduce the intensity of the confrontation has been considered for some time, but it is presently in a stalemate.

Another prominent feature of the last two decades is the frequency of major corruption scandals, which suggests that corruption is indeed rooted in the society and the economy. Several cases came to light under both Mkapa and Kikwete which every time led to the dismissals of ministers and high-ranked officials and led donors to suspend aid disbursements. In those days, and until now, Tanzania also found itself systematically in the bottom part of the corruption rankings published by Transparency International and comparable organisations. Donors repeatedly conditioned their aid on efforts being made to curb corruption, and successive governments have committed to act in this area. Their impact has been limited, though. Inherited from the socialist era and the disordered period of transition towards a market economy, corruption is a plague that now seems extremely difficult to eradicate.[3]

Some other noteworthy political developments are worth stressing. One is the inflow of refugees due to conflicts in neighbouring Democratic Republic of Congo (DRC), Rwanda, and Burundi since the mid-1990s. At some stage, there were around 700,000 refugees hosted in Tanzanian camps to be supported by international organisations and the Tanzanian government. Another development was the launch in 2000, 25 years after Nyerere's first attempts, of the East African Community, with five African partners: Burundi, Kenya, Rwanda, South Sudan, and Uganda.

On the economic side, the progress towards an all-market economy proved to be slower than anticipated. The number of parastatals or state-owned enterprises (SOEs) still active in 1995 was considerable – above 300. It took time to privatise them, to merge them in joint ventures with the private sector, or simply to dismantle them. It also took time for the public mindset to change with respect to the role of the private sector in development. It was only during the second term of Kikwete's mandate that policies aimed at creating a favourable climate for the private sector were explicitly adopted.

Still on the economic side, the last 20 years have seen significant progress towards macroeconomic stability but relatively little towards the 'self-reliance' goal pursued since the Nyerere era. Since independence, donors have generously supported the development of Tanzania. They have sometimes suspended their aid, after corruption scandals or in times of disagreement about the policies to be implemented, but they have always been present

[3] The current President, J-P Magufuli, was elected on a very strong anti-corruption platform and has sent strong signs of his determination in this area since taking office in 2016.

when their help was crucially needed. It cannot be denied that, at least over the last 20 to 25 years, Tanzania has been an 'aid darling'.

In any case, the recent period has been rather favourable on the economic growth front. Considerable acceleration took place during the second term of the Mkapa presidency. With an average GDP growth rate of 6% between 2002 and 2015, Tanzania is among the African champions. As in other countries, however, it is difficult to say how much of this is due to domestic reforms and how much to a favourable international context.

1.6 The fifth phase

On 05 November 2015, the fifth President of Tanzania was elected. John Pombe Magufuli's nomination within the dominant CCM party was the result of a difficult process as he was a kind of outsider with respect to influential groups within the party. He won the nomination, and then the election, very much on his anti-corruption platform and, of course, his well-recognised personal probity, a quality he had shown as the Minister of Public Works in the previous administration. For the first time since the advent of multi-partyism, however, the opposition showed a real strength, getting a little more than 40% of the votes in the run-off ballot.

The new president immediately brought some dramatic change in the way Tanzania was governed. Two and a half years later, he still seems to have broken off from the way the country was run in the preceding administrations. It is too early to evaluate the consequences of his actions. Yet it will be useful for the analysis in this volume to mention their main original features.

An article in the newspaper *The Citizen* summarising the first two years of the current presidency stressed the following five points (Paget, 2017):

- His determination to fight corruption within the civil service as well as among high-level politicians has been until now without failure.
- In the same vein, he confronted foreign mining companies accused of stealing resources to Tanzanian people by hiding taxable revenues.
- Through the second five-year development plan, he restored industrialisation as the main objective of the country's development policies, something apparently 'unseen since the 1970s'.
- In the face of an opposition whose strength is rising and a fragmented dominant party, he sought to reinforce his personal political power. His critics accuse him of authoritarianism and qualify some of his measures, like his ban on protests and his threatening tone with the media, as plainly anti-democratic.
- His domestic popularity has long been very high, as he appears as a 'man of integrity', determined to go against the status quo, able to sometimes take spectacular measures that please public opinion.[4]

[4] Concerning the last point, however, a recent poll by a well-considered non-governmental organisation (NGO) suggests that his popularity has recently fallen by a sizable margin. It has been fiercely attacked by the government, which has threatened to take the NGO to court if no clear proof of the poll results can be made (BBC, 2018).

Clearly, all this may be the foam of the waves. It is only on results in the fields of economic growth, employment, poverty reduction, social services, and inclusiveness that the actions of the fifth President of Tanzania will have to be evaluated, something that will not be possible for a few years yet.

1.7 Final remarks on political history

Numerous major events have occurred over the last 50 years or so that have oriented Tanzania in various, sometimes opposing, directions. In a first stage, post-independence Tanzania continued colonial trends, with essentially an outward market orientation. Then came the turn to socialism and the attempt at creating a self-reliant African socialist society. This second period lasted 17 years, during which huge and sometimes violent reforms took place at the same time as mindsets were deeply modified. Then a new period came which started to reverse the previous order, trying to instil in the society the seeds of a market economy and of a multi-party democracy. Ten years later, this new regime is more or less in place, but the old order has not completely disappeared in the minds of civil servants and the employees and managers of SOEs. Also, such a succession of reforms and the difficulty of monitoring them in a rigorous way has generated specific mindsets, especially regarding corruption, that will take time to be modified.

Most importantly for the present study, it is difficult to imagine that such a contrasting evolution in such a short time span has had no impact on the institutional context in which present and future development must take place. It is the purpose of this study to identify precisely which institutions are the most likely to be obstacles to that development. Before focusing on institutional issues, however, it is necessary to review the main features of the development process in Tanzania.

2 The features of economic development in Tanzania

At US$2,500 (at 2011 international prices), Tanzania finds itself today in the bottom 16% of the world ranking of GDP per capita. Still a 'low-income' country in the World Bank classification, the ambition of the present government is for the country to graduate to the 'middle income' status by 2025, from gross national income (GNI) per capita of US$905 today (2017) to US$995. This does not appear to be an impossible goal in view of the growth achievements of the past 10 to 15 years.[5] Yet such a promotion is unlikely to eliminate extreme poverty, which today still amounts to a little less than 30% of the population. Eradicating poverty in the next two decades still requires sizeable sustained efforts in terms of the aggregate rate, and the structure of economic growth, as well as social policies.

This section reviews the features of economic growth in Tanzania since independence to detect the most apparent constraints to growth poverty reduction today and in the years to come.

[5] Yet the so-called Atlas method used by the World Bank to compute dollar-valued GNI per capita at the current exchange rate – in fact a three-year moving average – implies that this indicator increases as the GNI rate of growth less the rate of real devaluation. As a result, over the last three years, the Tanzanian GNI per capita computed with the Atlas method has in practice not changed despite high rates of growth.

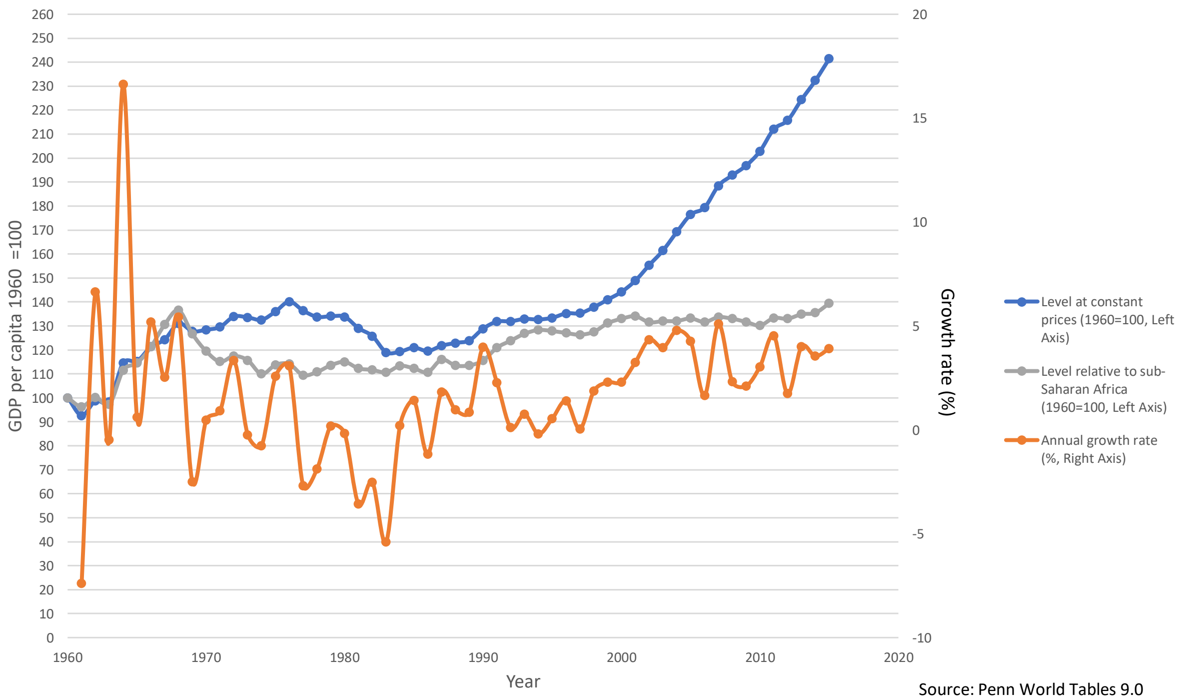
2.1 The aggregate rate of growth

Growth closely followed the changes in political and economic regimes that have characterised Tanzania over the last decades. Growth was fast following independence, but slowed down a bit after the implementation of the Ujamaa strategy, and collapsed when the destabilisation caused by the latter combined with adverse external conditions. Then followed a long period of stagnation and slow recovery as the transition to the market economy was taking place and the adjustments imposed by the IMF and the World Bank affected economic activity. It was only in the late 1990s that GDP per capita started to increase vigorously again, after almost 20 years of stagnation. Since then, progress has been vigorous, with GDP per capita growing on average by 3% a year and total GDP by around 6% over the last 15 years or so. As can be seen in Figure 1, GDP per capita has increased by 60% since 2000, a rather impressive performance in comparison with the previous period.

However, that overall evolution of growth is far from idiosyncratic. Compared with the whole of sub-Saharan Arica – excluding South Africa – Tanzania did better in the post-independence years, then worse in the early 1970s, at the time of Ujamaa. It then performed on a par with the region, recovered earlier from the stagnation of the 1980s, and has again grown with the rest of Africa since the turn of the century. Over the last 50 years Tanzania has grown a little less than 40% in comparison with the average sub-Saharan country, but in practice that gain was achieved by 1968!

The comparison is less favourable with other developing countries. In the early 1980s, countries such as Bangladesh, Cambodia, India, Laos, or Vietnam had a GDP per capita lower than Tanzania in international purchasing power parity. Today, it is 30% higher in Bangladesh and Cambodia and more than twice higher in the other countries.

Figure 1. Tanzania's GDP per capita (absolute and relative to SSA) and growth rate: 1960-2015 (1960=100)



Source: Penn World Tables 9.0

2.2 The sources of growth: structural change and productivity gains

The growth of the Tanzanian economy since independence has brought strong structural changes. Most noteworthy is the drop in the weight of agriculture in the whole economy. Its share in employment went from 92% at independence to 70% in the early 2010s and less today, while its share in GDP went from 45% to 30%, and 25% today. A careful examination of the changes in the sectoral structure of the economy over time suggests that they have closely followed the evolution of aggregate growth. As can be seen in Table 1, based on data compiled by the Groningen Growth and Development Center for the 1960–2011 period[6], most changes took place when growth was strong during the decade and a half after independence and then in the 2000s. The 1977–96 intermediate period, during which GDP per capita and aggregate labour productivity went down, saw a kind of regression, with the GDP share of agriculture going back up and that of manufacturing going down, whereas limited change was taking place in the other sectors, except for some limited movement from agriculture to the 'trade, restaurants, and hotel' sector. As relative and absolute labour productivity in the latter went down, it is likely that this structural shift was governed more by surplus labour sheltering than by the dynamism of that sector.

