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Land for Inclusive Development

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Cover Photo Credit: Illovo Malawi, featuring an aerial view of part of Illovo Malawi's Dwangwa Sugar Estate showing the sugar mill, warehouses and cane fields, with Ethanol Company Limited at the back of the warehouses. *Cover Design:* Deguzman Kaminjolo, Hi Resolution Graphix, Blantyre.

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OVERVIEW

The Malawi Economic Monitor (MEM) provides an analysis of economic and structural development issues in Malawi. This edition was published in November 2017. It follows on from the five previous editions of the MEM and is part of an ongoing series, with future editions to follow twice per year.

The aim of the publication is to foster better-informed policy analysis and debate regarding the key challenges that Malawi faces in its endeavor to achieve high rates of stable, inclusive and sustainable economic growth.

The MEM consists of two parts: Part 1 presents a review of recent economic developments and a macroeconomic outlook. Part 2 focuses on a special selected topic relevant to Malawi's development prospects.

In this edition, the MEM focuses on the special topic of land. Malawi's economy is primarily based on agriculture and heavily reliant on its land resources to achieve social and economic development. Secure land rights are required to enable investments to enhance resilience and to diversify the rural economy. The recently promulgated Land Acts have the potential to create multiple economic and social benefits for Malawi's citizens by improving investor confidence in the business environment, reducing the cost of documenting rights, supporting decentralization, improving land use planning, and protecting vulnerable groups' land rights and livelihoods. The effective implementation of these critical land reforms would ultimately facilitate the attainment of inclusive growth, boost productivity and generate additional revenue for the Government.

ECONOMIC DEVELOPMENTS

In 2016, Malawi recorded a real GDP growth rate of only 2.5 percent. The economy suffered two consecutive years of floods and drought in 2015 and 2016, which negatively affected agricultural production and growth. Widespread, frequent power cuts and water rationing in the second half of 2016 also had a significant impact on the productive sectors. Due to increased costs of production, subdued domestic demand, and the weak performance of the agriculture sector, growth in industry and services decelerated over the year.

The weak growth, together with the impact of the drought and floods on agriculture, are likely to have resulted in an increase in Malawi's poverty rate. With most of the poor engaged in agriculture in rural areas, the performance of rain-fed agriculture has a significant impact on the incidence of poverty. Thus, although official poverty estimates for the post-drought period are not yet available, it is likely that drought-induced agricultural production losses exacerbated poverty in 2016.

Despite the external shocks, the Government managed to contain fiscal slippages. In FY 2016/17, the fiscal balance narrowed, mainly due to a good revenue outturn. By the end of the fiscal year, the deficit had declined from 6.1 percent of GDP in FY 2015/16 to 4.8 percent of GDP in FY 2016/17, even lower than the revised target of 5.2 percent of GDP envisaged at mid-year. Despite a looming food crisis, Government was also able to somewhat contain spending within the approved ceiling.

With reduced pressure on recurrent spending, domestic borrowing reached MK 37.2 billion (0.9 percent of GDP) significantly lower than the targeted level of MK 60 billion (1.4 percent of GDP). At mid-year, Government had borrowed about MK 25.1 billion (0.6 percent of GDP) which means that it only borrowed about MK 12.1 billion (0.3 percent of GDP) in the second half of the fiscal year.

After six years of double-digit inflation rates, the year-on year headline inflation rate has receded to single digit levels. In September 2017, the headline inflation rate stood at 8.4 percent, 12.8 percentage points lower than the rate recorded in September 2016. This decline was driven by a significant drop in the food inflation rate, which fell by 21.8 percentage points to 5.1 percent over the same period. The downward trend has been largely due to the sustained decline in food prices, resulting from the increased availability of maize, as well as the stability of the exchange rate. Although on a downward trend, the non-food inflation rate has declined by only 4.3 percentage points, to 11.6 percent in September 2017. The stickiness of non-food inflation suggests that a significant proportion of costs have not been affected by the Reserve Bank's open market operations.

The continued easing of inflation has paved the way for the Reserve Bank of Malawi to further reduce interest rates. This is expected to encourage borrowing for investment and to reduce the cost of servicing Malawi's large domestic debt stock.

In 2017, the real GDP growth rate is expected to rise to about 4.5 percent due to increased rainfall which is expected to result in increases to agricultural output. Yet despite this increased growth, the proportion of poor households living under the

international poverty line is expected to decline only marginally.

The FY 2017/18 budget was presented in a time of recovery, following a period of policy-induced and weather-related shocks. Domestic revenues are estimated to remain buoyant, offsetting the projected fall in grants as a large share of project and dedicated grants continues to be provided off-budget. Recurrent expenditure is estimated to remain at current levels, with spending on the wage bill and subsidies projected to remain roughly unchanged, while expenditure on interest payments, especially on domestic debt, is expected to decline. The budget reflects a relative shift in priorities from agriculture to education, with the latter now receiving the largest allocation of all sectors. In large part, this is because reforms to the Farm Input Subsidy Program (FISP) have continued to reduce expenditure on agricultural subsidies.

The proportion of the budget allocated to development expenditure is expected to grow significantly, a departure from previous budgets which were more consumption-based than development-oriented. Overall, the fiscal gap is estimated to narrow to about 4.0 percent of GDP.

In 2017, the decline in tobacco production and lower export prices meant that the contribution of this commodity to total exports declined. However, this was partially offset by increases in other cash crops, such as tea and edible nuts. The overall demand for imports is projected to be subdued, with the decline in imports more than offsetting the decline in exports. Thus, the trade deficit is expected to improve. Overall, the current account deficit is expected to narrow to about 12.5 percent of GDP, down from 14.7 percent in 2016.

With a growth recovery now underway and the food security crisis over, the Government has an increased opportunity to refocus its efforts back to medium-term structural reforms. In particular, it now has the space to advance structural reforms that could increase resilience to future shocks and raise the potential rate of medium-term growth.

It is important to maintain the momentum for the implementation of critical reform measures intended to break Malawi's cycle of vulnerability. Malawi will only significantly improve its medium-term economic performance if it develops higher levels of resilience to both internal and external shocks. It is likely that it will continue to face recurring weather shocks in future. It is therefore essential to develop the systems and mechanisms required to effectively manage these shocks.

Ensuring that the growth recovery is sustained will require both short and medium-term reform efforts. Recommended measures include the following:

- **Safeguarding macroeconomic stability**: Improved levels of macroeconomic stability and fiscal discipline, as well as the careful maintenance of debt sustainability, are essential to the achievement of a medium-term growth recovery and sustained poverty reduction in Malawi. Recent efforts by the Government to strengthen expenditure controls and to break a vicious cycle characterized by large deficits, over-borrowing and the crowding out of the private sector have contributed towards lower inflation and the restoration of the basic macroeconomic conditions necessary for higher levels of investment and job creation. However, an accumulation of past fiscal deficits means that Malawi is reaching the upper limits at which its stock of domestic debt can be sustainably managed. Thus, prudence is required in making new borrowing commitments.
- **Staying the course with reforms to reduce distortions and ensure that agricultural markets function more effectively:** The prices of Malawi's agricultural commodities are amongst the region's most volatile. In many instances, the negative impact of climate-induced shocks has been exacerbated by policy-induced distortions that contribute to market failures. Issues include a lack of transparency and predictability in the market interventions implemented by key public sector institutions involved in the management of commodity markets, such as the Agricultural Development and Marketing Corporation (ADMARC) and the National Food Reserve Agency (NFRA). Measures taken during the recent food security crisis have outlined a pathway towards a reformed set of agricultural sector institutions that would enable agricultural markets to function better, with increased incentives for private sector investment and commercialization.
- **Addressing the key policy and infrastructural constraints that limit the potential rate of growth in Malawi's economy:** Increasing the potential rate of growth will require a combination of deep structural reforms and a number of vital medium-term investments. Key priority areas for reform include measures to improve the investment climate by reducing the cost of doing business and increasing both the transparency and predictability of regulation. Measures to achieve this include the

Subordinate Court Rules and the Arbitration and Mediation Bill, the revision of the Control of Goods Act, and the implementation of the amended Credit Reference Act. In addition, a persistent power supply deficit continues to constrain the development of modernized economic sectors. Creating the enabling conditions for private sector investment in new and diversified power generating capacity is a necessary building block for medium-term economic growth.

LAND FOR INCLUSIVE DEVELOPMENT

In Malawi, land is a key productive asset and a source of livelihood for most of the country's citizens, especially the poor. With Malawi's population growth, the depletion of natural resources, and an economy heavily reliant on agricultural production, the efficient use of land resources is a precondition for the achievement of economic growth and equity in Malawi. Effective land management would also improve resilience and rural living standards.

Weak land rights undermine investment, job creation, and the resilience of Malawi's productive sectors. Weak land rights cost the Government about US$ 10 million annually in foregone ground rent from estates and urban areas, and contribute to annual losses of about US$ 14 million due to insecure tenure.

Land tenure insecurity among smallholders, especially women, is high. In the 2016/17 Integrated Household Survey (IHS4), 33 percent of households indicated that they lacked confidence that they would still possess their plot of land in ten years' time. Insecure tenure reduces investment in higher-value crops or soil conservation measures and results in lower levels of productivity. In fact, estimates show that fear of land loss is associated with a 4 percent reduction in overall output.

Clarifying estate sector tenure would increase agricultural productivity and public revenue. By 2016, close to 70 percent of estate leases had expired and the status of around 22 percent was indeterminate. Failure to identify the tenure status of this land has reduced the intensity of cultivation and undermined the motivation for estates to make long-term investments. In fact, the level of productivity of estates is on average lower than that of smallholders. This implies that Malawi is making sub-optimal use of its scarce land resources.

Until recently, Malawi's land sector was based on an inadequate legal and institutional framework. Malawi's land institutions have historically promoted a dualistic system, with significant differences between smallholder subsistence farming and estate commercial farming. Thus, most smallholders lack documented land rights, which undermines tenure security and investment incentives.

Weak land management institutions affect productivity by affecting land sales markets. The operation of land markets and the use of land as collateral to obtain credit is also impeded by restrictions that increase transaction costs associated with transferring land through sale. Increased access to land ownership information has been shown to be associated with an increase in registered mortgages and in the volume of credit. If land registry information is incomplete, of low quality, or not accessible to interested parties at low cost, these benefits are unlikely to materialize.

Malawi's land administration system has significant limitations. Malawi ranks 96 out of 190 countries in the 2018 World Bank's Doing Business 'registering property' indicator, down from 95th in 2017. This shortcoming and the failure to keep up with global best practice reduces Malawi's attractiveness as an investment destination. It is due not only to the high time and financial costs to transfer registered land but, more importantly, to the lack of reliability, transparency, and coverage in the land administration system.

Land information is currently difficult to access, with a low level of transparency. One of the main benefits of an effective land registry is to make reliable information related to land ownership publicly available at low cost, thereby reducing constraints on contracting parties acquiring such information and thus reducing both the cost and risk associated with land transactions. Historically, Malawi's reform efforts have been frustrated by complex, centralized, and often discretionary manual processes, with a lack of clear procedures and very limited public awareness (Land Equity International, 2010).

In September 2016, a number of land bills, including the Customary Lands Act (CLA), were promulgated. These laws recognize customary tenure and create opportunities to document rights using low-cost technology and with the full involvement of local stakeholders. For the first time in Malawi's history, these laws establish a legal basis to address constraints in the land management system by clarifying rights and increasing tenure security. However, the laws need to be accompanied by institutional reforms to improve the quality and relevance of land information and overall transparency. The laws also need to be appropriately regulated to ensure cost effective implementation. They must be accompanied by

policies to enable private actors to easily verify land ownership and to engage in land transactions without interference. These policies must enable local and central government bodies to plan land use in affordable ways and to collect land-related revenue as a basis for effective service provision.

These land laws create a historic opportunity to generate higher levels of investment, job creation, and resilience by establishing more secure land rights. With the passage of legislation to allow low-cost participatory clarification, recording, and management of land rights, actions to generate optimal benefits include the following:

- **Institutional reforms to increase coverage, relevance, and access to land information:** To reduce costs and to improve service delivery, institutional structures and processes need to be simplified. Land information and management systems need to be upgraded, with the use of digital technologies to fully exploit potential synergies with other information systems (for example national ID systems, mortgage registration by banks, local land use and management plans, among others).
- **The establishment of an effective regulatory framework to make the Land Acts operational:** Regulations on matters such as survey and planning standards, local and central institutions' responsibilities, and data sharing or conflict resolution arrangements are vital to ensuring the effective implementation of the new legislation. For this to be achieved, it is necessary to demarcate traditional land management areas (TLMAs), to establish ground rent rates, to set conditions for the renewal or cancelling of estate leases, and to determine what will happen to the land occupied by cancelled estates. This will create a basis for a plan to attain nation-wide coverage and to set clear targets that can be monitored effectively.
- **The design and evaluation of pilots for gender-sensitive customary estate registration models**: By recognizing customary tenure and allowing such rights to be registered, the CLA creates a risk that vulnerable groups may be dispossessed if the new laws are abused. Careful piloting and rigorous evaluation will be needed to design area-wide means to register land that are pro-poor and gender-sensitive, that help enhance productivity, and that allow low-cost local maintenance. The scale up of these pilots to the national level should be conditional on rigorous evidence to support the viability and benefits of the chosen approaches.
- **Clearly sequenced implementation:** While work on institutional reform, regulation of the Land Acts, and the piloting of customary land demarcation systems and approaches should commence without delay, national recognition of customary rights will not be possible without prior delimitation of TLMAs and clarification of estate boundaries. Policy decisions on these matters will thus have to be taken as soon as possible, with implementation commencing quickly so it can be completed during the 18 month-period likely to be needed to conduct and evaluate pilots of systems for customary land regularization and to formulate regulations that enable the scale up of these pilots, if the approaches they test are found to be effective.

Clear vision and leadership are required to realize the full potential created by the passage of the 2016 Land Acts. Countries such as Rwanda have used laws similar to those promulgated by Malawi to generate dramatic improvements to their land management systems, thereby facilitating higher levels of inclusive development and improving their ranking in terms of globally established indicators. For Malawi to follow this path, the Government must establish a clear vision to define its objectives and to set a timetable for implementation. Capitalizing on the opportunities created by the new laws could enable Malawi to increase its attractiveness as an investment destination. In turn, this could facilitate the emergence of a more diversified economy that creates opportunities for all elements of society, including women, the poor, and other excluded groups, leading to the achievement of higher levels of sustainable growth, the creation of productive job opportunities, and increased prosperity for all.

1. ECONOMIC DEVELOPMENTS

Sub-Saharan Africa is seeing early signs of a fragile recovery

1. Within Sub-Saharan Africa (SSA) a recovery in commodity prices and increases in commodity production have been driving increased economic growth in 2017. In particular, increased regional economic growth is being driven by increased economic activity in the region's largest economies, Nigeria and South Africa. The drought conditions in Southern Africa have receded, with agricultural production and electricity generation expected to return to normal levels. Oil production is resuming in Nigeria's Niger delta, while fiscal expenditure is expected to increase in Angola due to election spending. In addition, increased external demand is expected to improve the trade balances for most commodity exporters in the region. These factors are expected to result in an increase in the regional growth rate to 2.4 percent in 2017, up from 1.3 percent in 2016.

2. However, drought conditions have persisted in a number of countries, negatively impacting agricultural production and exerting upward pressure on inflation. While normal rains have resumed in several countries in Southern Africa, some countries in Eastern Africa, including Kenya, Uganda, Somalia, and South Sudan, have experienced severe shortages, with a risk of famine in the latter two. Nevertheless, in the region as a whole, the high average rates of inflation recorded in 2016 have declined due to more stable exchange rates and decelerating food price inflation (World Bank, 2017a).