[6] This source is being used because of the work done by the authors to make original data sources on sectoral employment and GDP consistent with each other and over time.

Table 1. Evolution of the sectoral structure of employment and GDP: 1960-2011

(%)	1960		1977		1997		2011	
	Employment	*GDP*	Employment	*GDP*	Employment	*GDP*	Employment	*GDP*
Agriculture	91.7	*45.0*	88.5	*33.0*	85.3	*39.7*	70.7	*29.1*
Mining	0.1	*3.8*	0.6	*1.2*	0.5	*1.6*	0.7	*3.2*
Manufacturing	1.1	*6.9*	1.6	*12.4*	1.5	*8.5*	3.4	*10.4*
Utilities	0.0	*0.8*	0.1	*1.5*	0.2	*2.6*	0.5	*2.4*
Construction	0.2	*7.2*	0.7	*8.7*	0.6	*7.3*	1.5	*10.7*
Trade, restaurants and hotels	1.0	*17.7*	3.9	*16.2*	6.1	*15.9*	10.2	*17.3*
Transport, storage and communication	0.2	*6.3*	0.8	*9.0*	0.7	*7.0*	2.0	*8.7*
Finance, insurance, real estate and business services	0.1	*2.6*	0.2	*3.4*	0.2	*4.8*	0.7	*4.7*
Government services	3.5	*9.2*	2.2	*13.8*	3.1	*11.6*	8.6	*12.9*
Community, social and personal services	2.1	*0.5*	1.4	*0.8*	1.8	*1.0*	1.9	*0.7*
Whole economy	100.0	*100.0*	100.0	*100.0*	100.0	*100.0*	100.0	*100.0*
Overall labor productivity (1960=100)	100.0		135.8		124.9		186.6	
Total GDP (1960=100)	100.0		219.2		361.7		860.1	

Source: Author's calculation from Groningen Growth and Development Center database

Focusing on the two periods of fast growth in Figure 1 and Table 1, it would be tempting to say that the engines of growth of the Tanzanian economy stand in sectors where both the share of employment and the share of GDP have increased over time, i.e. manufacturing, utilities, construction, transport, and modern services in the post-independence period, and mining, manufacturing, trade, construction, and transport in the 2000s. Such a reading of Table 1 would be misleading, however. First, engines of growth in a small open economy like Tanzania are necessarily located in sectors that produce tradable goods. Growth in other sectors reflects more the dynamism of the demand side of the economy and is the consequence rather than the cause of growth. Thus, manufacturing in post-independence and mining, manufacturing, and that part of the trade, restaurant, and hotel sector oriented towards tourism in the recent period are the sectors that might qualify as growth engines. Second, true engines of growth are unlikely to be sectors where labour productivity falls while the sector's employment share rises. This would mean either that those sectors are sheltering surplus labour or that their development concentrates in sub-sectors with the lowest productivity, an unlikely evolution in the absence of significant modifications in foreign trade or foreign trade policy.

The case of the manufacturing sector is particularly interesting due to the emphasis presently put by the Tanzanian government on the industrialisation of the economy. It can be seen from Table 1 that the manufacturing sector grew substantially faster than total GDP over the last period. Assuming that part of that growth was a response to the increase in demand originating in the rest of the economy, the other part can be seen as truly autonomous and directed towards exports – net of imports. Indeed, it is the case that manufacturing exports grew quite substantially during the 2000s, as emphasised for instance in MacMillan *et al*. (2017, pp. 155–160), suggesting that sector could act as an engine of growth for the whole economy.[7] Yet it must be stressed that the contribution to growth of the manufacturing sector is limited by its size. It can be computed that the 2% growth surplus of

[7] See also World Bank (2014, pp. 33–35).

manufacturing over total GDP in Table 1 is responsible for 0.15% annual growth, out of 6.3% overall.[8]

Table 2 shows more clearly the contribution of changes in the sectoral allocation of labour and in sectoral productivities to overall growth in Tanzania. It is based on the standard decomposition of the growth of overall labour productivity into a structural change component – i.e. reallocation of labour across sectors – and a productivity component.[9] In the structural change column, each entry shows how much the change in the employment share of a sector contributed to overall productivity growth. The figure is obtained by multiplying that change by the initial labour productivity in that sector relative to the overall labour productivity. The productivity column shows how much the change in sectoral labour productivity contributed to overall growth. It is obtained by multiplying that change, deflated by the initial overall labour productivity, by the share of that sector in total employment.

The striking feature of Table 2 is that the total sectoral productivity component of overall growth in labour productivity has been negative in the three sub-periods. In the intermediate and final periods, the contribution of sectoral productivity change was negative for all sectors, except agriculture and mining. In the post-independence period, it was positive only for manufacturing and government services, although the latter is a bit odd since national account conventions are such that labour productivity should be roughly constant over time.[10] In any case, the conclusion to be drawn from Table 2 is that overall growth in Tanzania has been obtained from the reallocation of labour from low-productivity agriculture to sectors with a higher productivity in the rest of the economy, but most often at the cost of a drop in labour productivity in those sectors – the opposite being the case in agriculture, a result consistent with the hypothesis of the presence of surplus labour in that sector. The development of the manufacturing sector in the post-independence period is the main exception to that observation.

It is true that data are quite imperfect both in the national accounts for the first two or three decades after independence and in Censuses and household or labour force surveys, which are the source of employment data.[11] It can be seen, however, that the changes shown in Tables 1 and 2 are essentially driven by the drop in the share of agriculture in employment and GDP. Even in a dualistic framework that would distinguish only between agriculture and all the other sectors, structural change would be the dominant factor of growth. With the huge difference in productivity between agriculture and the rest of the economy until 1997,

[8] I.e. 2% of overall growth as a first approximation, although this does not take into account the potential long-run multiplier effects of manufacturing growth – through demand spillovers triggering increases in production capacity in other sectors.

[9] The identity behind that decomposition is as follows: $\Delta\frac{Q}{L} = \sum_i (\overline{\frac{Q_i}{L_i}})\Delta L_i + \sum_i \overline{L_i}\Delta(\frac{Q_i}{L_i})$ where Q_i and L_i stand for sectoral GDP and employment, and Q and L for the same at the aggregate level. The upper bar notation stands for averaging across the initial and final period. The first term corresponds to structural change, i.e. the reallocation of labour, whereas the second stands for the sectoral productivity effect. The figures in Table 2 correspond to the terms in the preceding equation after dividing on both sides by the initial labour productivity, Q/L. The same decomposition for Tanzania's productivity growth for the period 2002–12 can be found in McMillan *et al*. (2017), with similar results to the 1997–2011 period in Table 1.

[10] This is because, as government services are not exchanged on a market, the value added in that sector is conventionally measured by the total wage bill. At constant prices, i.e. wages, labour productivity should not change.

[11] As censuses and household surveys are irregular, the annual employment data provided by the Groningen Growth and Development Center very much rely on interpolations. It has been checked that original data were available for at least two points of time in the three periods appearing in Tables 1 and 2.

even a small shift of the labour force from the agricultural sector to the rest of the economy causes sizeable progress in the aggregate productivity.[12] This productivity differential diminished over time, but it was still 1:10 against agriculture in 1997.

able 2. Decomposition of overall labour productivity growth into structural change and pure productivity components: 1960-201

(%)	1960-1976		1977-1996		1997-2011	
	Structural	Productivity	Structural	Productivity	Structural	Productivity
Agriculture	-1.6	*1.1*	-1.1	*5.7*	-7.9	*11.7*
Mining	4.7	*-7.0*	-0.3	*0.5*	1.0	*2.1*
Manufacturing	6.1	*5.0*	-1.0	*-3.4*	9.7	*-2.7*
Utilities	1.4	*-0.4*	1.4	*-0.4*	3.4	*-2.4*
Construction	15.6	*-11.3*	-1.6	*-0.6*	9.3	*-0.6*
Trade, restaurants and hotels	33.0	*-28.0*	6.5	*-8.0*	10.6	*-0.7*
Transport, storage and communication	12.7	*-6.5*	-0.5	*-2.0*	10.0	*-4.0*
Finance, insurance, real estate and business services	2.9	*-1.1*	0.5	*0.5*	7.8	*-5.6*
Government services	-5.8	*14.6*	4.0	*-6.8*	16.2	*-8.6*
Community, social and personal services	-0.4	*0.8*	0.2	*-0.1*	0.1	*0.0*
Whole economy	68.7	*-32.8*	7.9	*-14.7*	60.3	*-10.9*
Overall change	35.8		-6.8		49.4	
Annualised change	1.9		-0.4		2.9	

On the non-agricultural side, no sector had a predominant contribution to growth in the recent period. The contributions of construction, trade and hospitality, and transport are of the same order of magnitude. This is in contrast with the post-independence period, when manufacturing was responsible for one-third of total growth. If manufacturing may have been an engine of growth at that time, the same cannot be said of the recent period, despite an annual growth rate higher than in other sectors.

It is thus not to be excluded that growth was largely demand-driven over the last decade and a half. This would be the case, for instance, with a significant improvement in the terms of trade or important foreign grants feeding both private and public domestic demand and fostering in turn output and possibly investment.

Because the preceding analysis relies on a period that ends in 2011, at the beginning of a fast growth spell in Tanzania, it seemed interesting to repeat it for a more recent period. This is done in Table 3 for the period 2006–14 based on the Integrated Labour Force Surveys taken in those two years. As sectoral definitions in employment data and in the national accounts are not necessarily the same as those used to construct the Groningen Growth and Development Center database, the table is not fully comparable to the previous ones. In particular, it was not possible to replicate the same breakdown of services, which are thus fully aggregated in Table 3. For the other sectors, however, it can be seen that the sectoral structure of employment and GDP is consistent with the period 1997–2011 in Table 1.

[12] McMillan *et al*. (2014) found that structural change had a negative impact on overall labour productivity in the 1990s but a positive one in the 2000s in sub-Saharan Africa. Tanzania would seem to conform to that pattern, even though the contribution of structural change may have been positive, but small, in the 1990s.

Table 3. Sectoral structure of employment and GDP and decomposition of overall labour productivity growth : 2006-2014

	Employment and GDP structure (%)				Productivity change decomposition		
(%)	2006		2014		2006-2014 (%)		
	Employment	GDP	Employment	GDP	Structural change	Productivity	Total
Agriculture	76.5	30.9	66.9	24.8	-4.9	8.4	3.5
Mining	0.5	3.9	1.1	3.7	2.7	-1.5	1.2
Manufacturing	2.6	7.8	3.1	8.2	1.8	1.8	3.6
Utilities	0.1	2	0.2	1.7	0.9	-0.5	0.4
Construction	1.1	8.5	2.1	10.9	7.4	-0.8	6.6
Trade	7.6	10.8	12.7	11.4	6.3	-1.3	5.0
Hotels and restaurants	2.0	2.1	3.9	1.6	1.1	-1.0	0.1
Transport, storage and communication	1.5	9.5	2.8	11.8	7.6	-0.8	6.9
Financial	0.1	2.9	0.3	4.6	4.2	-0.7	3.5
All other services	8.1	21.6	7.0	21.3	-4.5	12.4	7.9
Total	100	100	100	100	22.6	16.1	38.7
Annualised rate					2.6	1.9	4.2

Source: author's calculation based on Integrated Labor Force Survey (ILFS, 2006 and 2014) and National Accounts (Bank of Tanzania Annual report)

A notable difference with the preceding analysis is the fact that productivity has increased in the manufacturing sector over the recent period, despite an increase in employment faster than in the rest of the economy. This may be explained by new employees no longer being concentrated in the least productive segments of the manufacturing sector, or by productivity gains in those segments. This latter possibility is discussed at length in McMillan *et al*. (2017) in connection with informal firms.

Even if some productivity progress may be taking place in the manufacturing sector, it still accounts for less than 2% of the total productivity gain in the economy, so seeing a growth engine in the present development of the manufacturing sector would seem unjustified, or at least very premature. It is still the case that structural change is the main source of overall productivity growth. In this respect, the decomposition shown in the preceding table may be misleading because of the aggregation of the service sector. It might be the case that what comes under the 'productivity' heading actually corresponds to structural change within that sector. This is all the more likely as services are precisely an activity where productivity gains are limited.

All in all, then, the most recent data on the evolution of sectoral employment and value-added do not modify the conclusions reached for the slightly more distant period and, in particular, the apparent absence of a growth engine within the Tanzanian economy. More will be said below on the source of the rapid growth observed in the recent past.

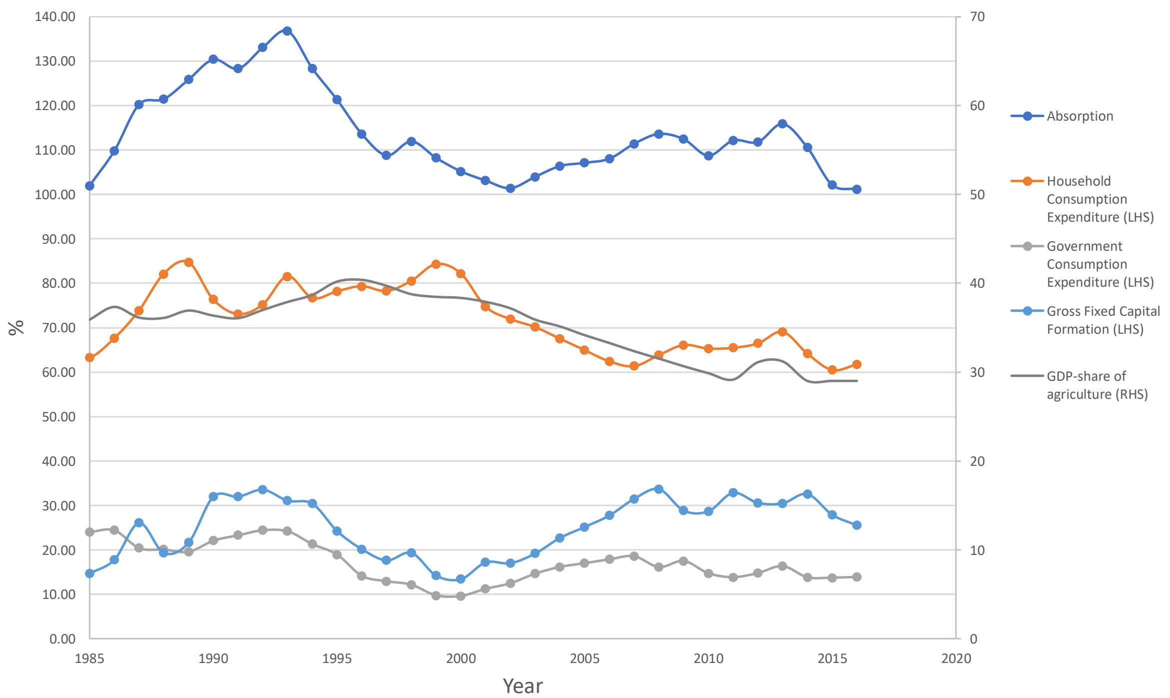
2.3 The structure of aggregate spending

There are time-consistency issues in the Tanzanian national accounts on the expenditure side of GDP. Prior to the transition to a market economy, there was apparently some confusion between private and public consumption, so that available data series are not comparable to data on the recent period. For this reason, the analysis is being limited to the period from 1985 onwards.

The top curve in Figure 2 shows the evolution of what is called 'absorption' in macroeconomics, that is the total expenditure by domestic agents, or the sum of household consumption expenditure, government recurrent expenditure, and gross capital formation. It can be seen that it has been above GDP for the last 30 years – and as a matter of fact since independence. The gap is low, practically zero, in 1985 at the time of the crisis, when the nature of the intervention of the international financial institutions was still under discussion. It then surges when the latter started heavily supporting the transition to a market economy, and then declines. After being close to zero in the mid-2000s, the absorption–GDP gap stabilises around 10%. The last two observations show another drop of the absorption gap towards zero, but it may be too soon to know whether this corresponds to a change of regime or to transitory factors. Note, moreover, that the 2016 figure is still provisional.

Thus, a first conclusion is that Tanzania has steadily lived beyond its means. The corresponding foreign funding flows will be discussed later.

Figure 2. Absorption: 1985-2016 (Share of GDP, %)



Source: Author's calculation from International Financial Statistics, IMF: 'GDP and Components'

The second noticeable feature is the strong fluctuation in household consumption expenditure. Slightly above 60% in 1985, it rises to more than 80% in the second half of the 1980s and is clearly responsible then for the surge in absorption. It then stabilises at that level for 10 years, until the turn of the millennium, after which it falls drastically, returning to its initial level and then stabilising at around 65%.

There are several explanations to the evolution of the average household propensity to consume. The first is the change in the share of agriculture in total income. The propensity to consume is known to be higher out of agricultural income, if only through subsistence farmers consuming most of their own produce. As shown in Figure 2 – and in Table 1 – the share of agriculture in GDP increased somewhat in the late 1980s, in part as the consequence of the crisis, but it fell drastically at the turn of the millennium, thus bringing about a drop in the average propensity to consume in the economy. Yet this explanation is not sufficient to explain the size of that drop. On top of this, the propensity to consume must have decreased in both the agricultural and non-agricultural sectors. There may be various causes for such an evolution, including an increase in taxation in the early 2000s, a slower inflation of consumption prices in comparison with the GDP deflator, the process of urbanisation – for a given GDP share of agriculture – and possibly a lesser share of total income being distributed to households, or more income inequality.

The GDP share of investment increased from a very low crisis level in the late 1980s, thus contributing to the surge in absorption. It then fell drastically from its record height in the early 1990s due to the fall in foreign aid – it then represented more than 25% of GDP (see Figure 5 below). At the turn of the millennium, investment recovered at the same time as growth was accelerating. It has been around 30% over the last 10 years or so, and a little below 25% over the last 20 years, a fairly high level by low-income country standards.

In view of the decomposition of changes in labour productivity in the preceding section, such a level of the investment share of GDP raises a puzzle. To move labour from the low-productivity agricultural sector to higher-productivity non-agricultural sectors requires investing in the latter in order to employ the net increment of the labour force as well as those workers moving out of agriculture. From 1997 onwards, the share of employment in agriculture has dropped at an average rate of 1% every year. With a labour force growing at a little less than 3% a year, a depreciation rate of capital of 1.5% and an initial capital–output ratio around 3.5, an investment rate of roughly 18% of GDP would have been sufficient to maintain the capital–labour ratio constant outside agriculture[13]. This is only a little more than half the actual investment rate.

This would not be a problem if labour productivity had substantially increased, outside the structural change component. But, as seen in Tables 2 and 3, this is not the case. One must thus conclude either that there is much inefficiency in the investment process or that the capital–output ratio is much higher than the 2.5 estimate in the Penn World Tables data. This might well be the case, but even with a value of 4, the observed 30% investment would still be showing inefficiency, unless investment increased very much in agriculture and in infrastructure, with gains of productivity still to come. Inefficiency remains the most reasonable conclusion.

Government consumption was severely cut during the Structural Adjustment period, from 25% of GDP in the late 1980s to 10% in 2000.[14] It then recovered with the acceleration of growth and increased taxation in the 2000s. Government spending has now stabilised at around 14% of GDP in the middle range of low and lower middle-income countries.

How does the structure of aggregate spending in Tanzania compare with other developing countries, including its neighbours? Compared with low-income countries over the last four

[13] Assuming most equipment is outside agriculture, the GDP share of gross investment needed to maintain the capital–labour ratio constant is given by: the growth of the labour force outside agriculture (3% + 1%) plus the depreciation rate, 1.5%, times the capital output ratio, arbitrarily assumed to be 2.5 in the Penn World Tables. The result is 18.25%.Note that the capital-output ratio from the Penn World Tables data is 2.5 only, which would make things worse.
[14] It is interesting that the biggest year-to-year drop took place in 1996, the year the 'cash budget system', by which government entities could not spend more than their cash holding, was introduced.

years, the absorption–GDP gap is a bit smaller and the share of government expenditure is comparable. The big difference is in the relative weight of investment, which is much higher in Tanzania – despite comparable growth rates – and that of household consumption expenditure, which is substantially lower. In comparison with lower middle-income countries, Tanzania still shows a higher rate of investment – 32% of GDP vs. 25.5 – but this advantage is very much obtained through foreign financing, which is smaller in comparator countries. Household consumption is comparable and government expenditure a bit higher.

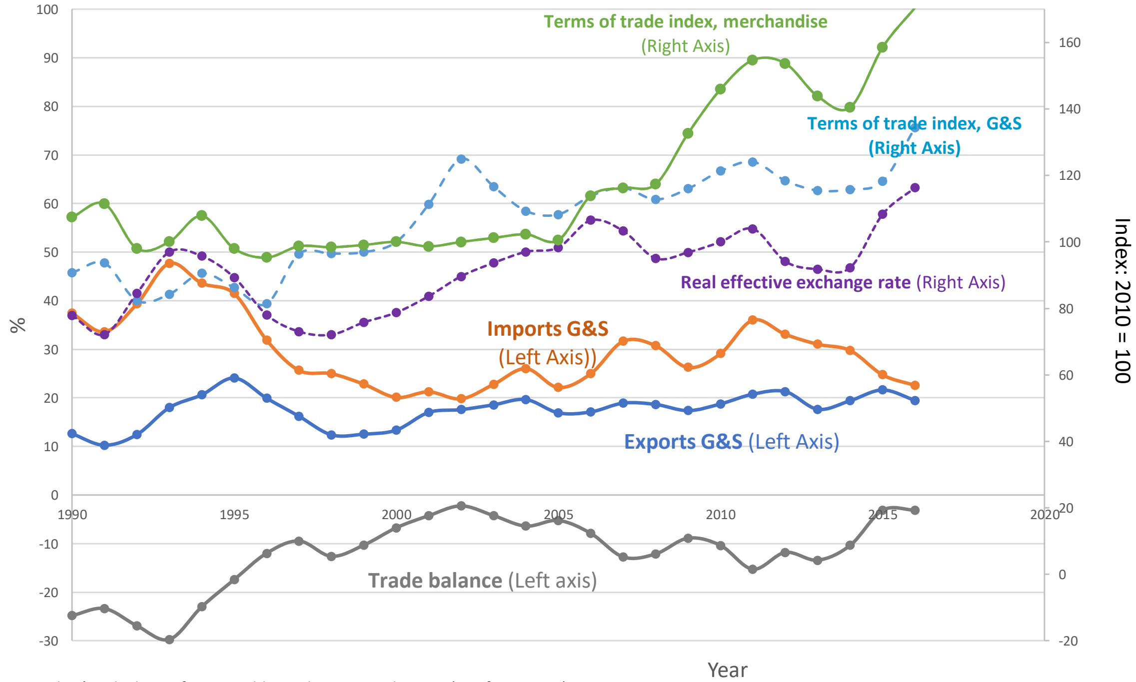
2.4 External trade

The evolution of trade between Tanzania and the rest of the world has been extremely variable over time. Unfortunately, consistent data series for foreign trade since independence do not seem to be available, nor do they fit national accounts at the time of the transition towards socialism in the early 1970s.[15] What seems certain is that the share of exports in GDP was around 30% at the time of independence and had practically collapsed by the time of the major balance of payment crisis that triggered the Structural Adjustment Programme in the mid-1980s. It was then as low as 5%. It had recovered a little by 1990 but then exports surged, peaking to 23% of GDP in 1995. They fell again in the late 1990s before expanding more regularly and stabilising at around 20% over the last five years or so.