3. In 2017, while the regional economic growth rate is projected to reach 2.4 percent, this is lower than the estimated population growth rate. As a result, average per capita incomes are likely to decrease. The recovery is expected to be moderated by the fact that the region is continuing to adjust to lower commodity prices. Although these prices are expected to increase in the medium term, they are likely to remain significantly lower on average than in the pre-global crisis period. Growth rates will continue to vary widely across the region, with growth in South Africa and amongst net oil exporters expected to remain weaker than amongst metals exporters, while growth in non-resource intensive countries is expected to remain robust.

4. While the regional growth rate is expected to continue to increase to 3.2 percent in 2018, this outlook is subject to a number of significant downside risks. Sharp increases in interest rates in the US and Europe could reduce the ability of SSA governments to finance domestic investments through the issuance of bonds. In addition, a slowdown in the economic growth of major trading partners such as China could further reduce the global demand for commodities and lead to lower levels of investment and official inflows. If implemented, the US government's signaled intention to reduce official assistance may impact small, fragile economies, such as Malawi, with these economies relying to a significant extent on aid. In addition, policy failures, security issues and increased vulnerability to climatic conditions could result in lower than projected growth rates, with a negative impact on poverty reduction and food security.

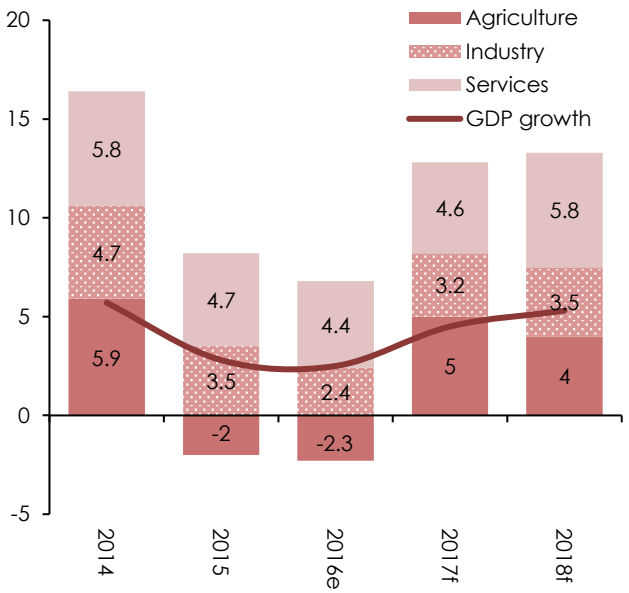
Malawi's economy is starting to recover after two years of climate-related shocks

5. In Malawi, economic growth is projected to increase from the rate of 2.5 percent recorded in 2016 to 4.5 percent in 2017. Performance in the first two quarters of 2017 was especially encouraging, with the impact of weather shocks that ravaged the economy over the past two years finally subsiding, facilitating a recovery in the country's vitally important agricultural sector. With a rebound in the production levels of all major crops except for tobacco, wheat and cotton, growth in the agricultural sector is projected to reach a rate of 5.0 percent in 2017, up from (2.3) percent in 2016 (see Figure 1). The third-round crop estimates released in June 2017 projected that the production of the staple crop, maize, will reach 3.5 million tons in 2017, a 46.2 percent increase compared to the output of 2.4 million tons recorded in 2016. This represents a 6 percent increase above the 5-year maize production average. Similar trends have been observed in legumes, with a 34 percent increase compared to the output recorded in 2016.

6. Despite the high growth rate in agriculture, the rates for the industry and services sectors have remained low. Industry and services are projected to grow at very modest rates, with the rate for services only 0.2 percentage points higher than that recorded in 2016 and industry only 0.8 percentage points higher (see Figure 1). However, within these sectors, the transportation and storage services and manufacturing subsectors are expected to record significantly higher growth rates, largely due to the increased availability of agricultural goods. Wholesale and retail trade and financial and insurance services are also expected to increase at significantly higher than average rates. Growth in industry has been driven by an increase in construction due to higher public expenditure on infrastructure development. On the other hand, despite the rebound, growth in the

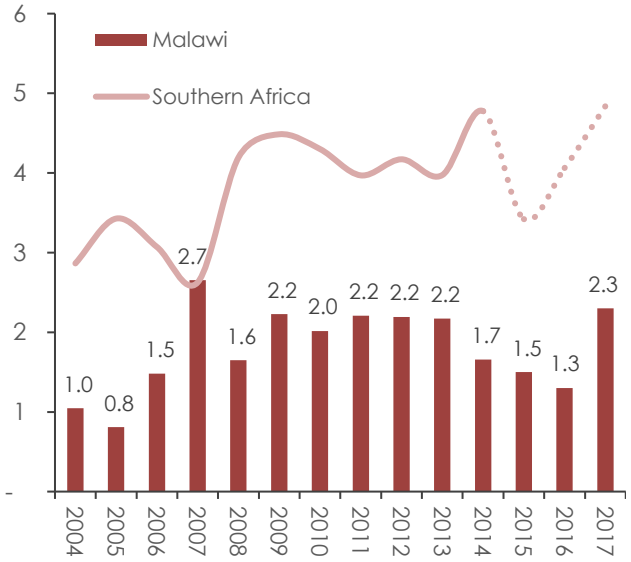
manufacturing sector remains weak, mainly due to structural constraints in the supply of energy and water, which continue to adversely affect production.

Figure 1: Growth has recovered following a resumption in agriculture production…
Sectoral contribution and GDP growth, 2014-18



Source: World Bank staff calculations based on MFMod

Figure 2: …but productivity remains below the regional average
Maize productivity, metric tons per hectare



Source: World Bank staff calculations based on FAO and MoAIWD data
Note: Estimates for Southern Africa from 2015

7. Food security has improved tremendously due to the increased agricultural output and the significant carry-over of stocks of maize imported earlier in the year. Consequently, there has been a significant decline in the number of people expected to be food insecure, with this number declining from 6.7 million in 2016/17 to 837,000 in 2017/18 (Malawi Vulnerability Assessment Committee, 2017). The volume of maize required to meet the dietary needs of these food insecure people is estimated at 23,000 metric tons. This need is likely to be met domestically, in part from large reserves including an estimated 130,000 metric tons in carry-over stocks held by Agricultural Development and Marketing Corporation (ADMARC) and National Food Reserve Agency (NFRA).

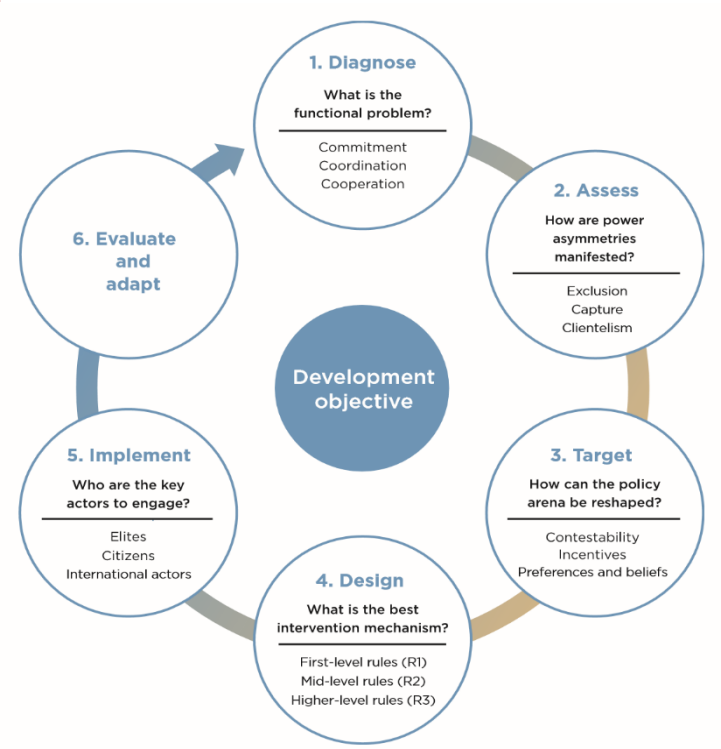
8. The combined impact of low food prices and low volumes of tobacco sales have continued to depress farm incomes. There was significant under-production in Malawi's major cash crop, tobacco, as farmers switched to legumes following an oversupply of tobacco and a decrease in prices in the previous growing season. By the close of the tobacco season in September 2017, the volume of sales had fallen by 45.5 percent compared to the previous season, while the total value of sales had fallen by 23 percent. In addition, farm gate prices for food crops such as maize and legumes declined to levels below their 5-year averages. The average price per kilogram of the staple crop, maize, declined to MK 98 per kilogram in September 2017, down from MK 230 per kilogram in January 2017. While the decline in food prices is driving the deceleration in the inflation rate, the restriction on maize exports kept the price of local grain artificially low, exerting downward pressure on rural farm incomes and on projected levels of maize production in future years. On the other hand, the urban poor, who are on average net purchasers of maize, have benefited from the increased availability of cheap maize. Overall, prudent intervention could have enabled Malawi to replenish its grain reserves while at the same time taking advantage of a food deficit in East Africa to generate additional foreign reserves.

9. Despite Malawi's incipient economic recovery, it remains susceptible to significant internal and external risks. A significant portion of the macroeconomic gains made so far rests on increased levels of smallholder production. This production is highly susceptible to the vagaries of the weather and to unstable markets. 97 percent of maize is produced by smallholder farmers whose primary objective is own consumption. Malawi's productivity levels have remained stagnant for about a decade, with an average output of 2 metric tons per hectare (see Figure 2). This is significantly lower than the average output of other countries in the region and around the world, with the Southern African regional average standing at 4 metric tons per hectare and the global average standing at 5 metric tons per hectare. Growth in large-scale maize production remains limited, largely due to the unpredictability of the Government's interventions in agricultural produce markets.

Box 1: Governance for development: The case of Malawi

This box draws from the World Development Report (WDR) 2017 'Governance and the Law' and applies the lessons in the context of Malawi (see Figure 3). In Malawi, weak governance and rampant corruption have been a major constraint on economic development, with the numerous attempts to strengthen governance systems having had only limited results. The impact of prevailing structures and social norms need to be taken into consideration to inform policy design and implementation. This implies that while it may not be possible to implement first-best solutions in Malawi, the implementation of feasible, second-best solutions could lead to improved development outcomes.

Figure 3: The policy effectiveness cycle



Source: WDR 2017

The underlying functional problem of institutions in Malawi primarily relates to commitment. The WDR report identifies three essential drivers of policy effectiveness: commitment, coordination and cooperation. The first step towards formulating and implementing effective policies rests on credible commitment to improving development outcomes by the authorities. To establish credibility and trust, political elites need to consistently maintain support for effective policies over meaningful timeframes. However, in Malawi, when new governments have come to power, they have tended to reverse the policies of previous governments. In addition, even during the period of administration of a single government, its policies may be inconsistent and contradictory.

Thus, governments have not adhered to defined medium-term and long-term development plans. This creates an environment of uncertainty and undermines the Government's credibility, with the private sector and citizens generally perceiving politicians as corrupt and motivated by a desire to advance their own political and financial interests, with a limited commitment to developing Malawi for the benefit of all citizens and stakeholders.

The political settlement in Malawi has been described as 'competitive clientelist,' with the political elite managing a system of patronage and with elements within this elite competing with each other for their clientelist base (O'Neil and Cammack, 2014). In Malawi's political system, short time horizons incentivize politicians to 'buy' votes in exchange for providing private benefits such as subsidies and cash handouts, and to shore up wealth and loyalty through patronage networks. The provision of national public goods over the long term is undermined as a result of these distorted incentives.

Transformation can occur by changing the incentives of the people in power. The policy arena can be reshaped as a result of shocks or measures that change the incentives of elites and increase contestability by previously excluded elements of society[1]. Citizen engagement including through protests and challenges has served to counter power at critical times, but has yet to result in sustainable changes in the logic of power and politics. International actors and development aid can play an important role in fostering greater citizen engagement and in enhancing the relative ability of domestic coalitions to push for reforms.

Thus, policy reform should be implemented by taking into account the functional issues and power asymmetries that define Malawi's institutional system. A policy design process that is based on an awareness of the existing policy arena should be implemented, with efforts to reshape incentives and hence to expand the set of policies that can be implemented. Transforming incentives could result in higher levels of commitment

[1] A more contestable policy arena is one in which the actors or groups who have reason to participate in the decision-making process have ways to express their interests and exert influence.

and reduce clientelism. Efforts to institutionalize a rules-based system and checks and balances can help, for example, by ensuring the independence of oversight bodies such as the National Audit Office and the Anti-Corruption Bureau, and by increasing their resources. The role of other actors, such as parliament, the judiciary, civil society, the media and the electorate, also needs to be strengthened in order to hold the Government to account effectively and to facilitate effective social compromise (Koch, 2015). Efforts to strengthen collective action, for example, by closing information asymmetries and fostering mechanisms to ensure government responsiveness to citizen demand can help rebalance the policy arena.

Development partners can play a role in fostering the emergence of positive governance dynamics. As Bridges and Woolcock (2017) make clear, development partners have often attempted to apply best-practice solutions that only address the form of Malawi's institutions, rather than their underlying function. As a result, such interventions have had only a limited impact. For aid to achieve its intended outcome, the design and implementation of interventions must take into account the specific characteristics of Malawi's political context. While development partners can avoid the policy arena and provide support for direct service delivery, it is important to engage with governing institutions in order to facilitate positive change in governance mechanisms. This would encourage the adoption of policies that would improve development outcomes[2]. In addition to monetary support, development partners could also provide technical assistance in the form of analytical work and knowledge-sharing to motivate public debate on policy effectiveness and governance.

The achievement of inclusive growth is in itself a means to reduce corrupt practices, with inclusive growth leading to a redistribution of power and changing norms in the policy arena. Over time, a more inclusive development process can result in a shift in political preferences, reducing tolerance to corruption and increasing the demand for better governance. Thus, a virtuous circle can be created whereby strengthening governance enables more equitable development, which in turn reinforces improved governance. Ultimately, positive transformation is a dynamic process. As Malawi achieves higher levels of development, its governance environment will also evolve as a result of changes to the bargaining power, incentives and preferences of an increasingly wide range of stakeholders. Adaptability to these changes and an understanding of the nature of the policy arena is vital to ensure the achievement of inclusive, sustainable development.

Growth has not been conducive to poverty reduction

10. Malawi's growth trends have been volatile, making it difficult to achieve meaningful poverty reduction. Weak growth, largely resulting from drought and flooding that adversely affected agricultural production, may have exacerbated poverty in 2016. Weather shocks continue to have a significant impact on the economic cycle. With the increasing impact of climate change, this trend is likely to continue, with the negative impact of weather shocks compounded by factors such as population growth and environmental degradation. Malawi is a predominantly agricultural country, with a large portion of its population engaged in subsistence agriculture in rural areas. Thus, the performance of rain-fed agriculture has extremely significant ramifications for poverty reduction. While official poverty estimates are not yet available for the post-drought period, it is likely that agricultural production losses caused by the drought exacerbated poverty in 2016.

11. Projections using the global poverty line suggest sluggish poverty reduction in 2017. Increased rainfall in the last cropping season is expected to result in higher levels of agricultural output than in the previous two years. Despite this increase, the World Bank estimates that the proportion of households living under the international poverty line of US$ 1.9/day (2011 PPP) will decline only marginally, from around 69.6 percent in 2016 to 69.2 percent in 2017. The official poverty rates for 2016/17 (based on the national poverty line) are currently being prepared using the Fourth Integrated Household Survey (IHS 4).

12. The FY 2017/18 budget continues to prioritize allocations to the social sector. Traditionally, allocations to agriculture, education and health have been regarded as supporting the achievement of poverty reduction. The current budget has continued to prioritize these sectors, with the three sectors receiving the highest allocations relative to the total budget (see Figure 9). Furthermore, the Government made an unprecedented upward revision to the budgetary allocations for Social Cash Transfers, with these allocations increasing from MK 550 million in 2016/17 to MK 1.5 billion in 2017/18. Similarly, allocations for Early Childhood Development (ECD) increased from MK 500 million to MK 600 million. The Government also rebalanced the budget with an

[2] The recently implemented World Bank Development Policy Operation (*Agricultural Support and Fiscal Management DPO*) is an example of motivating policy reform in the form of prior actions.

increased proportion allocated to the development budget, with planned investments in the education and health sectors.

13. Meaningful poverty reduction will be driven by growth in the sectors in which the vast majority of the poor derive their livelihoods, particularly agriculture. However, the agricultural sector is highly prone to price and weather shocks, with agricultural productivity having remained stagnant over the past decade (see Figure 2). Thus, the transformation of the agricultural sector remains a critical development priority, as do measures to promote private sector growth and job creation. As discussed in the second part of this report, a key element of agricultural transformation is land reform, which can boost both inclusion and agricultural productivity. Measures to promote productive employment and self-employment in the non-agricultural sectors would complement these efforts, serving as a cushion to protect the poor from shocks that impact agricultural incomes. In order to achieve higher levels of poverty reduction, it is necessary to understand and address the constraints on the formation and growth of non-farm enterprises, and medium and large enterprises.

Safeguarding current gains is critical for Malawi's long-term development

14. Malawi's economy appears to be on the path to recovery after two consecutive years of weather-induced shocks. The increased availability of food and the implementation of prudent fiscal and monetary policies have contributed to a steady decline in inflation and lending rates since December 2016 and to an easing of exchange rate volatility. In addition, the Government has implemented a number of significant public finance management reforms intended, amongst other goals, to contain public expenditure and to ensure the production of bank reconciliations for the first time since independence. However, the stabilization of the key macro-economic variables has done very little to encourage increased long-term investment, with constraints on energy supply, market-distorting regulations, infrastructure gaps, a deep-rooted rent-seeking culture and lack of public-sector capacity constraining prospects for higher growth rates.

15. The macroeconomic outlook remains subject to significant downside risks. Even in the absence of weather shocks, managing fiscal expenditure will continue to be vitally important to ensure the sustainability of the current economic recovery. If not adequately safeguarded, current gains are likely to be undermined by deep-rooted structural issues that keep growth at a low equilibrium level. In particular, distorted incentives in Malawi's political settlement and culture have constrained its prospects for growth (see Box 1). There is a risk that Malawi may loosen fiscal discipline in the period leading up to the 2019 election period, as it has done during the run-up to previous elections. These periods are typically characterized by large budget overruns and unplanned expenditures, posing a significant risk to the consolidation of the gains made so far. In addition to political economy risks, the economy's susceptibility to climate shocks and its reliance on rain-fed agriculture result in a boom-bust agricultural cycle and subsequent instability in GDP growth.

Inflation has declined to single digit levels after six years in double digits

16. After six years of double-digit inflation rates, the year-on-year headline inflation rate has receded towards single digit levels and is converging with that of other countries in the region (see Figure 4). Following a 49 percent devaluation of the Malawi Kwacha in April 2012 and a subsequent liberalization of the exchange rate regime in May 2012, headline inflation rates sky-rocketed, remaining at double digit levels, mostly above 20 percent, until the recent decline. Inflation rates have recently declined to single digit levels for the first time since December 2011, when the rate stood at 9.8 percent. In September 2017, the headline inflation rate stood at 8.4 percent, compared to 21.2 percent recorded in September 2016. This decline was driven by a significant decline in the food inflation rate, which fell by 21.8 percentage points to 5.1 percent in September 2017. The decline in this rate was driven mostly by the increased availability of affordable maize on domestic markets and the export ban on maize, which kept prices artificially low.

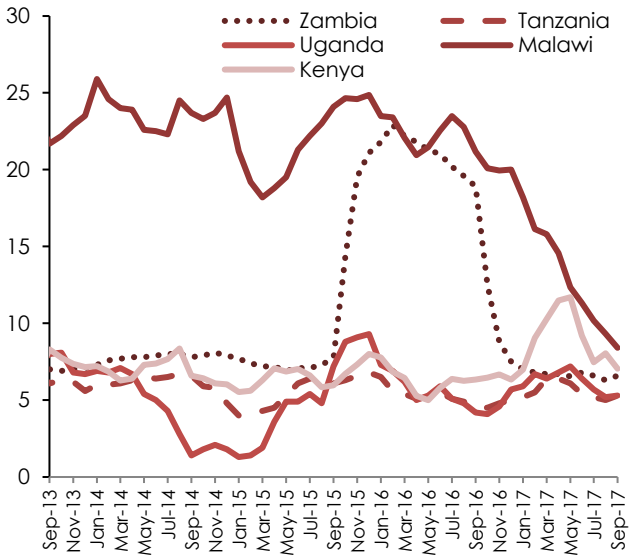
17. Imported inflation has also remained relatively low. The stability of the Kwacha relative to the US Dollar and the decline in average oil prices since March 2017 has exerted downward pressure on the national non-food inflation rate. Although it has declined, the year-on-year non-food inflation rate has gone down by only 4.3 percentage points, reaching 11.6 percent in September 2017. Stickiness in this rate indicates that a significant proportion of costs have not been affected by the Reserve Bank's open market operations. To successfully address the supply-side factors that maintain non-food prices at high levels will require a major structural transformation of the economy.

18. Even with the increased availability of food, a significant variation between urban and rural inflation rates has persisted (see Figure 5). In September 2017, the year-on-year urban headline inflation rate fell by 9.3 percentage points, compared to a 15.3 percentage point decline in the rural rate. The decline in the rural

inflation rate is largely due to the effects of the significant decline in the rural food inflation rate, which went down 23.5 percentage points, from 28.7 percent in September 2016 to 5.4 percent in September 2017. However, with a very modest decline in rural non-food inflation (only 1.9 percent over the same period), the decline in the food inflation rate has not been sufficient to lower the rural headline inflation rate to levels below the national and urban rates. The data suggests that they have been significant increases to water and electricity prices, the category with the greatest weight (13.8 percent) in the rural non-food basket and with the highest increase in CPI (22 percent) over the period. Nevertheless, further investigations are required to gain a better understanding of the drivers of the stickiness of the rural non-food inflation rate.

Figure 4: Malawi's inflation rate is descending towards that of other countries in the region …

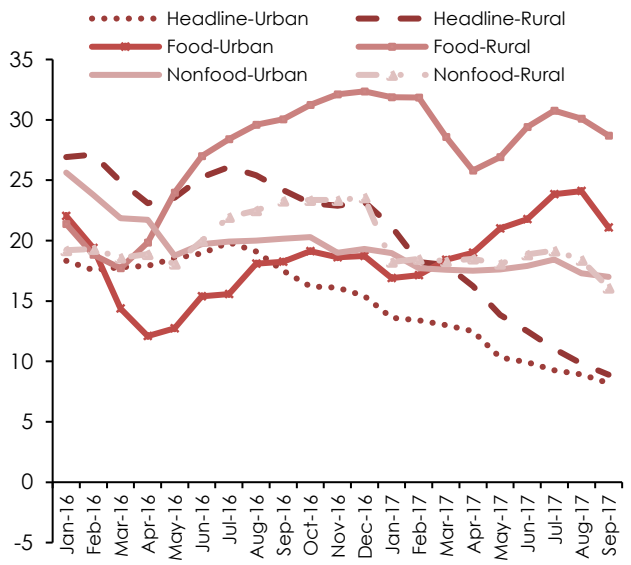
Headline, inflation, percent, year-on-year



Source: World Bank staff calculations based on country inflation data

Figure 5: … although with significant variation between rural and urban rates

Headline, urban and rural monthly inflation, percent, year-on-year



Source: World Bank staff calculations based on NSO data

Continued improvement in fiscal performance

19. In FY 2016/17, the fiscal balance narrowed, mainly due to a strong performance in revenue collection. By the end of the fiscal year, the deficit had declined to 4.8 percent of GDP, down from 6.1 percent of GDP at the end of FY 2015/16 (see Figure 6). This was a more significant reduction than the projected revised deficit, with the projected figure at 5.2 percent of GDP at mid-year. The improved fiscal position was mainly due to a better than expected revenue outturn and grants recorded, and to some degree, to the Government's ability to contain spending. Despite the food crisis, Government spending remained below the approved ceiling at mid-year.

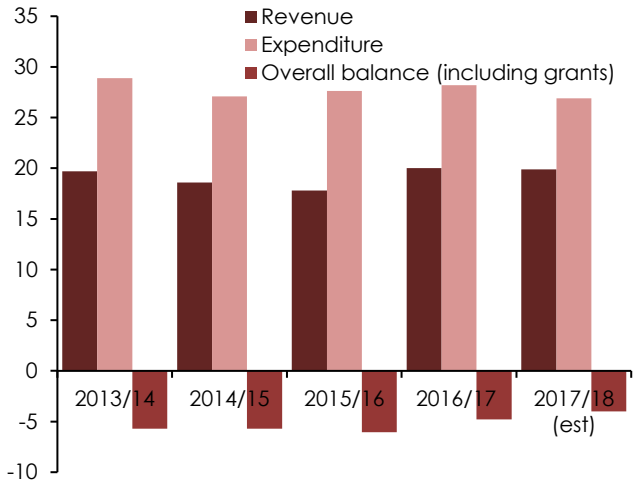
20. Good performance was recorded in the collection of domestic taxes, particularly taxes on goods and services and international trade (see Figure 7)**.** The total value of collected domestic taxes stood at 20.0 percent of GDP, with the target at mid-year standing at 19.8 percent of GDP. The introduction of new software at Malawi's borders (*Asycuda World*), the roll out of electronic fiscal devices to facilitate the collection of domestic taxes, and a series of new tax administrative measures all contributed to the better than expected performance. The collection of Value Added Tax (VAT), import duty and excise also improved. The Malawi Revenue Authority (MRA) also collected arrears from FY 2014/15 and FY 2015/16, mostly from the construction industry, with the value of these arrears estimated to stand at about MK 5.6 billion. By contrast, performance in the collection of Pay As You Earn (PAYE) and corporate income taxes fell below targets, especially towards the end of the fiscal year. However, this was offset by the strong performance in the other areas. The under-collection of PAYE tax was mostly due to delayed payments of civil servants' salaries at the end of the year.

21. The overall value of grants was also higher than targeted. The value of these grants increased to about 3.5 percent of GDP, with the target at mid-year standing at 3.0 percent of GDP. This higher than expected figure was mainly due to increased financing to address the humanitarian and food crisis. This financing included a World Bank dedicated grant to the Strategic Grain Reserves (SGR), at a value of about MK 40 million, and an African Development Bank (AfDB) program grant, at a value of about MK 11.8 million.

22. The Government managed to contain the pace of growth in recurrent expenditure, with this expenditure remaining within the targeted limits. The Government contained expansions in the typically large expenditure items, Wages and Salaries, and Subsidies and Transfers. In the case of the former, this was a result of salary arrears that were not paid at the end of the fiscal year. In the case of the latter, reforms to the Farm Input Subsidy Program continued to result in reduced expenditures on agricultural subsidies.[3] These reforms have involved reducing the number of beneficiaries, reducing the value of the Government subsidy, and eliminating fertilizer expenditure overruns, with inputs purchased and distributed by the private sector. On the other hand, although expenditure on foreign debt servicing remained below the approved ceiling, interest payments on domestic debt increased. This was a result of interest paid on debt incurred within the year and on the stock of existing debt, including arrears. The total value of recurrent expenditure amounted to 21.7 percent of GDP, with the approved ceiling at mid-year set at 21.8 percent of GDP.

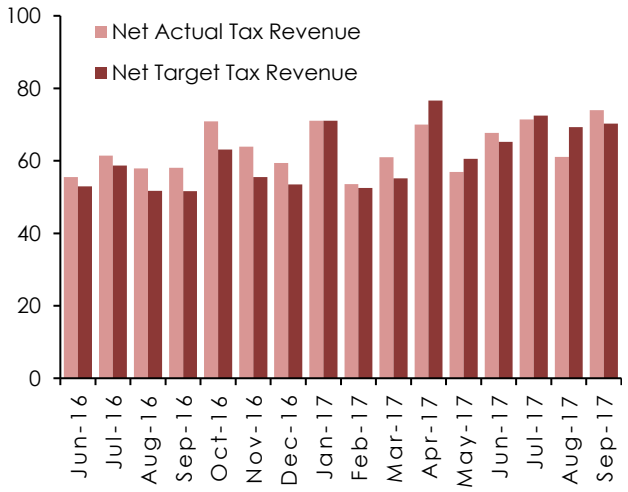
23. Foreign financing was utilized to fund an increasing proportion of development expenditure, with domestic financing continuing to decline proportionately. The increase in the proportion of foreign-financed development expenditure is consistent with the increase in funding towards foreign-financed projects. The value of this component increased significantly, from an estimated 5.1 percent of GDP at mid-year to about 5.8 percent of GDP at the end of the fiscal period. As has frequently been the case in previous years, domestic funding was reduced, from an estimated 1.0 percent of GDP to a realized 0.7 percent of GDP. These reductions have normally been necessitated by increases in recurrent spending and lower than expected revenues and grants, which are usually offset by reductions to the development budget.

Figure 6: The fiscal deficit continues to narrow after two years of shocks …
Revenue, expenditure and budget deficit, percent of GDP



Source: World Bank staff calculations and estimates based on MoFEPD data

Figure 7:…aided by higher than expected outturn in revenue collection
Net actual revenue vs. net target revenue in MK billion



Source: World Bank staff calculations and estimates based on MoFEPD data

24. Borrowing on the domestic market remained below the approved ceiling. An effective humanitarian response to the food crisis was implemented in such a manner that no expenditure overruns that would have necessitated domestic borrowing occurred. The Government managed to contain fiscal pressure arising from the necessity to transact food purchases thanks to the significant humanitarian aid provided by development partners. With reduced pressure on other recurrent spending, domestic borrowing reached a value of MK 37.2 billion, with the annual target at MK 60 billion. At the mid-year point, the Government had borrowed about MK 25.1 billion, meaning the Government borrowed only about MK 12.1 billion in the second half of the fiscal year.

[3] The 2016/17 Farm Input Subsidy Program (FISP) was substantially reformed with a reduction in the number of beneficiaries from 1.5 million in 2015 to 0.9 million in 2016. In addition, the supply of inputs was made open to private suppliers for the first time in the program's history via a fixed value coupon model, with almost 80 percent of fertilizer being procured and distributed by the private sector as well as 100 percent of seeds. The subsidy levels were also reduced from 97 percent to around 70 percent. For FISP to be efficiently run and for inputs to be applied to maximize potential production, the program design should be cleared well in advance of the start of operations. Further efforts are also needed to better target beneficiaries who are cash constrained, but have adequate land and labor to effectively make use of subsidized farm inputs.