Notwithstanding these fluctuations, exports have been extremely dynamic over the last 25 years. Their volume has grown at an average annual rate of 10% since the early 1990s. It can be seen in Figure 3 that the terms of trade also improved rapidly at an annual rate roughly equal to 1.5%. Overall, exports as a capacity to import thus grew at close to 12% a year.

[15] In the IMF's International Financial Statistics, the 'GDP and Components' table for Tanzania shows a discontinuity in 1970. Government consumption expenditure is multiplied by five with respect to the preceding years, causing a surge in GDP and a fall from 25% in 1969 to 12% in 1970 in the GDP share of exports.

Figure 3. Foreign trade and terms of trade : 1990-2016[a)]
(shares of GDP or 2010 based indices)



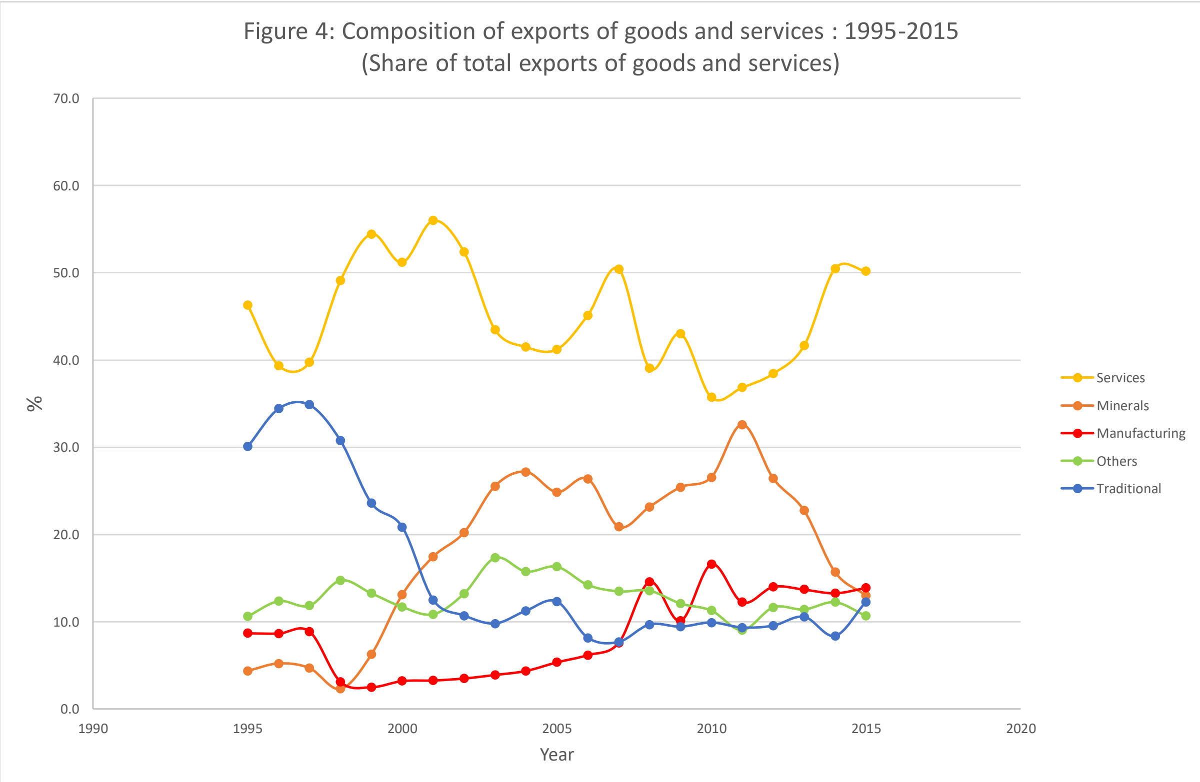
Source:Author's calculation from World Development Indicators (see footnote a)

a) The real effective exchange rate is obtained by multiplying the nominal exchange rate by the mean GDP deflator of partner countries and dividing the result by the consumer price index in Tanzania. The latter was preferred to the GDP deflator due to an apparent inconsistency in the World Development Indicators series around 2005. Trade partners were identified by the mean share of merchandise exports and imports across the two sub-periods 1997–99 and 2013–15. Only partners with shares above 2% were considered. The resulting list of countries include, in order of importance: India, South Africa, China, Kenya, Japan, UK, Saudi Arabia, Germany, UAE, Switzerland, Netherlands, USA, and Belgium.

Such rates suggest that exports may have been the growth engine of Tanzania over the recent period. This is not so much because of their direct contribution to the growth of the demand side of GDP, which nevertheless amounts to roughly a third of overall GDP growth, but because of their multiplier effect on the rest of the economy and the easing of the foreign budget constraint that they permitted. It is thus important to identify the causes for such dynamism.

The evolution of the sectoral composition of exports provides some elements of an answer to that question. Indeed, major changes have taken place. The most noticeable has been the surge in the export of mineral products in the first half of the 2000s, which was a substitute for the traditional agricultural exports. As can be seen in Figure 4, mineral exports – gold in particular – have been the driver of export growth throughout the 2000s. However, the long-run constancy of the share of services suggests they did a lot for the overall dynamism of exports.

The final driver of export growth has been the manufacturing sector. It was seen earlier that the fact that manufacturing grew faster than GDP could be explained by an increasing share of its output being directed towards foreign markets. Figure 4 confirms this view. Moreover, it is quite striking that the surge in manufacturing exports coincides with a steady and strong real depreciation of the currency. After a big depreciation in the early 1990s followed by an equally rapid re-appreciation, the real effective exchange rate rose continuously between 1998 and 2006. That simultaneity between manufacturing export growth and the real exchange rate and the view that causality is more likely to run from the latter was famously put forward by Rodrik (2008)[16]. Tanzania could thus be another example of the favourable consequences of currency undervaluation on industrialisation and growth. Note that it is unlikely that this argument could apply to mineral exports, as the price of those is generally determined on international markets rather than by domestic production costs, which are generally small. In services, however, it could apply to tourism.



Source: Calculation from Bank of Tanzania annual report

The dynamism of exports in Tanzania has been so strong that it is tempting to see a true engine of growth there. This would be taking it too far, however. There is no doubt that the development of exports had a huge impact on the whole economy, including indirectly on the non-tradable sectors through the additional demand it generated in these sectors. The issue, however, is to know whether such a dynamism is sustainable in the long run. Commodity exports, mineral or agricultural, are determined by foreign demand and their price is set on international markets. Relying on them is thus risky and the rate of growth of the revenue to be obtained from these exports is mostly exogenous. Service exports in the case of Tanzania include two major components: tourism and transport of merchandise from landlocked neighbouring countries. Tourism, whose share in total exports has recently fallen,

[16] See also Eichengreen (2008).

is without any doubt an autonomous source of growth in the sense that it does not depend on domestic demand and can be expanded if competitiveness is enhanced. Transport services, however, solely depend on the trade activity of neighbouring landlocked countries – although business will increase in a few years with the projected railway link with Rwanda and Burundi. Overall, then, only the manufacturing and tourism sectors represent truly long-run autonomous factors of growth. They are also labour-intensive, unlike some other exports, a key issue for the inclusiveness of growth and in view of fast demographic growth. As seen earlier, however, they are for the moment too limited – roughly 2% of GDP for manufacturing exports – to be a real growth engine of the Tanzanian economy.

If exports have undoubtedly been a powerful growth factor in Tanzania's development over the last 15 to 20 years, notice should be taken of the fact that quite a substantial part of export, and export revenue growth, is not under the control of the economy. This makes it dependent on foreign demand for commodities and their international price. There is thus some uncertainty about that source of growth. Manufacturing exports and tourism are also dependent on foreign demand but also, and in a major way, on the competitiveness of the domestic economy, which presumably is more under the control of policymakers.

One word should be said about the huge offshore resources of natural gas discovered some years ago. The dependency on foreign prices is at its strongest here since projects are currently on hold in view of international liquefied natural gas (LNG) prices being much lower than the estimated cost of extraction. Estimates of potential revenues vary depending on expected overall cost of extraction. Revenues amounting to 1.2% to 1.5% of GDP seem reasonable estimates[17]. Of course, this would be a real bonus for Tanzania and might be managed without too much negative spillover of the 'natural resource curse' type. However, it is unlikely to change the long-run economic prospects of the country either.

Another factor that may have contributed to the dynamism of Tanzanian exports that is worth emphasising is the change in the relative weight of destination countries. Exports towards China have surged over the last two decades, reflecting both the expansion of China in sub-Saharan Africa and the fast growth of its economy. Also, trade has grown very fast with two African countries that have become major trade partners: Kenya, a partner country in the East African Community, and South Africa, the dominant economic power of the region.

On the import side, the most noticeable fact over the preceding few decades has been their explosion in the early 1990s, at the time that import licensing was almost completely abolished as a final step of the Economic Recovery Programme, which was launched at the beginning of the transition towards a market economy in 1986. The share of imports in GDP reached 48% in 1993. The drop that took place in the second half of the 1990s was the consequence of the fast decline of absorption during that period – see Figure 2. Since then the behaviour of the GDP share of imports has been smoother. The upward trend until 2010 corresponded to a vigorous acceleration in the growth of GDP and in investment.

[17] A recent report by NRGI, a New-York based NGO specialising in advice on natural resource policies estimates the Tanzanian revenue of the Lindi LNG gas project to be 1.2% of GDP, if the project goes ahead (Olingo, 2017). Henstridge and Rweyemamu (2017) assume lower extraction prices that would make the investment profitable. Yet their detailed calculation leads to actual revenues of around 1.5% of GDP in the 20 years following investment – at least five years or more from now. Today's international LNG prices are close to their lowest level in the last 15 years.

As far as the composition of imports is concerned, the drop in the share of consumer goods is worth stressing. This fall, from 36% to 22% between 2000 and 2015, may result from two phenomena: the drop in the share of private consumption in GDP and some import substitution. It is unlikely that the former can explain all the drop in the share of consumption goods in imports, so some import substitution has probably taken place.[18] Presumably, this should have reinforced the impact of exports on the development of the domestic manufacturing sector.[19]

The gap between the aggregate expenditure and GDP, a key feature of the Tanzanian economy ever since independence, is reflected in a structural deficit of its trade balance. This deficit reached alarmingly high levels at the time of the liberalisation of imports at the turn of the 1990s, and when exports had not yet fully recovered from their collapse during the crisis of the 1980s. It was still high in the recent period, averaging more than 10% of GDP between 2005 and 2015. If it got closer to zero over the last two years, it is still too early to know whether this is the result of structural changes or of favourable trade circumstances.