25. The International Monetary Fund (IMF) Extended Credit Facility (ECF) Program, which was approved by the IMF Executive Board in July 2012, was concluded in June 2017. The program aimed to support the achievement of macroeconomic stability, reduced inflation and increased international reserves. The implementation of the program was marked by multiple periods of slippages. The impact of the El Niño-induced drought and the slowdown in economic activity resulted in a failure to achieve the end-June 2016 targets for the Government's net domestic financing and the Central Bank's net domestic assets. To safeguard the implementation of macroeconomic policy in the context of the increased risks due to the humanitarian crisis, the program was extended until mid-2017. It was successfully completed with a ninth and final review in June 2017.

Prudent fiscal management subject to risks, including those related to the political cycle

26. The FY 2017/18 budget was presented during a period of recovery, following a period of policy-induced and weather-related shocks. The total value of revenue and grants is expected to increase in nominal terms to reach MK 1,127.7 billion, an increase of 13 percent relative to the MK 1,000.5 billion recorded for FY 2016/17. Over the same period, expenditures are also expected to increase in nominal terms to reach MK 1,323.3 billion, an increase of 10 percent relative to the MK 1,203.0 billion recorded for FY 2016/17. Thus, the fiscal gap is projected to continue to narrow to approximately 4.0 percent of GDP, down from 4.8 percent in 2016/17.

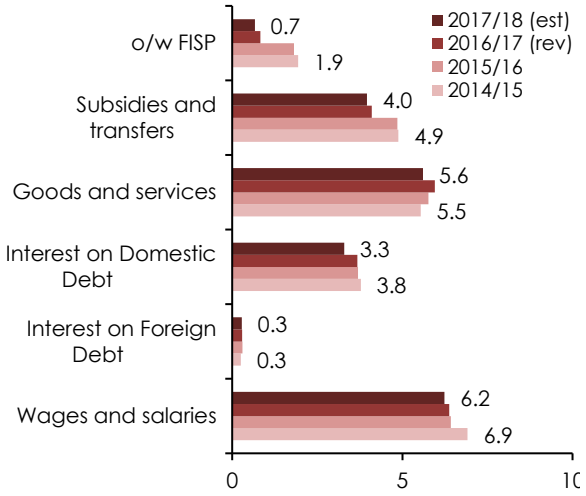
27. The total value of revenue and grants is projected to reach 22.6 percent of GDP, with 19.9 percent derived from domestic revenues (see Table 1). With improving macroeconomic conditions, it is expected that both production and demand will increase, thus enabling the MRA to collect higher revenues. The Government estimates that for the first time in several years, domestic revenues will fully cover projected recurrent expenditures. However, for the first four months of the fiscal year, the value of collected revenues was about 2.4 percent below the target. This was largely due to under-collections in import VAT and import excise duties, driven by an increase in the importation of non-vatable items that carry zero VAT and excise duties or that are tax exempt. Grants are projected to decline modestly to 3.0 percent of GDP, down from 3.5 percent of GDP in the previous year. The decline is mainly due to reduced dedicated and project grants, with the winding down of support for the humanitarian response.

28. Recurrent expenditure is projected to reach 19.6 percent of GDP, meaning that it could be fully covered by domestic revenues, if targets for both revenue and expenditure are met (see Table 1). The budget projects that pressure on recurrent spending will ease, with the wage bill and subsidies expected to remain broadly flat while interest payments, especially on domestic debt, are expected to fall (see Figure 8). The Government needs to manage the wage bill by exerting tight control over new hires and by preventing unplanned recruitment, which has occurred in recent years. It will also need to increase efforts to eliminate payroll irregularities, with these irregularities tending to build up repeatedly and to disrupt fiscal plans. In the medium term, the Government should consider implementing measures to improve the efficiency of public sector staffing structures, with the possibility of reallocating human resources from lower to higher priority areas.

29. While up until the recent past, FISP has been a major cause of budget overruns, this has been controlled by the implementation of effective reforms. The Government should continue to implement the reforms it initiated in 2016/17, which aimed at improving the efficiency and effectiveness of the program. In 2017/18, key reforms to FISP include: (i) further increasing the proportion of fertilizer retailed by the private sector; (ii) further reducing the level of subsidy to beneficiaries while maintaining the fixed value coupon, with beneficiaries paying the difference between the coupon value and market price; and (iii) expanding the pilot scheme that targets productive farmers from two to four districts. The reform package builds on encouraging evidence from the private sector retailing pilot of 2015/16 and from the scaling up of this pilot in 2016/17.

Figure 8: Recurrent spending to ease: less subsidies, reduced interest payments and a steady wage bill

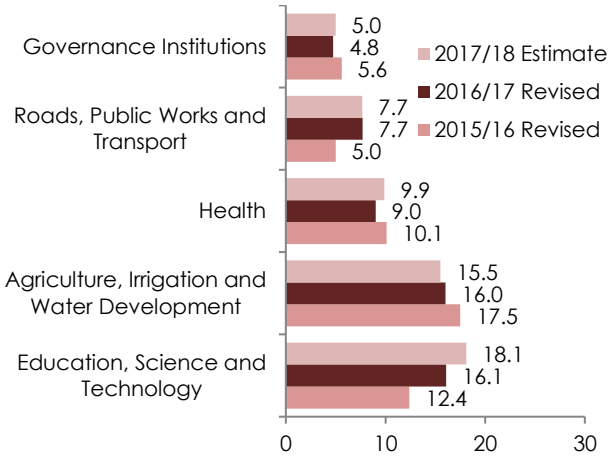
Share of estimated recurrent expenditure, percentage of GDP



Source: World Bank staff calculations and estimates based on MoFEPD data

Figure 9: Budgetary composition has changed as priorities shifted from agriculture to education

Top five sectoral budget allocations, percentage of total budget, net of transfers to local councils and subventions



Source: World Bank staff calculations and estimates based on MoFEPD data

30. The pilot scheme demonstrated that the increased involvement of the private sector in FISP could ensure the efficient delivery of fertilizer at reduced cost to the Government. The introduction of a fixed coupon value in 2016/17 ensured that expenditures were capped. As a result of this measure, for the first time, cost overruns were avoided as FISP expenditures remained within the allocated budget. Maintaining controls over expenditure and avoiding budget overruns is premised on the ability of the Government to clear domestic debt and accumulated arrears. The Government committed to utilize the US$ 80 million proceeds from the World Bank Development Policy Operation (DPO)[4] to achieve this. This presents an opportunity to relieve the Government of a significant portion of its debt burden and to refocus its budget on measures to achieve greater poverty reduction and economic growth. However, deeper reforms are needed to enable the Government to generate optimal benefits from this new financing.

31. There was an increase in the budgeted allocation to pensions as a result of the Government measures to eliminate pension disparities. The Government has proposed a process to eliminate the disparities that exist between the pensioners who retired before and after 2004. The pension base before 2004 was net of allowances, while after 2004 these were amalgamated with basic salaries to form a clean pension base clean. This resulted in instances where a pensioner from the earlier group who retired at the same grade and had served for the same number of years could now be receiving a quarter of the amount paid to a post-2004 pensioner. The reform process will be initiated with a 200 percent increase to the pensions of those who retired prior to 2004, with the pensions of those who retired after this point being held constant until the two equalize. In large part to provide the resources for this reform, the budgeted pension bill has been increased from MK 50 billion to MK 70 billion. The increase also encompasses the Government's contributions for civil servants below 35 years of age and incoming new recruits, who will migrate from the present Government pension scheme to the contributory National Pension Scheme as of 1 July 2017.

[4] The DPO face value of Special Drawing Rights (SDR) 58.9 million was disbursed as US$ 84.3 million due to exchange rate movements. For further details on the *Agricultural Support and Fiscal Management DPO* see: http://wrld.bg/QWeL30c9XQj.

Table 1: Fiscal accounts
Percentage of GDP (with rebased GDP)

	2013/14	2014/15	2015/16	2016/17		2017/18
				Revised	Outturn	Proj.
Revenue and grants	**23.2**	**21.4**	**21.6**	**22.8**	**23.5**	**22.9**
Revenue	**19.7**	**18.6**	**17.8**	**19.8**	**20.0**	**19.9**
Tax Revenue	17.3	16.3	16.0	17.8	17.6	18.3
Nontax revenue	2.4	2.4	1.8	2.0	2.4	1.6
Grants	**3.5**	**2.8**	**3.7**	**3.0**	**3.5**	**3.0**
Budget support grants	0.3	0.0	0.5	0.3	0.3	1.1
Dedicated grants	1.4	1.1	1.8	1.1	1.5	0.7
Project grants	1.8	1.7	1.4	1.6	1.7	1.2
Expenditure and net lending	**28.9**	**27.1**	**27.6**	**28.0**	**28.2**	**26.9**
Recurrent expenditure	**24.4**	**21.8**	**23.5**	**21.8**	**21.7**	**19.6**
Wages and salaries	6.2	6.9	6.4	6.4	6.2	6.3
Interest payments	4.4	4.0	4.0	4.0	4.3	3.6
Foreign	0.2	0.3	0.3	0.3	0.3	0.3
Domestic	4.2	3.8	3.7	3.7	4.1	3.3
Goods and services	7.9	5.5	5.8	6.0	5.9	5.7
Maize purchases	0.3	0.2	0.8	0.8	0.7	0.7
Subsidies and transfers	5.6	4.9	4.9	4.1	3.8	4.0
Fertilizer subsidy	2.7	1.9	1.8	0.8	0.7	0.7
Arrears payments	0.4	0.4	2.5	1.4	1.4	0.1
Development expenditure	**4.5**	**5.3**	**4.0**	**6.1**	**6.4**	**7.2**
Domestically financed	0.9	1.0	0.7	1.0	0.7	2.7
Foreign financed	3.6	4.4	3.3	5.1	5.8	4.4
Overall balance (incl. grants)	**(5.7)**	**(5.7)**	**(6.1)**	**(5.2)**	**(4.8)**	**(4.0)**
Financing	6.1	5.8	6.1	5.2	4.9	4.0
Net foreign financing	2.0	2.5	1.9	2.6	2.5	3.4
Gross foreign borrowing	2.4	2.9	2.4	3.2	3.0	4.0
Budget support loans	0.0	0.0	0.0	0.0	0.0	1.2
Project loans	1.8	2.2	1.9	2.3	2.5	0.2
Other loans	0.6	0.7	0.5	1.0	0.5	2.5
Amortization	(0.4)	(0.4)	(0.5)	(0.7)	(0.6)	(0.6)
Net Domestic borrowing	4.2	3.3	1.7	1.0	0.9	0.6
Securitization of domestic arrears	0.0	0.0	2.5	1.3	1.3	1.0
Privatization proceeds	0.0	0.0	0.0	0.3	0.3	0.0

Source: World Bank staff calculations based on MoFEPD data

32. Development expenditure is projected to increase by about 29 percent to reach 7.2 percent of GDP, up from 6.4 percent of GDP in the previous fiscal year (see Table 1). This represents a departure from the direction of previous budgets, which were more consumption-based than development-oriented. Domestic financing has been substantially increased, from 0.7 percent of GDP to 2.7 percent of GDP. A decline in foreign financing, from 5.8 percent of GDP to 4.4 percent, is envisioned, possibly due to the traditionally low absorptive capacity of projects. Therefore, a key challenge this fiscal year will be ensuring that slippages in recurrent expenditure do not necessitate cuts to the development budget, as has frequently occurred in the past.

33. The FY 2017/18 budget reflects a relative shift in priorities to education from agriculture. Education now receives the largest proportion of the budget of any single sector (18.1 percent), followed by agriculture (15.5 percent); health (9.9 percent); transport (5.7 percent); and governance (5.2 percent) (see Figure 9). Of the major sectors, governance received the largest budget increase. The impact of the decentralization of the payroll is clearly visible from the budget, with large cuts to Personal Emoluments (PE) to central education, health and agriculture ministries, with an associated increase in Local Council PE allocations.

34. If the Government maintains fiscal prudence, its recent progress can be sustained and accelerated. Over the past year, policies implemented in areas such as agricultural markets and fiscal management have played a key role in facilitating the achievement of fiscal stability. However, there are risks that could undermine the progress achieved so far. Past experience suggests that Malawi struggles internally with repeated episodes of volatility in growth and fiscal performance over the political business cycle. Despite the recent progress, the challenge will be to avoid such volatility by containing recurrent spending, especially in the context of the upcoming elections. In terms of external risks, weather shocks continue to impact Malawi's economic cycle. Thus, sustained recovery will require structural reforms to achieve higher levels of agricultural diversification and

increased resilience (see Box 2). In addition, it will be necessary to strengthen flexible safety nets to manage these shocks when they occur.

The debt burden remains manageable but rising domestic debt may create stress

35. The most recent joint World Bank/IMF Debt Sustainability Analysis (DSA) for low-income countries confirms that Malawi faces a moderate risk of external debt distress. In terms of external debt burden indicators, Malawi is projected to remain below policy-dependent thresholds in the medium term, premised on a baseline scenario for growth recovery with a continued moderate pace of borrowing, predominantly on highly concessional terms. However, stress tests indicate that a less favorable debt outcome is possible under certain conditions. The least favorable outcome occurs in a scenario involving a one-time depreciation of the Kwacha by 30 percent, causing the present value of debt to GDP, the present value of debt to revenue, and the debt service to revenue ratio, to breach thresholds. Domestic debt dynamics have been affected by a Kwacha-denominated debt-swap arrangement with a regional development bank, PTA Bank, with this arrangement expected to be wound down by 2018. A more moderate profile for domestic debt is projected for the period after 2018, assuming reduced fiscal deficits and ongoing economic recovery.

36. While the level of risk remains moderate, issues affecting non-concessional sources of financing could quickly escalate Malawi's potential debt risk. In Malawi, much of the fiscal space created by the Heavily Indebted Poor Countries/Multilateral Debt Relief Initiative (HIPC/MDRI) has been eroded as a result of a decade of slow economic growth and persistently large deficits. The Government needs to explore options to lower financing costs by deploying concessional financing in cases where the risk and cost of commercial financing is high. Investment should be considered as a priority for non-concessional financing only where deemed commercially viable and cost effective without government guarantees.

Box 2: Incentivizing agricultural diversification to achieve improved nutrition and resilience in Malawi

Despite the smallholder-led growth of Malawi's agricultural sector over the past decade, nutritional outcomes have improved only modestly. Malawi's crop production is heavily weighted towards maize, with this crop cultivated on nearly 80 percent smallholder land in 2011. This has critical implications for the diversity of food supplies in rural markets (Aberman et al., 2015). Although children may be consuming sufficient calories, only a small proportion regularly consumes sufficient quantities of nutrient-rich foods (meat, fish, eggs, dairy, legumes, fruits and vegetables). Consequently, 37 percent of children under the age of five are stunted, 3 percent are wasted and 12 percent are underweight for their age (Malawi Demographic and Health Survey, 2015-16). Though the prevalence of stunting has decreased by 10 percent since 1992, in absolute terms, child undernutrition continues to have a significant negative impact on human capital, constraining national economic growth. A study on the cost of hunger in Malawi shows that the total annual cost associated with child undernutrition is estimated at MK 147 billion (US$ 597 million) which is equivalent to 10.3 percent of GDP (WFP et al., 2015).

Increased crop diversification has a strong potential to influence nutritional outcomes amongst farm households, who largely consume their own production. Studies in Sub-Saharan Africa emphasize that poor nutritional outcomes are at least partially due to the lack of on-farm agricultural diversification. Mazunda et al. (2015) show that, in Malawi, there is a significant positive correlation between the level of on-farm crop diversification and nutritional indicators, particularly for micronutrients. Similarly, Jones et al. (2014) show that there is a significant positive correlation between on-farm diversification and diversity of household diets, independent of household wealth and social standing. A forthcoming World Bank (2018b) study on Malawi shows that high levels of crop and livestock diversification and off-farm diversification are consistently, positively and significantly correlated with a higher household dietary diversity score.

Studies show that agricultural diversification can also play a key role in facilitating the achievement of greater resilience to climate change. In Malawi, weather shocks have intensified over the years, with this trend likely to continue in the context of ongoing climate change. Malawi's vulnerability to these shocks is exacerbated by its reliance on specialized crop production. The forthcoming World Bank (2018b) study shows that households with high levels of crop and income diversification are more resilient to these shocks than less diversified households in terms of indicators related to food production, food stocks and household income.

The degree of on-farm agricultural diversification is positively correlated with the availability of land and labor, the application of climate-smart agriculture practices, and with the prevalence of female-headed households. Studies focusing on Malawi found that there is an association between household size and the availability of

labor with the degree of diversification (Kankwamba et al., 2012). The forthcoming 2018 World Bank study has found that the prevalence of female-headed households is positively and significantly correlated with the degree of crop diversification. This may be because women are more likely to cultivate legumes (which are considered a women's crop) and tubers (which are considered as crops for the poor). The degree of crop diversification also increased with land size up to a certain level, after which it starts to decline. This indicates that agricultural diversification may involve an expansion of land rather than an intensification of production. Distance to markets was negatively correlated with the degree of crop diversification, indicating that farmers diversify to achieve food security and as a result of risk aversion. In terms of government policies and initiatives, the impact of FISP has been to increase the degree of diversification, which may be the result of the deliberate introduction of a greater range of crops, such as legumes, in the FISP package. In contrast, participation in cereal and cash crop markets, high ADMARC maize farm gate prices and proximity to parastatal ADMARC centers was negatively correlated with the degree of agricultural diversification.

It has been recognized that measures to promote diversification may play an important role in meeting the multiple challenges faced by the agricultural sector. The Government's strategies to increase agricultural productivity have centered disproportionally on FISP. While this program has had a beneficial impact on maize yields, it has had only a limited impact in terms of improving food consumption, household incomes and nutritional outcomes at the national level. Nevertheless, the Government has acknowledged the need to encourage diversification. In recent budgets, the Government has allocated financial resources to scale up legume production and to increase agricultural resilience. The Government's strategies have included reforms to reduce expenditure on FISP, to improve the targeting of beneficiaries, and to increase the level of involvement of the private sector in importation and retailing. To successfully introduce new farming practices, ongoing technical support should be provided through public and private extension services. To ensure the economic viability of a more diversified agricultural sector, policies should encourage 'farming as a business' and promote the emergence of agribusinesses or commodity-based production. To ensure that on-farm diversification and market purchases result in improved nutritional outcomes for all household members, increasing nutritional awareness through the provision of advocacy and educational programs, particularly when linked with the provision of agricultural extension services, has been found to be effective.

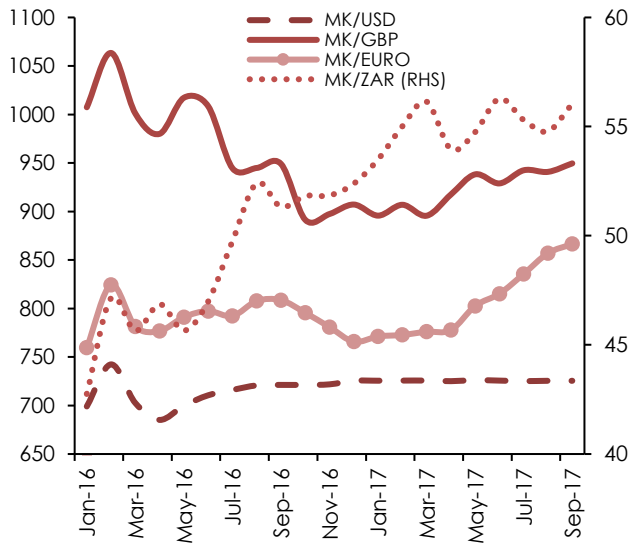
The Malawi Kwacha has remained stable against the US Dollar

37. The value of the Malawi Kwacha (MK) has remained fairly stable relative to the United States Dollar (US$) since August 2016. During this period, the Kwacha has traded at an average middle rate of MK 729 to the Dollar. However, its value depreciated against several other major currencies, including the British Pound, Euro and South African Rand (see Figure 10). This was due to the strengthening of these currencies on global markets, particularly in the case of the Euro, with increased investor confidence due to improved political certainty. On the one hand, the stability in the MK/US$ exchange rate is attributable to a steady inflow of foreign reserves, which have been maintained at just above the required three-months minimum import cover. Major sources of these inflows included purchases from the market, swaps and project funds. On the other hand, the demand for foreign exchange by the domestic market has been subdued. This is mainly due to structural constraints, including the unstable power supply, which have hindered production and hence reduced demand for foreign exchange to purchase imported inputs.

38. Maintaining steady levels of foreign exchange reserves has also enabled the authorities to tame typical seasonal variations of the exchange rate. Traditionally, the Kwacha appreciates in the early months of the year, prior to and during the tobacco sales season, and depreciates towards the end of year as reserves are drawn down to finance significant expenditures on imports, such as fertilizer for FISP. The Reserve Bank of Malawi (RBM) has continued to implement measures to absorb excess liquidity in the banking system, with the success of these measures being reflected by the stability of the Kwacha. RBM has required commercial banks to maintain foreign currency positions within prudent limits to avoid exposure to excessive risk as a result of losses due to fluctuations in foreign currency values.

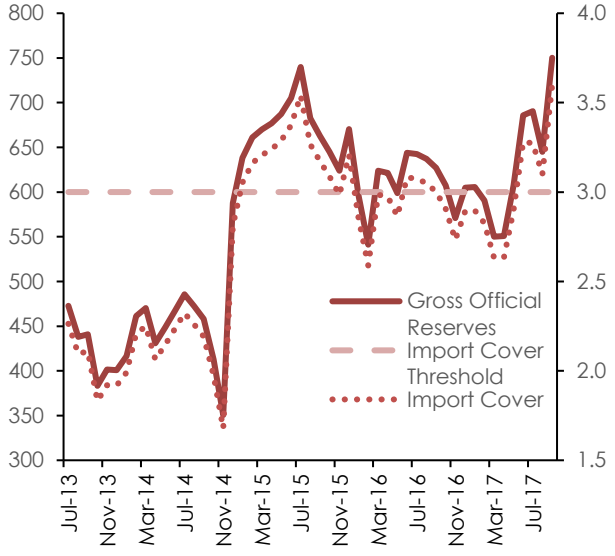
39. The accumulation of net foreign reserves has increased steadily, now exceeding three months import cover. The value of these reserves increased from US$ 550 million (2.6 months import cover) in the first quarter of 2017 to US$ 750.2 million (3.6 months import cover) in the third quarter (see Figure 11). The adequate level of Malawi's foreign exchange reserves has played a role in reducing speculative foreign exchange trading and led to a sustained narrow spread between the official and parallel market rates. If reserves are maintained at the current level, the authorities will have attained their objective of achieving a minimum of three months import cover.

Figure 10: Pressure on the Malawi Kwacha against the Dollar has eased …
Exchange rate USD, GBP and EURO (LHS), ZAR (RHS)



Source: World Bank staff estimates based on RBM Data

Figure 11:… as reserves have steadily increased, with import cover rising above the threshold target
Gross official reserves in US$ millions (LHS), Import Cover in months (RHS)



Source: World Bank staff estimates based on RBM data

Monetary policy is starting to ease, providing a welcome boost to investment

40. Responding to the significant decline in the headline inflation rate, the RBM has continued to ease monetary policy. Since November 2016, the RBM has reduced the policy rate by an overall 9 percentage points, with a reduction by 6 percentage points in 2017 alone. Specifically, the policy rate was reduced from 24 percent to 22 percent in March 2017, and by a further 4 percentage points in July 2017 to 18 percent. In addition to reducing the policy rate, RBM maintained the Liquidity Reserve Ratio (LRR) at 7.5 percent to ensure affordability of credit.

41. While the reduced policy rate has led to a decline in lending rates, the decrease has not been enough to significantly stimulate long-term borrowing for investment. Commercial banks have continued to impose a risk premium on lending, resulting in only moderate adjustments to base lending rates. On average, commercial banks' minimum lending rates have declined from about 34 percent in December 2016 to around 28 percent in July 2017, with the maximum lending rates declining from 43 percent to 36 percent over the same period. By September 2017 there were slight downward adjustments to these rates, to 27.6 and 35.6 respectively. Despite the revision in lending rates, they remain prohibitive for long-term financing.

42. While the RBM has eased monetary policy, it continues to implement measures to manage any excess liquidity that may result from lower interest rates. Lower nominal interest rates mean that a larger set of loan-financed activities may become viable, which may create inflationary pressures through an increase in the money supply. The RBM has been managing these pressures by mopping up any excess liquidity. As a result, the growth in money supply has been consistent with the growth in nominal GDP and real interest rates have remained positive and stayed at levels sufficient to maintain the demand for holding domestic currency. The money supply growth rate averaged at 18.4 percent by August 2017, lower than the figure of 24.3 percent recorded at the same point in the previous year. According to RBM, the underlying money supply growth rate is lower than the projected nominal GDP growth rate of 22.6 percent for 2017.

The mixed performance in export commodities has led to an overall decline in exports

43. In 2017, the total value of Malawi's exports is expected to decline, largely due to the decrease in the value of tobacco exports. The total value of Malawi's exports is expected to fall by 7.4 percent compared to the value recorded in 2016 resulting from both the decline in tobacco production and the decrease in average tobacco export prices (see Figure 18). The overproduction of tobacco in 2016 and the resulting decline in prices led to a significant shift away from this cash crop by farmers in 2017. As expected, in 2017, demand exceeded supply by around 46 million kilograms, leading to an increase in the average national price by 41 percent from US$ 1.42 in 2016 to US$ 1.99 in 2017.

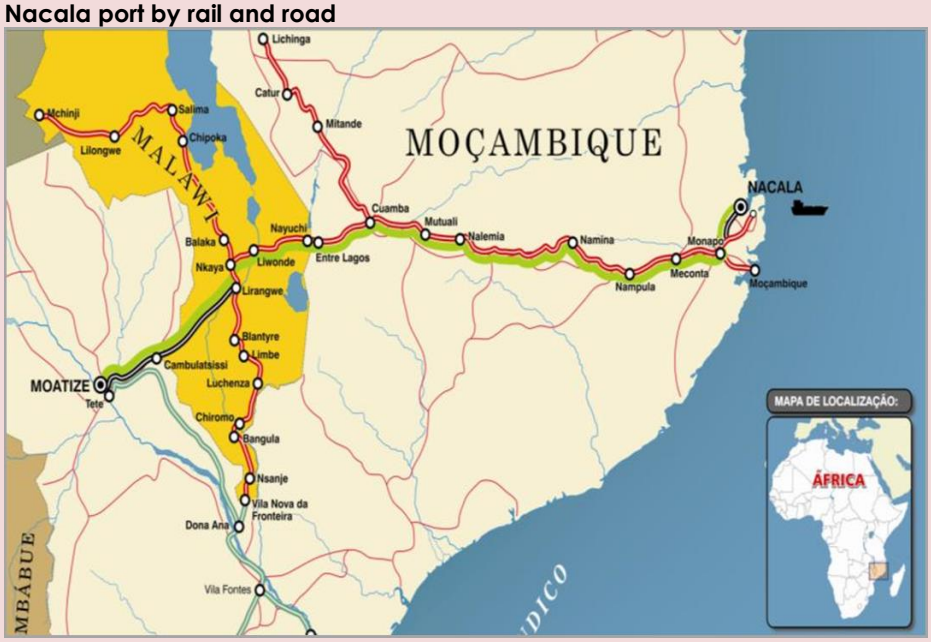
44. However, the increase in the price of tobacco on the domestic market is not expected to translate into higher export prices. In the period from January to July 2017, the average export price was estimated to stand

at US$ 3.28 per kilogram, compared to the figure of US$ 3.85 per kilogram recorded during the same period last year. This is in part due to the export of carry-over stocks from the previous tobacco season, which could be driving prices down. Even with a significant increase in export prices since August, the average annual export price in 2017 is expected to be lower than that recorded in 2016.

Box 3: Opportunities created by the Nacala Development Corridor

The recent investment in the Nacala railway line creates opportunities for Malawi's businesses to export their products through the Nacala port. A Brazilian company, VALE, has invested more than US$ 4 billion in the development of the railway from the Moatize coal mine in Mozambique, across Malawi, and towards the Nacala port (see Figure 12). Commercial coal operations commenced in January 2016, with the transportation of 6.6 million metric tons in 2016. This is projected to increase to 10 million metric tons in 2017, with a target of at least 18 million metric tons by 2019. The concession agreement between the Government of Malawi and Vale Logistics Limited (VLL) provides Malawi with two train slots in each direction, with up to 120 wagons per train for general cargo, and one passenger train.

Figure 12: The Nacala corridor connects Mozambique, Malawi and Zambia to Nacala port by rail and road



Source: VALE

Over the past two decades, a number of initiatives have been implemented to improve and modernize the operations, infrastructure and logistics of the Corridor. Prior to 2000, the railway line was in poor condition due to the civil war in Mozambique and the lack of a well formulated, coordinated legal and institutional framework in both Malawi and Mozambique. In 2000, the Governments of the two countries entered into an agreement related to the development of the Corridor, based on a recognition of the need for efficient trade routes to promote regional and external trade and higher levels of economic integration and growth. In 2003, the Government of Zambia also joined the Agreement. Other significant agreements that have led to the improvement of the Corridor have included the commercialization of rail transport in Malawi in 1999, as a result of which Central East African Railways (CEAR) came into operation. In addition, in 2011, the Government of Malawi and VLL entered into a concession agreement to develop rail infrastructure across the Corridor.

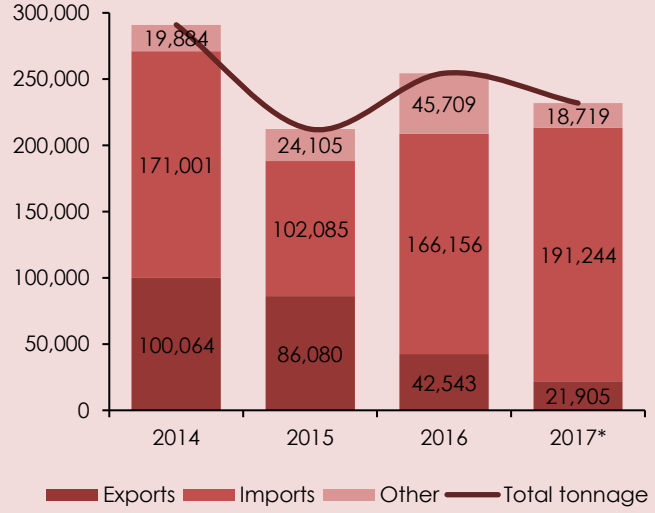
Apart from the interventions on the rail section of the Corridor, there have also been a number of joint interventions on the road component of the Corridor by the Southern African Development Community (SADC). In Malawi, through SADC, the African Development Bank (AfDB) has provided resources for the construction and rehabilitation of sections of the road along the Corridor. In addition, in order to promote trade facilitation, AfDB is financing studies to determine the feasibility of one stop border posts at borders between Malawi and its neighbors on the Corridor. In Mozambique, the Nacala port is being expanded and upgraded, and other sections of the road are being improved.