2.5 The financing of the economy

A thorough appraisal of the way Tanzanian development has been financed over time is a difficult task because of the lack of mutual consistency of the basic data sources, i.e. national accounts, balance of payments, and general government accounts, and the lack of time consistency of some of these sources. Table 4 shows the best that could be done based on available data for the 2006–15 period. It combines on the one hand national accounts and government accounts to determine the financing needs of the public and private sectors and, on the other hand, balance of payments data to see how this funding was met through foreign capital inflows.

Inconsistencies are apparent when comparing the 'total' row in the foreign financing section of the table with overall needs for funds in the domestic section. In several years the financing is larger than the need for funds and it turns out that the difference is in some cases much larger than the change in reserves at the Central Bank (not reported). Various factors may explain these discrepancies. First, the 'errors and omissions' item of the balance of payments is sometimes sizeable. Second, mixing calendar and fiscal (June-to-June) year sources as done in this table may result in comparability problems. Third, 2006 was the year a major part of the Tanzanian government debt was written off. The corresponding amount does not appear in the table, but the write-off has probably affected other items in the balance of payments. On average, however, it is the case that the need for funds coincides with the total foreign financing, over most recent years as well as the whole period.

[18] As the GDP share of consumption in 2000 was 78% and that of imports was 20%, the 36% share of consumption goods in exports corresponds to an average household propensity to consume imported goods of (.36x.2/.78=.09). Assuming this propensity remained constant, the 15% drop in the GDP share of household consumption between 2000 and 2015 would have generated a drop of 1.35% in the GDP share of imported consumption goods, or 6% of imports instead of the observed 14% (i.e. 36%-22%).
[19] Assuming import substitution accounts for half the observed drop in the share of consumption goods in imports – as suggested in the preceding footnote – it would have contributed to roughly 1.75% increase in GDP – i.e. .5x(36%-22%)x GDP share of imports (25%) – over a period of 15 years, slightly less than the increase in manufacturing output due to export growth.

Beyond these technical issues, the striking feature of the table is the very acute need of the Tanzanian economy for foreign financing. The overall domestic saving rate averages 19% over the period, which is clearly insufficient to finance investment expenditure averaging almost 30% of GDP. If one considers that the fast growth of Tanzania over the last decade is precisely due to this rather high investment rate, such a performance should then be attributed to the availability of foreign financing. With an incremental capital–output ratio of around 3.5[20], the foreign financing of the 10% of GDP discrepancy between the investment and the domestic saving rate could be responsible for 3% annual growth, a sizeable amount.[21]

Table 4. The financing of the Tanzanian economy: 2006-2015[a]

(% of GDP)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	*Average*
Domestic flows											
Domestic savings	19.3	20.0	18.0	16.9	18.0	17.7	16.8	18.8	22.3	23.8	*19.1*
Central Government	-1.6	0.8	-1.1	-2.2	-2.0	0.4	-0.9	0.2	0.1	0.5	*-0.6*
Private sector[b]	20.9	19.2	19.1	19.1	20.0	17.3	17.7	18.6	22.2	23.3	*19.7*
Gross capital formation	29.9	32.4	28.4	26.8	31.4	31.5	29.4	30.5	29.7	28.4	*29.8*
General Government	5.3	6.1	6.0	6.4	5.7	6.6	6.8	5.2	4.4	6.1	*5.9*
Private sector[b]	24.5	26.4	22.4	20.4	25.8	24.8	22.6	25.3	25.4	22.4	*24.0*
Need for funding	**10.6**	**12.4**	**10.4**	**9.9**	**13.4**	**13.8**	**12.6**	**11.7**	**7.5**	**4.7**	***10.7***
Government: Deficit excluding foreign grants	6.9	5.3	7.1	8.6	7.7	6.2	7.7	5.0	4.3	5.6	*6.4*
(Deficit including foreign grants)	2.9	-0.7	3.1	4.7	3.8	2.7	5.1	2.9	3.1	3.3	*3.1*
Private sector[b]	3.6	7.1	3.3	1.3	5.8	7.6	4.9	6.7	3.2	-0.9	*4.3*
Foreign financing											
Primary and secondary income in CA[c]	-0.9	-0.9	-1.2	0.0	-0.5	-0.1	-0.1	-0.6	-0.7	-0.5	*-0.5*
Official Development Assistance	11.7	10.6	9.4	9.8	8.2	7.2	7.5	6.5	5.6	5.3	*8.2*
of which: loans	3.9	4.2	7.7	4.6	5.4	5.9	4.4	3.7	4.9	4.4	*4.9*
Foreign Direct Investment	3.8	2.5	3.6	4.0	3.1	3.0	4.6	4.4	5.0	3.1	*3.7*
Foreign Inflows: total	**14.7**	**12.2**	**11.9**	**13.8**	**10.8**	**10.1**	**12.0**	**10.4**	**9.9**	**7.9**	***11.4***
Outstanding external debt	22.0	23.4	21.9	26.9	28.3	29.6	29.6	29.6	29.9	33.0	*27.4*
of which:											
Government	13.2	14.8	13.6	16.2	17.8	19.0	18.8	20.5	20.6	23.4	*17.8*
Others	8.8	8.6	8.4	10.7	10.5	10.6	10.8	9.1	9.2	9.6	*9.6*

Source: Author's calculation from IMF, Government Accounts and Balance of payments data in the Annual report of the Bank of Tanzania

a) Government account indicators are defined over the fiscal year from 01/07 to 30/06; accordingly, GDP, saving and investment figures have been transformed into 2-year averages for consistency

A second striking feature of the table above is the difference between the public and the private sector. The main financing difficulty of the Tanzanian economy clearly arises in the public sector. Its current savings are substantially negative, although things seem to have improved in recent years. This means that the current government revenues, consisting mostly of various types of tax, barely cover the recurrent public expenditure, including key sectors like education or health. With such negligible or negative savings, the government is not able to provide the key infrastructure investments needed for the development of the private sector without some support from the private sector or from foreign entities. As the private sector also spends more in capital formation than it saves, the funding of investments by both the public and private sectors must be met by foreign transfers or capital flows.

[20] This figure corresponds to the ratio of the percentage change in the capital stock of the economy to the percentage change in GDP. It is easily proven that this ratio is given by (I/Q – δK/Q)/g where I/Q is the investment to GD ratio (30%); δ the rate of depreciation of capital (taken to be 2%); K/Q the capital–output ratio of around 2.5 according to the Penn World Tables; and g the rate of growth of GDP (7%).
[21] This is ignoring the possible inefficiency of investment underscored above.

On average over the last decade, the financing needs of the Tanzanian economy amounted to 10% of GDP, roughly two-thirds of it arising in the central government and one-third in the private sector, which, in the way Table 4 is built, includes the operation of all public entities not belonging to the central government. It is thus possible that that part of the overall deficit of the economy to be imputed to the public sector is actually higher than what appears in the table.

In the context of the present institutional diagnostics, this state of affairs suggests that a major potential challenge to the economic development of Tanzania lies in the functioning of the public sector. Sustainable autonomous development would require either a larger revenue-generating capacity of the government or more efficiency in its delivery of services, including the provision of infrastructure for the development of the private sector.

Given its importance, the ambiguity of the role of official development assistance in the development of the Tanzanian economy must be stressed. Tanzania may need foreign aid to provide basic public services and infrastructure, but it may also be the case that it is the availability of foreign aid that leads to low savings and inefficiency in the public sector as well as to price distortions, through 'Dutch disease' effects in the private sector, as the ongoing debate on aid effectiveness emphasises.[22]

As can be seen in Figure 5, the correlation between the saving–investment gap, as proxied by the trade deficit, and foreign aid has been extremely strong over the last 25 years, at least until 2010. The gap between the two curves in the early 2000s is due to the way the operations of debt relief undertaken in those years were accounted for by donors. In most cases, the cancellation of debt was considered as equivalent to a flow of aid for the same amount, which explains the discrepancy observed with the trade balance in those years. Close correlation was observed again after 2005 at the end of the debt relief programme, until 2010, at which time the trade deficit was financed by other means, including foreign direct investment and foreign borrowing.

The very close correlation between aid and the trade deficit throughout the 1990s and probably the 2000s could suggest that indeed official development assistance has been a key short-run palliative to Tanzania's budget difficulties. Without it, development performances would have been considerably worse than what was observed. But, of course, anticipating such high flows of development assistance was certainly not an incentive for more saving or efficiency gain efforts.

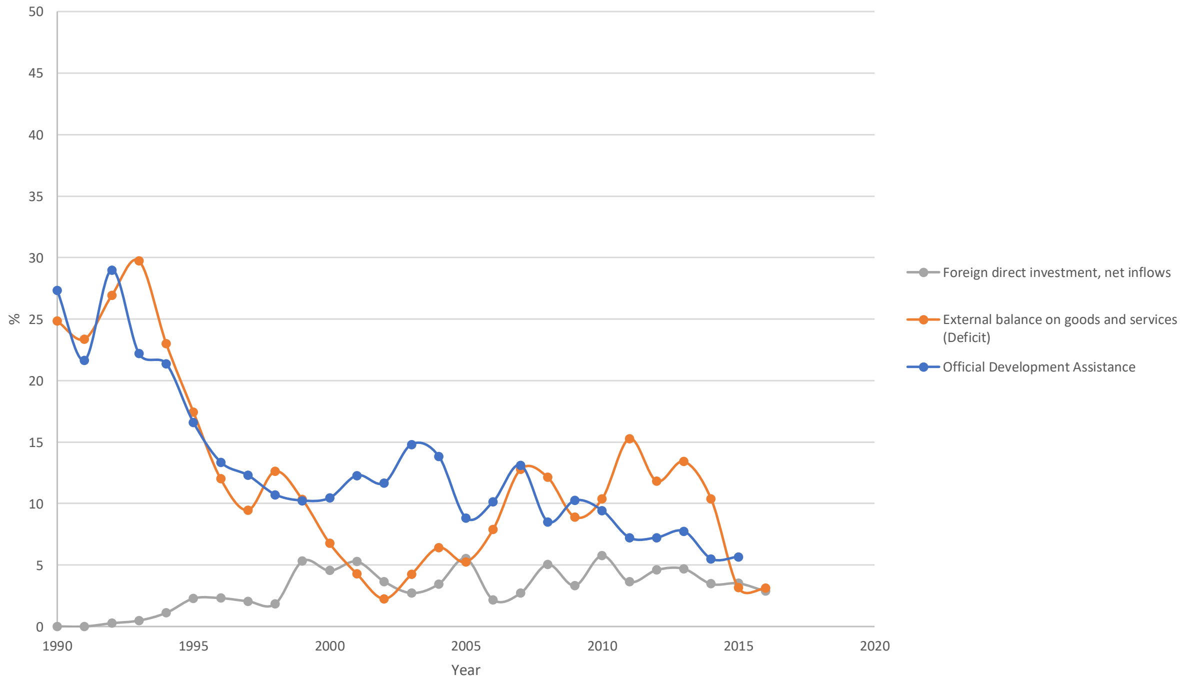
It is the case that foreign assistance has considerably diminished as a proportion of GDP. Figure 5 shows that it steadily declined from the early 1990s, at the end of the Economic Recovery Programme. In those days, it amounted to more than 15% of GDP, so that foreign donors were close to financing the whole government budget. Partly due to some corruption scandals that reduced donors' appetite, but also to their desire of reducing the aid dependency of the country, a goal shared by domestic authorities, aid has now come down to a little more than 5% of GDP. This is still practically 25% of the government's total recurrent and development expenditure, or all public investment expenditure, as seen above. Foreign aid thus remains a key source of finance of the Tanzanian economy, which

[22] For a recent statement of this important debate see Deaton (2013). For the specific case of Tanzania see Edwards (2014).

continues to be extremely dependent on foreign funds, even despite the recent, and possibly temporary, improvement in the trade balance.