In Malawi, the majority of freight transported by rail is imported (see Figure 13). Imports constitute almost two thirds of this freight, while exports constitute around a quarter, with the remainder consisting of freight

transported within the country. The exports consist mainly of sugar, pigeon peas and tobacco, while the imports include wheat grain, fertilizer and fuel. Unfortunately, improvements to the railway infrastructure and the concession agreement between the Government of Malawi and VLL has not resulted in a significant uptake by Malawian exporters. While Malawi has usage rights amounting to 5 million metric tons per year, on average it only utilizes 250,000 metric tons.

Figure 13: Malawi mainly uses the Nacala corridor for importing

Summary of traffic moved, tonnage



Source: World Bank staff calculations based on CEAR data
Note: 2017 contains data up to July 2017

The main factors constraining the greater use of the railway relate to the seasonal nature of agricultural exports and to security concerns. There have been efforts to improve security by providing police escorts on the trains and by engaging with the army. In addition, the length of the transit time at the Nacala port has created additional challenges, despite considerable improvements in recent times.

The Nacala Development Corridor has the potential to transform trade and transport not only in Malawi, Zambia and Mozambique, but throughout the entire SADC region. The development of this strategic trade corridor is critical to enhancing the competitiveness of regional trade, particularly in the case of the land-locked countries, Zambia and Malawi. Encouragingly, the challenges the three member countries faced are being addressed through their individual and joint efforts.

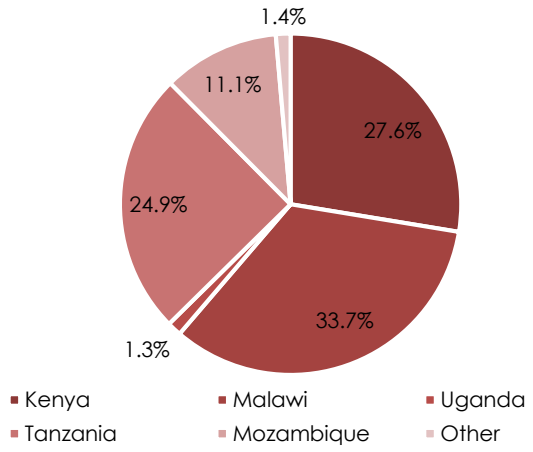
Source: Ministry of Transport and Public Works

45. The decline in tobacco exports has been offset to some extent by increases in the exports of other major commodities, including tea and edible nuts. On average, the production of other commodities increased with good weather, while international market prices have also increased. Tea production is projected to reach 48 million kilograms in 2017, a level that has not been recorded since 2010. A drought in Kenya boosted demand for tea from Malawi, the continent's second largest tea producer, leading to a rebound in prices. Likewise, both export volumes and average prices of edible nuts (groundnuts, macadamia nuts and cashews) and coffee are projected to increase over the year. Although cotton production decreased by 6.0 percent, due to the unavailability of inputs and the exit of various ginners from the market, international prices are expected to increase by almost 12.8 percent, leading to an overall increase in the value of Malawi's cotton exports.

46. On the other hand, the performance of other key exports, particularly sugar and pulses, has deteriorated. The aftermath of the El Niño drought of 2016 continues to negatively affect sugar production, with output in 2017 remaining close to the levels recorded in 2016. A greater focus on the domestic market, with a corresponding decline in exports, appears to be the most significant factor behind the continuous decline in sugar exports over the past few years (see Figure 17). Malawi's exports of pulses have been significantly affected by India's imposition of an import restriction on pigeon peas in August 2017. This follows a jump in production in India, the largest market for pigeon peas in the world, by more than 85 percent in 2016/17, to 4.8 million metric tons, with India's domestic demand estimated to stand at just over 3 million tons.

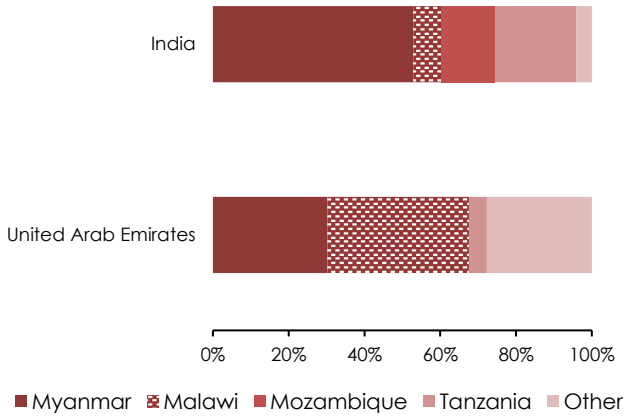
47. Malawi is the most significant producer of pigeon peas in Africa, with a large portion of this commodity being produced by smallholder farmers and exported to India and the United Arab Emirates (see Figures 14 and 15). The oversupply in India and the subsequent imposition of the import restriction has resulted in a dramatic decrease in local prices, from around MWK 500/kg at the beginning of the year to around MWK105/kg in September 2017. Despite the loss of its key export market this year, Malawi stands to benefit from the continued production of pigeon peas and other pulses as a means to achieve higher levels of diversification. Engaging with the Indian government, as other countries in the region have done, finding alternative export markets, and focusing on producing other pulses, such as soya beans, for which there is both local and regional demand could be ways to manage this challenge.

Figure 14: Malawi is Africa's largest producer of pigeon peas…
Pigeon peas production, percentage of total in Africa, 2014



Source: World Bank staff calculations based on FAO data and data from Mozambique's Ministry of Agriculture

Figure 15: …and the fourth largest exporter to India and second largest to the United Arab Emirates
Pigeon pea exports, percentage of total, 2014

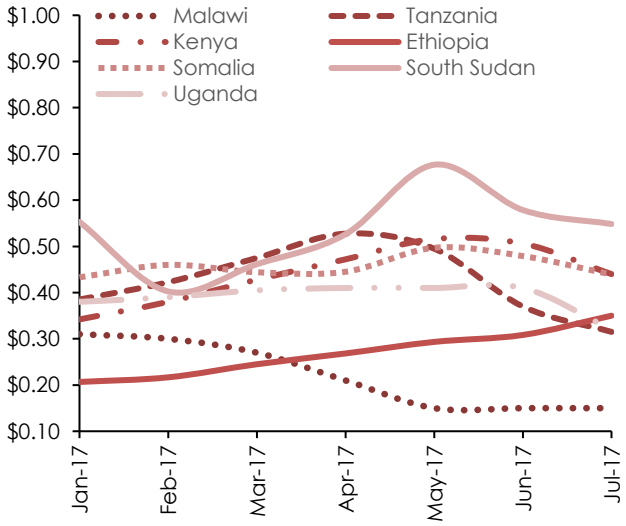


Source: World Bank staff calculations based on ITC data

48. With Malawi's maize surplus and the drought in East Africa this year, informal exports of maize are increasing. The volume of informal maize exports, especially to Tanzania and Mozambique, is estimated to have increased to 7 percent above five-year averages (FEWSNET, August 2017). With the food production deficit in the East African region and below-average maize supplies in Tanzania this year, there has been an increasing demand for maize from these markets. The Ministry of Agriculture, Irrigation and Water Development estimates Malawi's maize surplus to stand at almost 130,000 metric tons, with carry-over stocks of more than 300,000 metric tons.

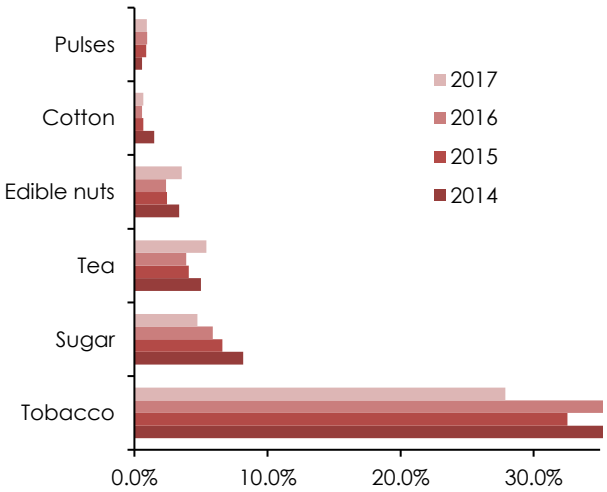
49. Malawi's maize export ban exacerbated the situation. In anticipation of a large maize deficit in 2016 (estimated at 790,000 metric tons), the private sector imported maize to meet the anticipated demand. However, possibly due to a significant volume of informal imports from Zambia, where maize fetched significantly lower prices, not all stocks were sold. During the course of 2017, there was an outcry against the maize export ban by the private sector holding such stocks, as they stood to benefit from exporting maize to other countries in the region where there is a deficit and where prices are more favorable (see Figure 16).

Figure 16: Maize prices in Malawi have been significantly lower compared to the East African region
Average maize prices in US$ per kg



Source: World Bank staff calculations based on FAO data

Figure 17: Tobacco exports have been fluctuating as farmers chase higher prices over time
Top exports, percentage of total export earnings, selected years



Source: World Bank staff calculations based on NSO data

50. A more transparent and predictable trade regulatory regime is crucial for the development of Malawi's agricultural sector. A ban on maize exports has not resulted in consistently lower domestic maize prices but it has made maize prices significantly more volatile compared to neighboring countries (Edelman and Baulch,

2016). In addition, although the ban may arguably achieve its intended outcome of facilitating food security in the short term, in the long term it is self-defeating, as it reduces incentives for commercial production and thus constrains supply (Aragie et. al., 2016). In this respect, the revision of the Control of Goods Act creates an opportunity to develop a transparent and predictable system by which trade restrictions and licensing requirements are implemented.

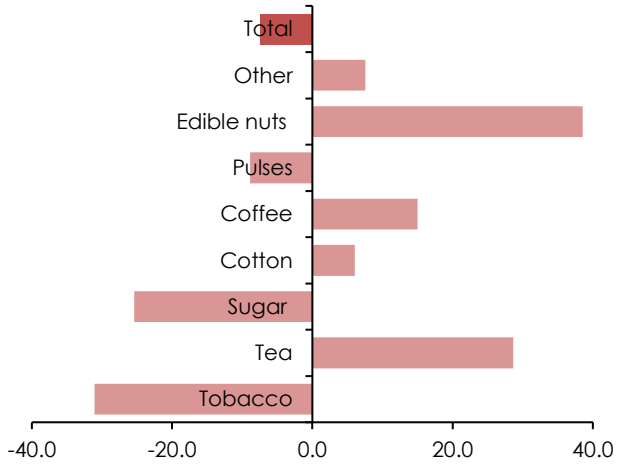
51. In 2018, Malawi's export performance is expected to rebound due to a projected increase in tobacco exports. A significant shift towards tobacco production is expected in 2018. This is due to higher tobacco prices, the collapse of the pigeon peas market, and the lower prices for other commodities in 2017, especially maize. Normal weather conditions are expected, which may outweigh some of the negative effects of volumes for other crops. In addition, international commodity prices are forecast to remain close to 2017 levels. Global demand for pigeon peas is expected to remain depressed, as favorable monsoon conditions in 2018 are projected to push India's output to levels higher than in 2017. Thus, the magnitude of the rebound will ultimately depend on tobacco export prices and the extent to which farmers prioritize the cultivation of tobacco rather than other crops.

Decreased demand has resulted in a lower import bill

52. Malawi's total import bill is projected to decrease in 2017, mainly due to the decrease in food imports. The drought that afflicted Malawi in 2016 resulted in a high volume of food imports, particularly by development partners and the private sector. With the humanitarian response continuing into 2017, 46,000 metric tons were estimated to have been imported through official channels at the beginning of 2017, compared to 284,000 metric tons in 2016. This significant decrease in the volume of food imports is projected to drive the total import bill down by 5.4 percent. When the decline in the volume of food imports is excluded, the total value of imports is estimated to decline by a modest 0.4 percent (see Figure 19).

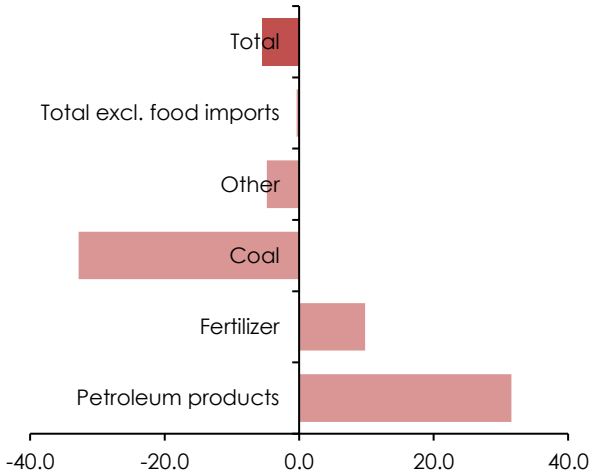
53. Malawi's demand for imports appears to be subdued. Although the volume of imported fertilizer is projected to decrease as a result of the scaling down of FISP, the increase in average global prices, at 15.6 percent, is projected to lead to an overall increase in the value of fertilizer imports. As coal is generally used in the process of tobacco curing, its demand has been affected by the decline in tobacco production. In addition, there is anecdotal evidence that demand for other imports has been declining, with several manufacturing firms scaling down their activities and with the generally lower consumer demand associated with the various shocks that Malawi has experienced in recent years.

Figure 18: A fall in tobacco exports is driving the overall decline in exports
Exports by type, 2017 percentage change from previous year, US$



Source: World Bank staff calculations and estimates based on NSO data
Note: 2017 estimates are preliminary

Figure 19: Imports are estimated to decrease mainly due to a significant decline in food imports
Imports by type, 2017 percentage change from previous year, US$



Source: World Bank staff calculations and estimates based on NSO data
Note: 2017 estimates are preliminary. The figure excludes food (maize) imports, which accounted for an estimated 6 percent of total imports in 2016, but fell significantly in 2017 to less than 1 percent of total imports

54. On the other hand, the demand for petroleum products is projected to increase. The volume of petrol, diesel and paraffin imports in the period from January to July 2017 increased by 19, 18 and 10 percent respectively

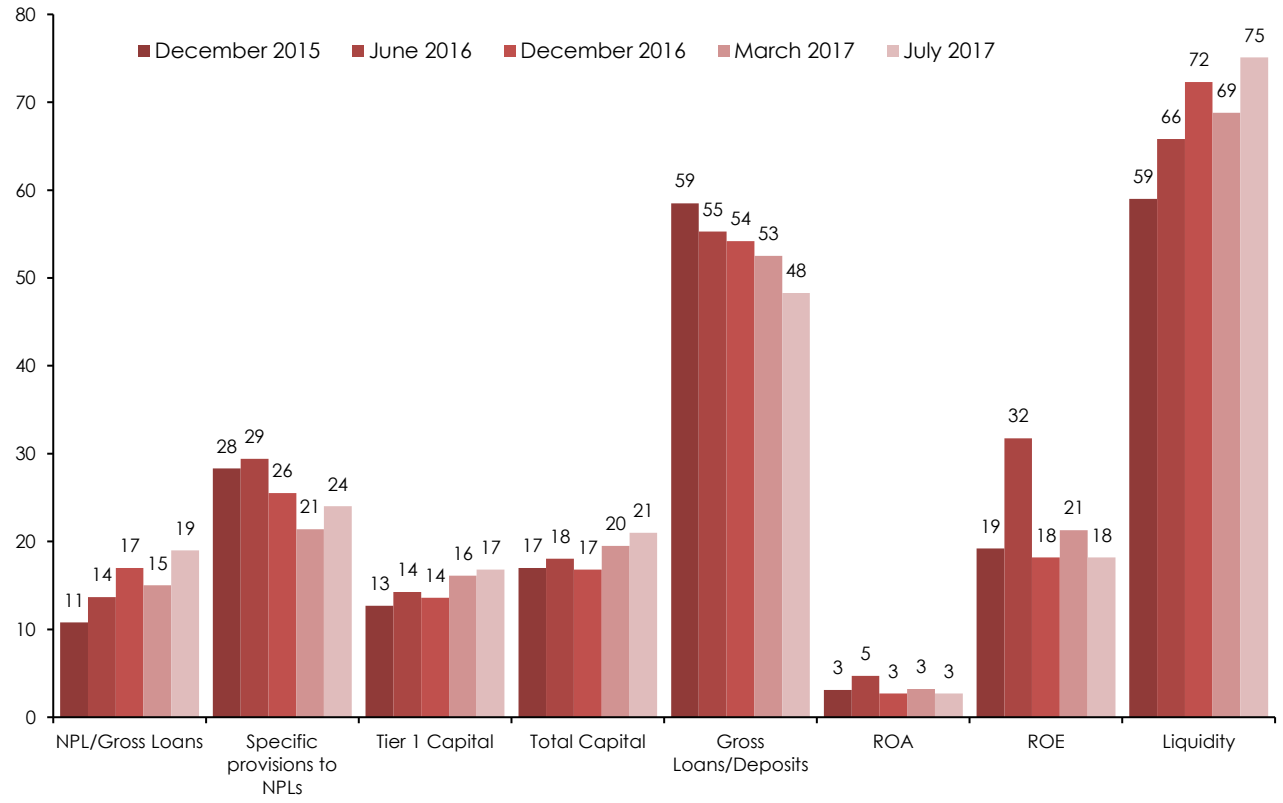
relative to the figures recorded in the same period in 2016 (MERA data). This is partly due to the increase in imports by the National Oil Company of Malawi Limited (NOCMA) to fill the Strategic Fuel Reserves to its current carrying capacity of 60 million liters. Combined with higher Freight on Board (FOB) prices, which were not reflected in domestic prices, the value of imports of petroleum products has increased substantially.