Even though progress has been made, government savings remain limited and cover only a tiny part of infrastructure investments. Without foreign assistance, the government's deficit would amount to 6% of GDP. As for the private sector, it was a net lender for the first time in 2015, but this was essentially because of a sharp drop in investment expenditure rather than structural change.

Figure 5. Trade deficit and foreign inflows of funds : 1990-2016
(Share of GDP)



Source: WDI

Foreign direct investment is another source of investment funding. It amounts to roughly a sixth of the overall capital formation. As a percentage of GDP, it is more or less constant. It should also be noted, however, that it is heavily concentrated in mining (50%), with much smaller amounts going to manufacturing (16%) and financial services (11%) (National Bureau of Statistics (NBS), 2015).[23]

As in recent years, foreign aid and direct investments are not sufficient to cover the financing needs of the Tanzanian economy. It follows that the net indebtedness with the rest of the world has been increasing steadily since the mid-2000s. A debt write-off that took place in 2006 brought the external debt down to 22% of GDP, but it went up again to 33% in 2015. Such a level still seems sustainable, especially in a period of low interest rates, but this positive trend suggests that Tanzania's present pace and structure of development may not be sustainable in the long run if foreign assistance, as a share of GDP, were to keep falling. The other noticeable feature of the increase in the debt is that it is concentrated on the

[23] Figures refer to the year 2013.

government sector, which possibly reflects the limited access of private financial and non-financial agents to the international capital market.

2.6 Social aspects

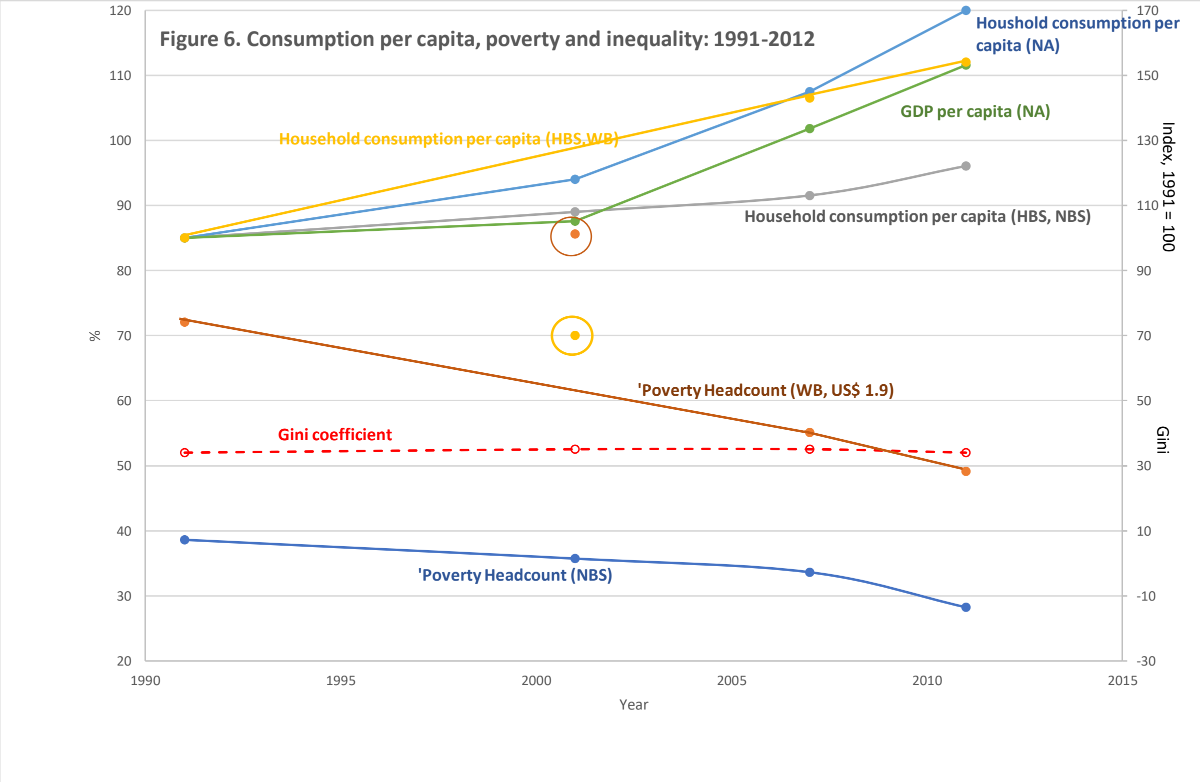
Up to now, the review of the main features and evolution of the Tanzanian economy has essentially been conducted at the macro level. It is now time to see what happened at the level of individual households and the extent to which the overall progress of the economy and its fluctuations reflected themselves in individual welfare. Three dimensions of welfare are briefly reviewed in what follows: income or monetary poverty and inequality, education, and health.

2.6.1 Poverty and inequality

Figure 6 presents some summary statistics on poverty, inequality, and household consumption expenditure as estimated in the four national Household Budget Surveys (HBS) taken since 1990, and compares them with relevant national account indicators. Two sources are consulted, both using the same microdata. The National Bureau of Statistics (NBS) (initially associated with the International Household Survey Network) defines poverty by a poverty line based on the value of the food basket consumed by the poorest half of the population deflated by the share of food in the budget of these households. The poverty line is updated from one survey to the next through specific food price Laspeyres indices – which differ substantially from the consumer price index (CPI) or the deflator of consumption expenditure in national accounts. It must be stressed, however, that the methodology to compute the poverty line and even to collect consumption data has been changing over time, so that the estimates of the distribution of consumption expenditure and poverty are not completely comparable across the four surveys.

The second source is the Povcalnet database maintained by the World Bank. The poverty line is the international poverty line of US$1.9 per person per day at purchasing power parity of 2011. The comparability across years is based on the consumption expenditure deflator of national accounts, the evolution of which is not too different from the CPI. Another difference with respect to the NBS source is that Povcalnet uses household consumption per capita rather than per adult equivalent.

The two sources yield a rather different picture of the evolution of poverty and real consumption per capita over time. As far as the latter is concerned, both sources also differ from the national accounts.



According to the NBS source, poverty reduced from 38.6% of the population in 1990 to 28.2% in 2012, a rather slow change relative to the growth of GDP or consumption expenditure per capita as given by the national account, which increased respectively by 70% and 53% for the whole period. This yields elasticities of 0.4 and 0.5, substantially smaller than the unity estimate for sub-Saharan Africa on the whole – see Arndt *et al*. (2017a). Note that this unit elasticity was also implicit in the National Strategy of Growth and Reduction of Poverty (locally known as MKUKUTA).[24]

Various factors may explain such a low elasticity. First, it is very much due to the slow drop in poverty in comparison with GDP during the intermediate period 2001–7. There may be purely statistical reasons for this, linked to the nature of the price deflators being used or to the specificity of the 2001 survey with a larger coverage of the population and a regional definition of food prices and poverty lines. These have been discussed in some length in various papers (Hoogeveen and Ruhinduka, 2009; Mkenda *et al*., 2010; Atkinson and Lugo, 2014). As inequality did not change significantly – as shown by the Gini coefficient – the low elasticity is essentially due to the mean consumption expenditure per capita in the surveys growing at a much slower pace than GDP or consumption expenditure per capita in the national accounts – i.e. 4.7 vs. 26% or 23%.

Such a discrepancy may indeed be linked to the use of very different price indices to make the two surveys comparable. However, a second cause for the low growth elasticity of poverty may be the fundamental differences in the way consumption expenditure is being

[24] The goal was to reduce poverty from 38.6% in 2001 to 24% in 2010, whereas the projected rate of growth of GDP was 6–8% at the end of that period. Assuming this growth rate corresponds to slightly above 3% throughout the period, the corresponding projected growth elasticity of poverty was indeed around unity (United Republic of Tanzania, 2005, pp. 35–39).

estimated in the national accounts in comparison with household surveys. It is sometimes held that the latter are a better source than the former, given that consumption expenditure is essentially estimated as a residual in national accounts and thus includes items that do not appear in surveys, like imputed housing rents, bank margins on loans, and NGO expenditure (Deaton, 2005). There is less imprecision in GDP growth.

Two hypotheses can be formulated about the low elasticity of mean household consumption per capita and poverty as measured by the NBS with respect to GDP. First, surveys are right. Consumption did not grow as fast as GDP, suggesting that some redistribution away from households, or in favour of very rich households not covered by the survey, took place. As a matter of fact, it was seen earlier that the share of household consumption in GDP had been going down during the 2001–7 period, the main reason for real consumption expenditure growing faster than GDP in the national accounts being that the price deflator for consumption grew faster than the GDP deflator. Maybe this is where the problem lies: a discrepancy between the price indices used in comparing surveys and those used to deflate nominal consumption amounts in the national accounts. Second, the national accounts are right, which means that the drop in poverty in the surveys is underestimated between 2001 and 2007. But this would then mean that it is overestimated in the subsequent 2007–12 period or that poverty is in fact lower than estimated in 2012, despite the claim that the methodology to measure poverty was very much improved then. Because of this last argument, the first hypothesis of a slow growth of household consumption and a slow reduction of poverty seems to be favoured.

The preceding conclusion is reinforced by the fact that another household survey, the National Panel Survey (NPS), shows an increasing trend in poverty between 2008 and 2013. A deeper analysis shows that the difference from the HBS estimates lies essentially in the price indices used to compare household expenditure per capita and poverty headcount over time, with the NPS making use of the CPI, which the HBS do not.[25] This indeed confirms that there is a real issue with the measurement of poverty in Tanzania.

Things are no simpler with the World Bank source on poverty data. First, the observation for 2001 – the circled dots in Figure 6 – is clearly nonsensical. It would imply a 30% drop in household consumption per capita between 1991 and 2001 and conversely a 100% increase between 2001 and 2007. It is better to simply ignore that observation. Relying on the other observations, the estimate of poverty with a poverty line at US$1.90 (at 2011 purchasing power parity) per person per day turns out to be much higher than the NBS data. This discrepancy in the level of poverty may seem surprising given that Tanzania happened to be among the 15 low-income countries whose national poverty lines were averaged, after adjusting the dollar figure for purchasing power parity, to get the 'international poverty line' equal to US$1.90. It simply turns out that, indeed, after adjusting for the purchasing power parity estimated for Tanzania, that country's poverty line ended up somewhat below the average obtained with the 15 countries – i.e. 0.633 of the international poverty line, to be precise.[26] To be sure, estimating the poverty headcount in Tanzania with 0.633 x US$1.90 in the Povcalnet software leads to precisely 33.8% in 2007, almost equal to the 33.6 figure reported by NBS. There may be two reasons why the Tanzanian poverty line is substantially

[25] See the comparison between poverty trends based on the HBS and the NPS in Belghith *et al*. (2018).
[26] See World Bank (2017, p. 19), where Tanzania is taken as an example of the relationship between national poverty lines and the US$1.90 international poverty line.

below the international line: a) it is truly lower than the average national poverty lines of the 14 other countries behind the international poverty line; or b) the purchasing power correction is based on domestic prices different from and/or higher than the prices used to value the basket of goods that supports the national poverty line.

All this would be a good argument for favouring the NBS over the World Bank poverty estimates.[27] In terms of poverty reduction, however, both are bound to give comparable results. In both cases, the GDP-growth elasticity of poverty is around 0.5, which was seen to be on the low side.