55. In 2017, the trade deficit is projected to improve, with the decline in imports more than offsetting the decline in exports. The merchandise trade deficit is expected to decline from 16.7 percent of GDP in 2016 to 14.1 percent of GDP in 2017. In 2018, the trade position will most likely continue to improve as a result of the increase in exports, due to the projected increase in tobacco production volumes and to the impact of a sustained period of normal weather conditions, with the impact of these factors outweighing that of the increase in imports. The import bill is likely to grow modestly due to a recovery in economic activity and to the increase in fuel imports.

While the banking sector remains sound, there has been a rise in non-performing loans

56. The overall asset quality of the banking sector has continued to decline since 2016, reflected by the increase in the ratio of non-performing loans (NPLs). Although there were some signs of improvement at the beginning of 2017, by July the NPL ratio had reached 19.0 percent, up from 10.8 in December 2015 (see Figure 20). This ratio is significantly above the regulatory benchmark of 5.0 percent. The high NPL ratio is indicative of the difficult economic situation, with borrowers often failing to generate sufficient returns from their businesses to repay their loans. The situation is exacerbated by Malawi's high interest rates. The provisioning for NPLs was on a declining trend up to mid-2017, when it started to reverse, as banks had to put aside extra funds to cover for potential loan losses. This affected the banking sector's overall level of profitability, as reflected by the decline in Return on Assets (ROA) and Return on Equity (ROE). Thus, the constraints facing the banking sector have resulted in an increase in liquidity and a decline in the ratio of loans to total deposits.

Figure 20: The banking sector remains sufficiently capitalized, despite high levels of NPLs
Banking sector soundness indicators



Source: World Bank staff calculations based on RBM data

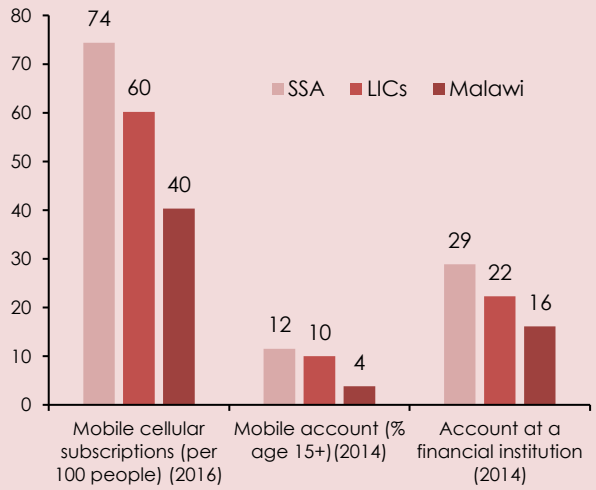
57. Overall, as of March 2017, the banking sector appeared to be adequately capitalized, except in the case of four banks which had capital ratios below the prudential requirements**.** The low level of capitalization of some banks and the increasing level of NPLs continue to pose a significant threat to the financial stability of the banking sector. Tier 1 capital increased slightly from 16.1 percent in March 2017 to 16.8 percent in July 2017,

while the total capital to asset ratios increased from 19.5 percent in March 2017 to 21.0 percent in July 2017, partly reflecting the recapitalization of these four banks during that period.

Box 4: The potential of mobile money for financial inclusion and gender empowerment

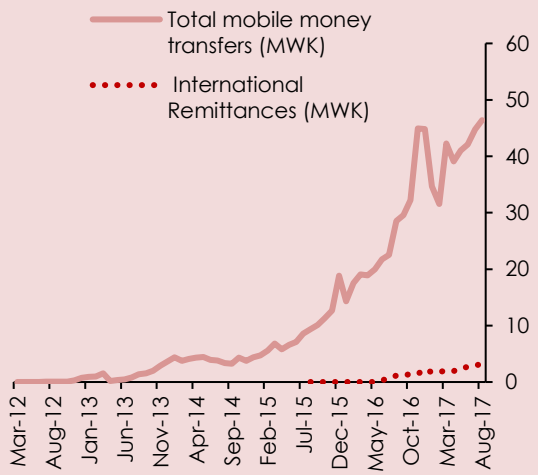
Malawi is one of the least banked countries in the world. In 2014, it was estimated that only 16 percent of the population had accounts at a financial institution, compared to averages of 29 percent for the Sub-Saharan African (SSA) region and of 22 percent for Low Income Countries (LICs). The introduction of a mobile phone network in Malawi in 1995 facilitated improved communication and permitted a range of services to be offered through cellular networks. Such services include using mobile phones to conduct financial transactions, allowing users to store, save, send and receive money, to purchase airtime or to pay for utilities without having a bank account. While ownership of mobile phones in Malawi has increased exponentially from 382 in 1995 to more than 7 million in 2016, the number of mobile subscriptions and the rate of use of mobile phones for financial transactions was still lower than the SSA and LICs averages (see Figure 21).

Figure 21: Mobile subscriptions are high while uptake of mobile accounts remains low…
Mobile cellular subscriptions, mobile accounts (% of 15 year olds+) and accounts at financial institution (%)



Source: World Bank staff calculations based on World Bank Global Findex Data

Figure 22:…. yet there has been exponential growth in mobile money transactions
Total non-bank mobile money transactions, international remittances using mobile non-bank platforms in MWK billions



Source: World Bank staff calculations based on RBM data

Malawi has recorded strong growth in the value, volume and range of non-bank mobile money transactions. Since the introduction of two mobile money facilities, Airtel Money in March 2012 and TNM Mpamba in May 2013, by the two mobile network operators, Airtel and TNM respectively, and the development of a non-e-wallet[5] mobile money transfer platform, Zoona, in July 2014, the value and volume of mobile money transactions has increased dramatically. Over this period, the number of transactions has increased from 1,700 transactions, with a total value of MK 3.5 million, in March 2012 to 11.4 million transactions, with a total value of MK 760 million, in August 2017 (see Figure 22). An increase in the use of mobile transfers for the payment of remittances has been recorded since August 2015, with the average value of transactions increasing from MK 30,000 in August 2015 to MK 40,000 in August 2017. As in many other developing countries where a large proportion of the population face significant constraints in opening bank accounts, mobile-based money transactions have enabled a large proportion of the unbanked population to access financial services.

There is still potential for the further growth of mobile money, despite existing challenges. Although mobile money accounts are cheaper than maintaining a bank account, only 40 percent of Malawians have mobile subscriptions, with only 4 percent of those having mobile money accounts. In addition, access to mobile money transfers is limited, with non-e-wallet agents preferring to serve markets in urban locations. In July 2017, the

[5] Non e-wallet based services offer a slightly different product as customers do not need to have an e-wallet from which to initiate or receive payments on their own, rather, customers are assisted to services by a network of agents established across the country (RBM, 2017a).

Reserve Bank of Malawi noted that only 5.5 percent of non-e-wallet agents were located in rural areas (RBM, 2017b). At present, a much greater proportion of the population have mobile phones (40 percent) than have bank accounts (16 percent). This suggests that there is still a huge potential for mobile technology to facilitate higher levels of financial inclusion in Malawi. With adequate coverage, the platform could be used to facilitate payments for state benefits such as the FISP and social cash transfers, thereby reducing transaction costs. Mobile money providers are currently exploring the potential for a greater range of uses. Zoona, for example, has a plan to reach an agent base of which 70 percent will consist of women, thus actively promoting the empowerment of women through the provision of its services.

Steps towards improving the business environment

58. While business confidence remains low, there have been signs of hope on a number of fronts. The fall in the inflation rate and the subsequent reduction in the policy rate and commercial bank lending rates has given some hope to the business community that the challenges related to accessing finance could be easing. Exponential growth in mobile-based money transfers and in the value of remittances coming into Malawi using this technology could allow for increased financial inclusion and increases in the disposable incomes of Malawi's unbanked population (see Box 4). Furthermore, large-scale investment in the Nacala railway line and improvements to the Nacala port present an opportunity to transform trade and transport for Malawian exporters (see Box 3).

59. Malawi has implemented a number of key reforms aimed at improving the business environment. The new Companies and Insolvency Acts were operationalized in March 2017. The implementation of the new Companies Act has simplified the process of registering companies and has introduced wide-ranging protection of the rights of minority investors, which were previously non-existent. The implementation of the new Insolvency Act facilitates company reorganization, whereas previously only winding up was possible. It has also introduced protection for secured creditors inside and outside the insolvency processes. In addition, the Government has demonstrated a commitment to reviewing a number of laws that depress business confidence, such as the Control of Goods Act and the Seed Act, in an effort to improve the environment in which domestic firms operate, especially in the agribusiness sector. Also in the pipeline is the development of new Subordinate Court Rules and an Arbitration and Mediation Bill, which are important for the enforcement of business contracts.

60. Malawi has also implemented measures to facilitate greater access to credit and to simplify processes related to external trade. An amendment to the Credit Reference Bureau Act has made it possible for financial institutions and public utilities to submit credit information related to individuals and firms to the two credit reference bureaus in Malawi. It is now mandatory for reports from the bureaus to be utilized in the processing of new loans. With regards to external trade, the Malawi Revenue Authority has upgraded its customs data management system from *Asycuda++ to Asycuda World* across all customs stations in the country. The upgrading of the system has enabled the electronic submission of customs declarations and supporting documents for both exports and imports. As a result, the time required to prepare documents and achieve border compliance has been reduced.

A return to growth offers an opportunity to refocus policy efforts on structural reforms

61. Two years of severe economic and humanitarian crisis directed the focus of policymakers towards addressing acute short-term challenges. Successive flooding and drought in 2014/15 and 2015/16 resulted in a severe food security crisis and a collapse in economic growth, in an already weak macroeconomic and fiscal context. This diverted policy focus towards crisis response.

62. With a growth recovery now underway and the food security crisis over, there is an opportunity to refocus efforts back on medium-term structural reforms. This would both reduce the risks of future weather shocks having such a devastating effect and increase the potential rate of medium-term growth. At this point, policy makers have the space to introduce and advance key structural reforms that will help to boost Malawi's economy in the medium term.

63. It is vital to maintain the momentum for the implementation of a range of critical reforms intended to break the cycle of vulnerability. Malawi will only record significantly improved medium-term economic performance if it develops higher levels of resilience to both internal and external shocks. It is likely that Malawi will continue to face recurring weather shocks into the future, so it is essential for it to develop the systems and mechanisms required to manage these shocks effectively.

64. Ensuring that the growth recovery is sustained will require both short- and medium-term reform measures. Recommended measures include the following:

- *Safeguarding the restoration of macroeconomic stability:* Improved levels of macroeconomic stability and fiscal discipline, as well as the careful maintenance of debt sustainability, are essential to the achievement of a medium-term growth recovery and sustained poverty reduction in Malawi. Recent efforts by the Government to strengthen expenditure controls and to break a vicious cycle characterized by large deficits, over-borrowing and the crowding out of the private sector have contributed towards lower inflation and the restoration of the basic macroeconomic conditions necessary for higher levels of investment and job creation. However, an accumulation of past fiscal deficits means that Malawi is reaching the upper limits at which its stock of domestic debt can be sustainably managed. Thus, prudence is required in making new borrowing commitments. The Government must also implement measures to increase fiscal buffers to enable the budget to withstand the impact of future external shocks, including measures to ensure the adoption of and adherence to appropriate fiscal rules. Deeper efforts to improve systems of public financial management and governance could result in increases to ODA flows to on-budget execution, reversing the trend of these flows off the budget.
- *Staying the course with reforms to reduce distortions and to ensure that agricultural markets function more effectively:* Malawi's smallholder-driven agricultural sector continues to be characterized by a strong orientation towards subsistence farming, with limited levels of commercialization. In addition, the prices of its agricultural commodities are amongst the region's most volatile. In many instances, the negative impact of climate-induced shocks has been exacerbated by policy-induced distortions that contribute to market failures. Issues include a lack of transparency and predictability in the market interventions implemented by key public sector institutions involved in the management of commodity markets, such as ADMARC and NFRA. Measures taken during the recent food security crisis have outlined a pathway towards a reformed set of agricultural sector institutions that would enable agricultural markets to function better, with increased incentives for private sector investment and commercialization.
- *Addressing the key policy and infrastructural constraints that limit the potential rate of growth in Malawi's economy.* Increasing the potential rate of growth will require a combination of deep structural reforms and a number of vital medium-term investments (see Box 5). Key priority areas for reform include measures to improve the investment climate by reducing the cost of doing business and increasing both the transparency and predictability of regulation. Measures to achieve this include the Subordinate Court Rules and the Arbitration and Mediation Bill, the revision of the Control of Goods Act, and the implementation of the amended Credit Reference Act. In addition, a persistent power supply deficit continues to constrain the development of modernized economic sectors. Creating the enabling conditions for private sector investment in new and diversified power generating capacity is a necessary building block for medium-term economic growth.