Three conclusions can be drawn from this rather technical discussion of poverty estimation in Tanzania. The first is that more clarity is needed in the way the poverty line is set and household consumption expenditure is made comparable over time. Which price index is being used is crucial. The second one is that international comparability through purchasing power parity may be deceptive if prices behind that conversion are too far from prices in the consumption basket of poor people. The third conclusion, the most important one for the purpose of this study, is that there is a challenge in Tanzania in transforming GDP growth into poverty reduction. In other words, growth has not been inclusive enough over the last 25 years.

Given the relative imprecision or ambiguity of monetary measures of poverty in Tanzania, it is interesting to consider other definitions and estimates relying on different types of data. A recent study by Arndt *et al*. (2017b) has done so, relying on four waves of the Tanzania Demographic and Health Survey and identifying poverty through deprivation in five dimensions of household welfare: water, sanitation, housing, education, and information (through radio or television). Deprivation is defined as a binary variable describing if the corresponding need is satisfied or not. Then, household welfare is defined as a vector of five deprivation 0/1 variables, generating 32 possible combinations, some of which can be unequivocally ranked in terms of welfare and others less so. The authors then compare the distribution of this multi-dimensional poverty variable across surveys taken respectively in 1992, 1996, 2004, and 2010, using a generalisation of the first-order stochastic dominance.

Over the long run – i.e. 1992–2010, they find that poverty has unambiguously diminished at the national level. Over some shorter periods of time – 1992–96 or 2004–10, however, they find no significant progress. The explanation may be that change in living conditions is relatively slow and is significant only when measured on long enough periods. It may also be the case that, as discussed earlier, poverty reduction was slower in the 1990s (a conclusion consistent with the monetary evidence discussed earlier) and the second half of the 2000s – for which the comparison with earlier evidence is uneasy given the limited overlaps with the household consumption surveys.

An interesting finding of the Arndt *et al*. (2017b) study is that, even over the long run, the drop in poverty seems much less pronounced in urban than in rural areas, even though growth in Tanzania has tended to favour the non-agricultural rather than the agricultural sector. This suggests that phenomena other than economic growth are at work behind that non-monetary measure of poverty.

[27] As a matter of fact, the World Bank itself seems to use the NBS data, as can be seen in World Bank (2015).

A word should be said on inequality. Here too there is a considerable ambiguity and diversity in published estimates. The last NBS publication based on HBS 2011 reports a Gini coefficient virtually constant at 35% over the whole period. The World Bank data show an increase in 2007 followed by a return to the initial level in 2012. Belghith *et al*. (2018) report HBS-based estimates of 38.5% in 2007 and 36% in 2011, but the NPS data lead to 38% in 2008 and 42% in 2012. In all cases, Tanzania's level of inequality would stand in the high–middle range by international standards, but probably below the average for most of sub-Saharan Africa. Whatever the source being considered, these estimates must be taken with considerable caution, however. Inequality measures are most likely to be severely biased in developing countries because top incomes, including income from corruption, are most certainly not covered by HBSs. This is where the most important source of inequality may lie, and it may have a non-negligible impact on the economy overall. Unfortunately, not much is known about it.[28]

2.6.2 Education

Education has made huge progress in sub-Saharan Africa over recent decades. Enrolment slowed down at the time of macroeconomic adjustments in the 1980s, but accelerated again with the launch of the Millennium Development Goals in the early 2000s. Gross primary enrolment went up from 50% in 1970 to practically 100% in 2015, and from 13% to 42% for secondary.

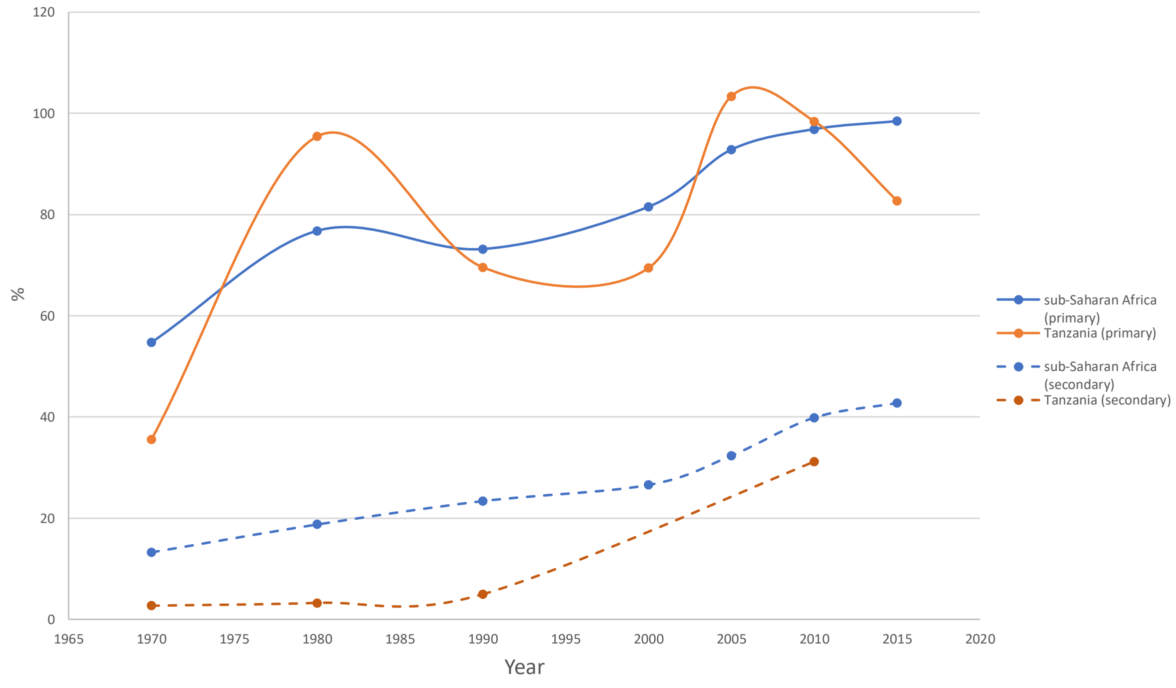
In comparison, fluctuations in the enrolment rate have been much more pronounced in Tanzania and the overall gain is not as large. As can be seen in Figure 7, the crisis and the market transition has triggered a sizeable fall in enrolment, after a fast growth in the socialist period. With the economic recovery, the Millennium Development Goal push and the abolishment of tuition fees, enrolment increased again in the 2000s and practically reached universal primary schooling in 2007. But that increase could not be sustained, and enrolment fell back to 83% by 2015, a percentage possibly overestimated (Joshi and Gadis, 2015, p. 2).[29]

The progress in secondary education has been much stronger, from less than 5% in 1990 to 31% in 2010, and data from HBS suggest that this progress has been continuous, unlike for primary (NBS, 2014, p. 12). Yet the gap with respect to the average sub-Saharan country is sizeable, although diminishing.

The situation is also favourable for pre-primary schooling, where Tanzania is making rapid progress and is ahead of the sub-Saharan average. Yet a high enrolment rate may hide low quality. The pupil-to-qualified-teacher ratio at the pre-primary level is as high as 169:1 in public entities (UNICEF, no date). The consequence is that most children enter school in unfavourable conditions, due either to lack of, or poor, pre-primary.

[28] Yet see Atkinson (2011) for a historical estimation of top incomes in Tanzania.
[29] Data from the HBS confirm that evolution: 59% in 2001, 84% in 2007, and 79% in 2012.

Figure 7. Primary and secondary school enrolment (gross) in Tanzania and some comparator countries: 1970-2015 (percent)



Source: UNESCO

Quality is also found to be low, and deteriorating, in both primary and secondary schooling. Joshi and Gaddis (2015) report that the pass rate of the primary school leaving examination went down from close to 70% in 2006 to 30% in 2012. The deterioration is even worse for secondary schooling, with the pass rate to the Certificate of Secondary Education Examination falling from 90% to 30% over the same period (Joshi and Gaddis, 2015, Figure 1.1). Only 10% of grade three students are able to read a grade two story in Kiswahili, and only 30% have mastered grade two numeracy. Moreover, this low average performance hides a high level of disparity across geographic regions or family backgrounds.

Even though Tanzania does better in educational achievement tests than most other east African and southern African countries in SACMEQ (Southern and Eastern Africa Consortium for Monitoring Educational Quality), the preceding drop in performance is worrying. In primary school, a possible cause may be the overcrowding of schools, partly due to the surge in enrolment in the early 2000s. The average number of pupils per teacher in primary schools was 63:1 in 2007, much above the 47:1 observed in 2000. The average number of students per classroom was 74 in 2010. The number of textbooks per pupil has gone down: 3% of grade six students had the sole use of a mathematics textbook in 2007 (Ponera *et al*., 2011). However, another cause of low and falling performances in both primary and secondary schools is teacher absenteeism and possibly teacher training. One out of four teachers are not in school when supposed to be there, and more than half of the teachers are not in the classroom when they should be teaching. Students in primary school are thus taught two hours a day on average, instead of the scheduled five hours. As can be expected, all these ratios are much worse in rural than in urban areas (Wane and Gaddis, 2015). Apparently, teacher absenteeism from school has gone down since 2010, but still remains extremely high.

There is probably a direct relationship between the observed drop in enrolment in recent years and the deterioration of the quality of schooling, with the relationship going in both directions. Primary school overcrowding and the subsequent lowering of school quality may have disincentivised parents, whereas overcrowding itself and the lack of resources in general may have disincentivised teachers.

Two conclusions of importance for the present institutional diagnostic of Tanzania come out of this brief review of the education sector. The first is the negative impact of the public budget constraint, despite the support of foreign aid, on the quality of the educational service and its consequences for the demand for schooling. The second is the negative effect on enrolment and educational achievements of several sources of inefficiency in the public sector, directly in the delivery of educational services, and, indirectly, in reducing the resources that can be made available to the education sector.

2.6.3 Healthcare

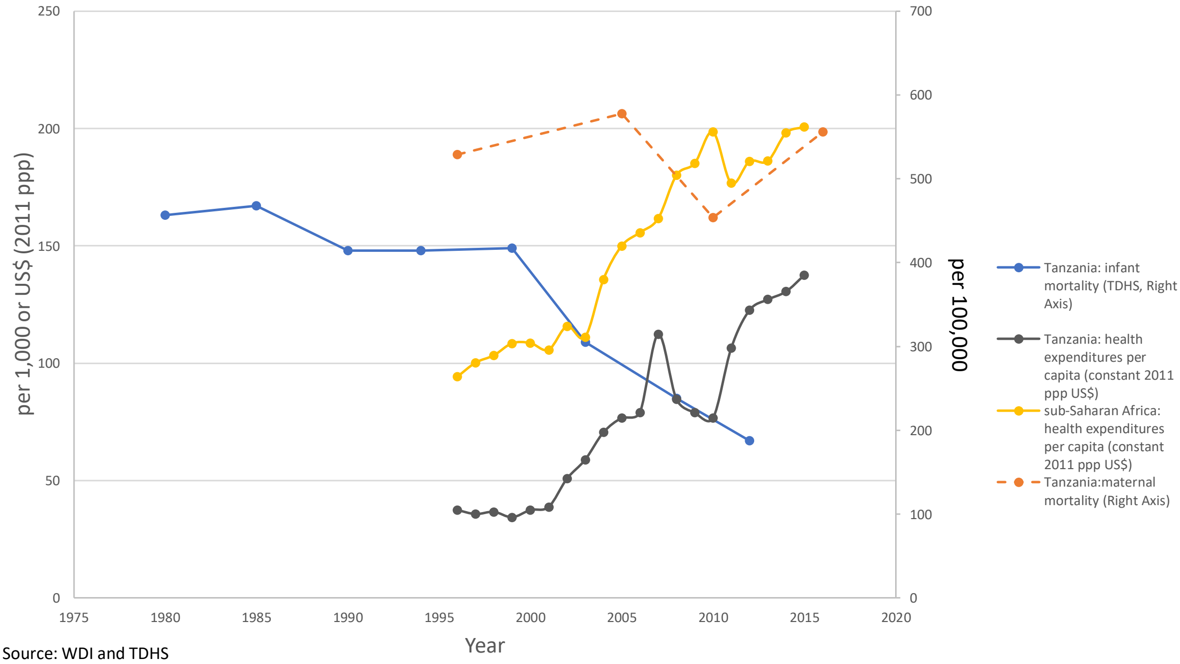
The diagnostic of the healthcare sector in Tanzania is variable. On the one hand, some input and outcome indicators show satisfactory results, while others have evolved less favourably. On the other hand, a recent evaluation suggests important quality issues in healthcare delivery. In addition, the funding of the sector relies on foreign assistance in a proportion that is high and shows no sign of decline.

Figure 8 shows various indicators that illustrate the contrasting performances of the health sector. Under-five mortality has undoubtedly made considerable progress since the turn of the millennium, and most likely in connection with the launch of the Millennium Development Goals. This indicator went down from 148 for 1990–5 to 67 in 2010–15.[30] Thus, Tanzania is very close to achieving Millennium Development Goal number four, which was to reduce infant mortality by two-thirds.

It does not seem to be coincidental that the evolution of infant mortality is exactly the opposite of that of real total healthcare expenditure per capita, which both started to move, down and up respectively, after 2000. Over the last 15 years or so, expenditure per capita has increased at the average annual rate of 8.8%, much faster than GDP per capita of -3.5%.[31] Yet, when compared with the average sub-Saharan country, Tanzania still spends less on healthcare.

[30] These figures are drawn from the various Tanzania Demographic and Health Survey reports, which refer to a period extending 0–5 years before the survey.
[31] The peak in 2006 is explained by the severe drought that hit the country and had serious consequences for nutrition and the health of the population.

Figure 8. Some input and outcome healthcare indicators in Tanzania and sub-Saharan Africa: evolution of under-5 and maternal mortality in Tanzania and sub-Saharan Africa, 1970-2016



Source: WDI and TDHS

Not all indicators show such a favourable evolution, however. Maternal mortality is such an example. Its long-run trend is flat, the fluctuations shown in Figure 8 not being statistically significant. What is more surprising is that, according to the Tanzania Demographic and Health Survey, skilled delivery assistance increased substantially over time – e.g. from 51% to 64% between 2010 and 2015 – as part of the Strategic Plan to Accelerate Reduction in Maternal, Neonatal and Child Deaths launched by the Ministry of Health and Social Security in 2008 (United Republic of Tanzania, 2016, p. 172).

This last observation suggests that there may be some skill deficit in the provision of healthcare. It is not clear whether this may apply to maternal mortality, but the 2014 Health Service Delivery survey points to such weaknesses by concluding that the 'major challenge for Tanzania's health sector is the shortage of skilled human resources for health' (p. 9). The report also insists on possible gains in efficiency through increasing the caseload, currently low by international standards, and reducing absenteeism, although, at 14%, this is much less pronounced than in the education sector.

On the financing side, a major cause of concern is the importance of foreign assistance. The share of expenditure financed by external sources rose from around 20% in the early 2000s to an average of 45% since 2006, which suggests a serious problem of sustainability in the long run. If progress in health outcomes is to continue at the same pace as in the previous 15 years, funding will have to keep increasing faster than GDP. More funding will thus be needed domestically. It might come from the higher formalisation of the economy leading to more people being covered by health insurance programmes paid for by employers through the National Social Security Fund, or, in the informal sector, from expanding the coverage of the Community Health Fund, a voluntary insurance programme. However, it is unlikely that with a premium of less than US$10 per household, the latter could become a significant source of funds for the healthcare system, especially given its complex decentralised governance. Further progress in healthcare will have to come from more resources being made available at the central government level or through cross-subsidising healthcare in the informal sector with the health insurance system in the formal sector.

This expansion of healthcare funding and service provision is all the more important given that large disparities are observed in most health indicators between geographical areas, and within areas between households with different characteristics. From that point of view, the cheapest progress in healthcare in Tanzania may come from 'extensive', more people being covered, rather than 'intensive', more risks being covered, strategies.

Improving the governance of the overall healthcare system, in particular through better coordination of the various actors at various levels, may also be a source of improvement. This is an issue that does not seem to be well covered by the existing literature, and which is certainly not foreign to more developed countries.

3 Conclusion

Tanzania started its independent existence with considerable economic dynamism, until it was hit on the one hand by the consequence of an ill-prepared transition towards socialism, which made the economy increasingly inefficient, and, on the other hand, by the global development crisis of the early 1980s. There followed a long and painful period of slow growth, caused by a grim international economic environment and a difficult adjustment to a market economy. The growth acceleration observed over the last 15 years is quite spectacular. At the current rate of growth, GDP per capita will double in 20 years and it should not take very long for the country to leave the 'low-income' tier of the World Bank classification to acquire the 'middle-income country' status.

This does not mean there is no cause for concern about the long-run sustainability of such an accelerated growth path. The main challenges identified throughout this chapter are listed below, before briefly mentioning what they may imply for the institutional diagnostic exercise in this volume.

The first cause for concern is the lack of clarity about what really is Tanzania’s long-run engine of growth. To a large extent, growth during the last one and a half decades was pushed by the demand side of the economy, itself relying on increasing export revenues and foreign financing. Such a model is quite different from the contemporary Asian model or the Latin American model of the 1960s and 1970s based on industrialisation. As a matter of fact, the Tanzanian manufacturing sector has not underperformed. It has even been able to significantly expand its exports and substitute some imports. The problem is that it is presently too small to pull the economy forward thanks to its sole development. Although manufacturing exports have done well, they remain a minor fraction of total exports and it is the other fraction that has driven recent growth. The problem is that it is very much exogenous, depending mostly on international prices and foreign level of activity. Circumstances may become less favourable in the future and growth will then weaken. There are fewer constraints with manufacturing, agroindustry, or tradable services like tourism. Could they expand so as to make growth less dependent on foreign economic factors?

The second cause for concern, linked to the preceding one, is the poor productivity performance of the economy once one has corrected for the reallocation of labour from low-productivity agriculture to the rest of the economy, i.e. 'structural change'. The fact that this reallocation is taking place with productivity losses in practically all sectors is worrisome. It suggests that, overall, the reallocation of labour in the economy is governed more by push factors out of agriculture than pull factors in the rest of the economy, and/or that factors complementary to labour – i.e. equipment, human capital, infrastructure – are not expanding fast enough, which reduces labour productivity. As the rate of capital formation is fairly high by international standards, this suggests there may be serious misallocation problems or technical inefficiency in the investment process. There may also be production bottlenecks, for instance power supply, which, as will be seen later, is a frequently cited constraint on faster growth.

The preceding remark refers to non-agricultural sectors. If productivity gains are positive in agriculture, they are not impressive either. From Table 2, it can be calculated that the annual agricultural productivity gain has been 2% between 1997 and 2011. Given the presently low overall (land) productivity in Tanzania – and in sub-Saharan Africa in general – and the obvious comparative advantage of Tanzania in agriculture, faster gains must be possible. What is the main obstacle to such gains?

The third source of concern may be the most serious one. It is the strong dependency of the Tanzanian economy upon foreign financing. It is true that, for several reasons, the gap between absorption and national revenue has been scaled down in recent years. However, it is not clear whether that evolution is due to domestic structural factors and policymaking, or to decisions made by outside actors, foreign donors in particular. In any case, even during recent years, the dependency remains high. Excluding foreign grants, the deficit of the current account was still above 6% of GDP on average in 2014–15. Official development assistance itself still represented more than 5% of GDP over those two years, a little more than a quarter of the government budget and practically all of the public investment in infrastructure. What would happen if, for some geopolitical reason or unexpected development, this flow were to dry up? It is most unlikely that the past growth trend could be maintained.

An important unknown for the economic development of Tanzania is what will happen with its offshore natural gas reserves. They are sizeable and could provide Tanzania with substantial additional revenues for the 20 to 30 years after a five-year investment period. This would require that the international price of gas goes up again and stays up. It was seen that extraction costs are apparently high, possibly higher than current and average past prices. Betting on a sustained price increase in the medium run that would justify the huge investments required for extraction would clearly be extremely risky. At this stage, it is thus not clear whether the discovery of these reserves truly modifies the prospects of the Tanzanian economy at a reasonably close horizon.

A final source of concern is on the social side. Poverty is receding slowly, certainly more slowly than if all households had their real income or consumption expenditure growing at the same rate as GDP. It is a problem that growth has not trickled down more strongly to all segments of the population since its acceleration at the turn of the millennium. This may have adverse effects on future development through the demand side. The same is true of the falling enrolment and low quality of the education sector, which may put future growth and poverty reduction at risk. More is to be done to ensure a more inclusive growth and a more dynamic investment in human capital.

The preceding review of the economic development challenges faced by Tanzania was essentially factual. Little was said of policy choices or the behaviour of major economic actors. Only the consequences of their action, not their decisions or their behaviour, were analysed. The way in which the economic decision makers, public or private, interact and generate specific economic outcomes, including obstacles to development, depends on the complex set of rules that govern these interactions. These rules constitute the institutional framework in which development takes place. Beyond the pure economic facts reviewed in this chapter, a deeper analysis of development challenges thus requires identification of the institutional challenges causing them.

The rest of this volume will focus on the way institutions in Tanzania affect economic development and in particular how they create obstacles to it. In this respect, the analysis in the present chapter and the preceding remarks suggest several obvious points and questions.

The first one is the utmost importance of the public sector, from the policymaking process, and most importantly the political economy behind it including lobbying and corruption, to the civil service, as seen in the case of the education sector, to the general efficiency of the functioning of the State and its capacity to raise revenues. The latter is itself a function of the availability of foreign assistance and the relationship with donors, which experience has shown is sensitive to public governance.

The second set of institutional issues are those which may be behind the slow sectoral productivity growth. In agriculture, for instance, is the slow productivity gain related to the absence of a competitive land market, which reduces the efficiency of the allocation of land among possible users, large-scale production units in particular? Or is it the predominance of traditional farming based on outdated technology? What are the institutional factors responsible for the productivity losses in the other sectors of the economy or the apparent inefficiency of investment? A heavy burden imposed by the bureaucracy? The poor regulation of infrastructure – electricity, ports, roads, trains – which leads to a shortage of capacity? A poor educational system producing too few skilled workers? Or inadequate trade policies serving the interests of particular groups?

Finally, why has growth not trickled down more than it has to poor groups in the population? The indirect appropriation of a large part of the national income by powerful groups, the concentration of capital ownership in a few hands, the inability to make the formal sector and formal employment grow faster, or the lack of public resources to develop the adequate redistribution channels? What prevents the educational system from being more efficient and leading to less poverty and a more productive labour force in the future? A lack of resources for a proper monitoring of the whole sector, an allocation of those resources towards other priorities, or the lack of political will to get out of this kind of low-level equilibrium?

These issues will be studied in much more detail in the following chapters of this volume. Before then, however, the next chapter will review the way institutional quality is perceived by global experts, top politicians, and decision makers in Tanzania, and the main institutional challenges they believe Tanzania would have to overcome to accelerate development or make it more inclusive and sustainable in the long run.

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