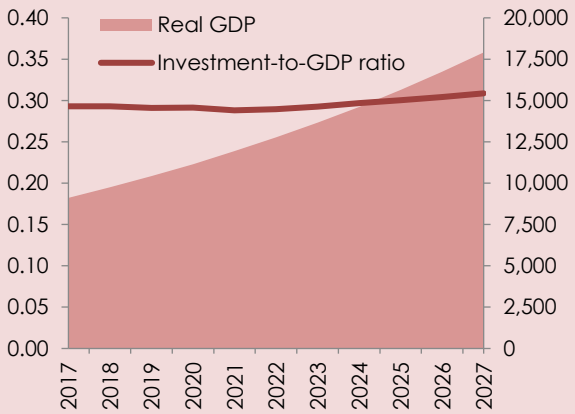
65. As the economy emerges out of crisis, this provides an opportunity for the Government to focus on structural issues, including through land reforms, which could support the achievement of higher levels of inclusive, medium-term growth. As the second part of this edition of the MEM explains, land reforms are crucial for the following reasons. First, increased private sector investment in agriculture and higher levels of productivity will not be achieved unless land rights are well-defined, easily ascertained, and transferable at low cost and without undue risk of future challenges. Second, there is enormous unexploited potential to generate public revenues at the central and local levels and to improve urban planning and the provision of infrastructure and services through the effective management of land resources. Finally, in the past, while land policies secured land rights for the wealthy, they failed to do so for a large proportion of the rural population, especially women and vulnerable groups, thereby undermining inclusion. The recent passage of a set of Land Acts makes a more inclusive approach viable. A determined effort to modernize land institutions provides an opportunity for Malawi to effectively utilize its land resources to facilitate the achievement of higher levels of inclusive growth.

Box 5: How can Malawi double its real income?

This box uses a Long-Term Growth Model (LTGM), to investigate the level of investment and average GDP growth rates required for Malawi to double its real income over a period of 10 to 15 years. The third Malawi Growth and Development Strategy (MGDS III), has a goal of scaling up investment to at least 33 percent of GDP in 2018, with a gradual decrease in subsequent years, in order to double per capita income in the medium term. It is expected that the capital injection would result in a GDP growth rate of about 6.9 percent in the first year and an average of 6.2 for the rest of the years. Using a neo-classical growth model, as adapted by Pennings (2017), the investment rate required for Malawi to double its real income in 10 to 15 years is investigated. The aim is not to produce a forecast but rather to determine how changes in investment would affect the future growth path. The model includes assumptions on demographics, human and physical capital, total factor productivity (TFP), and other growth drivers which are important for developing and emerging economies[6].

Figure 23: Malawi would require significant investment for real GDP to double in 10 years…

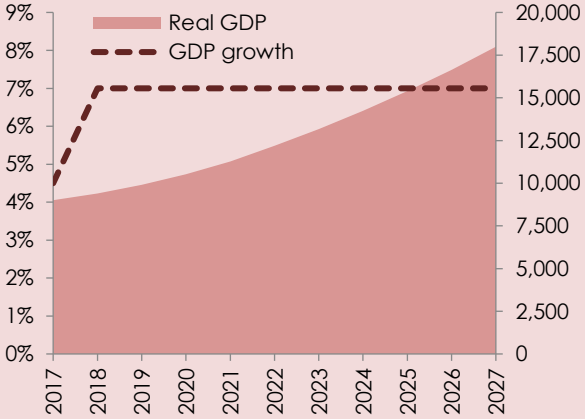
Investment to GDP ratio (LHS) and GDP in constant 2010 US$, million (RHS)



Source: World Bank staff estimates based on Kandoole, Stylianou and von Carnap (2016), WDI (2017), and World Bank population projections

Figure 24: …and an annual average real GDP growth rate of 7 percent

Real GDP growth, percentage change (LHS) and GDP in constant 2010 US$, million (RHS)



Source: World Bank staff estimates based on Kandoole, Stylianou and von Carnap (2016), WDI (2017), and World Bank population projections

The investment to GDP ratio required to double real GDP within 10 years is estimated at 30 percent annually (see Figures 23 and 24). Starting from a baseline GDP growth rate of 4.5 percent in 2017 (see Table 13) and thereafter an average annual rate of 7 percent, real GDP in this simulation would double in 10 years. Although Malawi has grown at a similar pace over 2003 to 2010[7], sustaining such high growth rates is highly ambitious given the large increase in investment required. Malawi has achieved investment ratios of around 10 percent historically, and about 16 percent during the last 10 years. Hence, reaching an investment ratio as high as 30 percent would require a much larger capital injection than in the past.

The model is then adjusted, with the time period extended by an additional five years to determine whether investment rates are more feasible under this scenario. The assumption with regards to real GDP growth is modified to allow for an additional five years to reach the income target (see Figures 25 and 26). The results show that an annual average investment of 14 percent would be required with an increase in real GDP growth to 4.7 percent annually until 2032. In this scenario, Malawi would follow its current growth path and invest close to historical levels. Yet, although this scenario is less ambitious than the previous one, it would still require stability in both growth rates and investment levels in the long run.

[6] The simulations were premised on the following assumptions based on historical data for Malawi from Penn World Tables (version 9.0), a comparison to averages within SSA and among low income countries, and a growth decomposition exercise from Kandoole, Stylianou and von Carnap (2016):

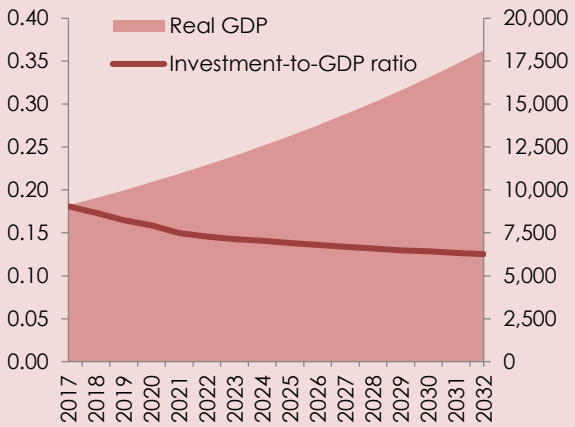
- Labor share of income: 0.59
- Capital depreciation rate: 0.06
- Initial capital-to-output ratio: 2.0
- Human capital per worker growth: 1.06 percent annually; and
- Total factor productivity (TFP) growth: 0.5 percent with a gradual increase to 1 percent by 2022 and constant at 1 percent annually thereafter.

[7] Between 2003 and 2010 Malawi grew at an average rate of 6.4 percent annually.

The analysis shows that under the right circumstances Malawi could double its real income within 10 to 15 years. With higher rates of GDP growth in subsequent years, starting from a low base of 2.5 percent in 2016, and with higher investment, Malawi could significantly improve its economic performance. Given Malawi's historical record of high volatility with boom and bust cycles, achieving such high investment and real GDP growth rates for the next 10 to 15 years would require a strong commitment to the achievement of inclusive and sustainable growth and to the implementation of deep structural reforms.

Figure 25: Moderate growth in investment would be needed for real GDP to double in 15 years…

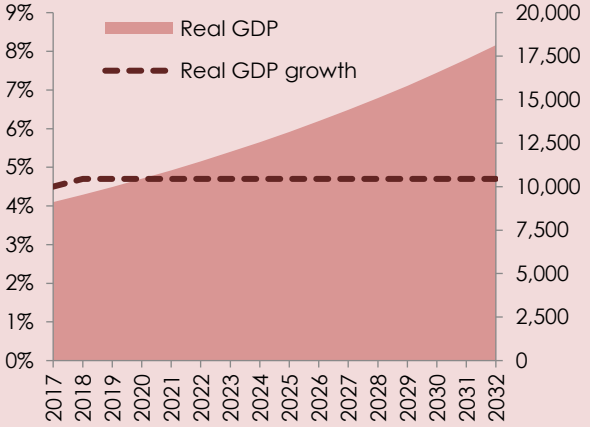
Investment to GDP ratio (LHS) and GDP in constant 2010 US$, million (RHS)



Source: World Bank staff estimates based on Kandoole, Stylianou and von Carnap (2016), WDI (2017), and World Bank population projections

Figure 26: …and a real GDP growth of 4.7 percent annually

Real GDP growth, percentage change (LHS) and GDP in constant 2010 US$, million (RHS)



Source: World Bank staff estimates based on Kandoole, Stylianou and von Carnap (2016), WDI (2017), and World Bank population projections

Increasing the efficiency by which factors of production are combined is also key for Malawi's growth. A key assumption of the LTGM model is the increase in TFP growth to around 1 percent annually, which is relatively high for both the region and low-income countries. In fact, during the strong growth period of 2003-2010, TFP was the most significant contributor to growth. TFP refers to the efficiency by which factors of production are combined and thus an increase in its growth would imply an increase in efficiency. TFP also increases with the improved allocation of factors of production, namely labor and capital, such that productivity increases and the economy benefits as whole. Thus, the required investment levels to achieve the high growth rates described above would only be attainable if complemented with fast and steady growth in TFP, boosted by reforms to increase economic efficiency[8]. These include an improved allocation of factors of production to more efficient firms or industries; better regulation; greater access to finance; and improved infrastructure such as in energy, water and transport.

Sources: Kandoole, Stylianou and von Carnap (2016) and Pennings (2017)

[8] To illustrate the importance of the TFP growth assumption, the increase in the investment ratio is investigated using a constant TFP growth rate of 0.5 percent. If TFP growth remained constant at its initial rate of 0.5 percent, investment would increase to an average of 34 percent of GDP to double real GDP in 10 years, and 18 percent of GDP to double real GDP in 15 years. Thus, with lower TFP growth, investment would need to be higher in order for Malawi to reach its goal.

2. SPECIAL TOPIC: LAND RIGHTS FOR DIVERSIFICATION, EQUITY, AND RESILIENCE[9]

In Malawi, land is a key productive asset and a source of livelihood for the vast majority of the country's citizens, especially the poor. Secure land rights can stimulate greater investment, contribute to higher productivity, and improve the functioning of land and financial markets. They are also essential for poverty reduction and gender equity. However, an inadequate legal framework and weak institutional capacity have compromised the sector's ability to fully contribute to the achievement of these objectives. Consequently, the frequency of land-related disputes is high and tenure often insecure, especially for women and vulnerable groups, while smallholders lack the confidence to invest in higher-value crops or in soil conservation measures. In addition, estate land that could be highly productive remains underutilized and not transferred to those who could use it more effectively. The Government is also missing the opportunity to collect revenues and help provide infrastructure and services and plan land use in a forward-looking way. This note discusses factors such as limited capacity, outdated regulations, institutional inefficiencies, and a failure to optimally utilize Information Technology (IT) that contribute to the land sector's performance and demonstrates that the impacts are significant.

The Government is aware of the need to improve the capacity and performance of land institutions, as well as the need to clarify relevant policy and to streamline processes to make them more customer friendly. Promising steps have been undertaken in this direction, including, after more than 20 years of debate, a new set of Land Acts that would strengthen smallholders' tenure security and gender equity by registering customary estates in participatory and low-cost ways. Initial steps have also been taken towards better land administration service delivery, establishing a fully electronic land information system and modernizing estate leasehold management and ground rent collection. Targets for delineating traditional land management areas (TLMAs), defining a policy for estate lease renewal and issue notices accordingly; and pilot implementation of the new Land Acts in a gender-sensitive, cost-effective, and rigorously evaluated manner have been agreed upon. These efforts, if implemented as planned and carefully evaluated to draw relevant lessons, can provide a basis to draft relevant regulations, streamline procedures, and improve the Government's capacity in a way that would allow scaling up. Malawi would then be able to attract investment from within and outside the country, and fund infrastructure and service provision by taxing the increases in land value due to such public investment, and thus better harness its economic potential by equitably and sustainably utilizing its natural resource base.

The far-reaching impact of land rights

66. Appropriate utilization of Malawi's land resources is vital for the achievement of greater economic growth and poverty reduction. Around the world, land and real estate comprises households' most important asset. In the case of Malawi, these assets are particularly important for two reasons. Firstly, Malawi's economy and its potential for development are heavily dependent on efficient land use in the agricultural sector. The agricultural value added contributes to approximately 30 percent of GDP and an even larger proportion of the labor force depends on agriculture for livelihoods, Secondly, with an average population density of 177 persons per km^2 and an annual population growth rate of close to 3 percent, land is becoming increasingly scarce. Malawi's natural resource base is fragile. Soil erosion is affecting 48 percent of land users interviewed for the 2016/17 Integrated Household Survey (IHS4). An efficient land management system could strengthen investments in resilience.

67. Effective land institutions can increase land tenure security, contributing to development in a number of ways. Tenure security is likely to drive an increase in investments in measures to enhance the efficiency of land. Without it, such investment may not be forthcoming with land users instead continuing to engage in unsustainable practices that could permanently reduce soil fertility or otherwise generate negative externalities. The clear documentation of land ownership provides a basis for efficiency-enhancing transactions in rental markets, which can support positive structural transformation and the growth of the rural non-farm economy. If land sales markets are sufficiently liquid and their functioning not impeded by constraints in financial and other markets, land may also serve as an ideal form of collateral. Thus, the emergence of liquid land sales markets can be expected to facilitate the development of financial markets. Moreover, the clear documentation of land ownership makes it easier to manage public land; to plan and finance urban expansion and the effective provision of services; and to guide private investment in the agricultural and other sectors.

[9] The analysis presented here would not have been possible without data collected by the National Statistical Office as well as Lilongwe University of Agriculture and Natural Resources (LUANAR) and support with data processing by Daniel Ali, Thabbie Chilongo, Thea Hilhorst, Talip Killic, Maxwell Mkondiwa, Siobhan Murray, Heather Moylan, and Fang Xia.

Table 2: Characteristics of land tenure by Malawi's households

	All Malawi	Region North	Central	South	Head's gender Male	Female
Household characteristics & assets						
Durable goods (US$)	242	309	253	211	296	118
Grass roof	0.57	0.45	0.66	0.55	0.56	0.60
Mud floor	0.77	0.67	0.80	0.79	0.76	0.80
Head born in the village	0.56	0.59	0.59	0.53	0.51	0.68
Head had main job in non-agriculture	0.17	0.14	0.20	0.15	0.19	0.12
Land tenure & agriculture (IHS4)						
Have ownership document	0.020	0.022	0.020	0.019		
Land size (ha)	0.62	0.64	0.76	0.50	0.67	0.49
Crop income (US$)	254	358	366	135	288	172
Will not possess some land in 10 years	0.33	0.21	0.34	0.37	0.32	0.36
Village-level indicators (NACAL)						
Land conflicts by village families	0.293	0.276	0.279	0.316		
Land conflict with neighboring villages	0.195	0.177	0.204	0.194		
Inheritance regime matrilineal	0.672	0.023	0.785	0.843		
No. of villages	4,107	729	1,784	1,594		

Source: Own computation from 2016/17 Integrated Household Survey (IHS4) (top panel) and from 2006/07 National Census on Agriculture and Livestock (NACAL) (bottom panel).

68. Land tenure insecurity among smallholders in Malawi is high. Household survey data support the notion that land tenure insecurity is high among smallholders. Concerns related to being deprived of their land were expressed by 22 percent of respondents in the 2006/07 National Census on Agriculture and Livestock (NACAL). In the 2016/17 Integrated Household Survey (IHS4), 33 percent of households indicated that they lacked confidence that they would still possess their plot of land in ten years' time (see Table 2). The prevalence of these concerns varies between regions, ranging from 37 percent of respondents in the South to 21 percent in the North. Continued population growth, migration, and urban expansion have placed increasing stress on customary institutions that traditionally provided high levels of security for community members (Bruce and Migot-Adholla, 1994) and resulted in increases to the frequency of land transactions with outsiders (Ricker-Gilbert et al., 2014), with such transactions particularly prone to dispute (van Donge, 1999), often after long periods of dormancy (Jul-Larsen and Mvula, 2007). These developments tended to undermine land tenure security and investment incentives. Traditional leaders continue to play a key role in the resolution of land disputes, being involved in approximately 60 percent of dispute resolutions. Past land disputes, participation in land transactions, length of tenure, and lack of physical presence are significant factors contributing to higher levels of tenure insecurity (see Table 3).

69. Access to land also has a strong gender dimension. More than two thirds of Malawi's villages, particularly in the South and Central regions, follow matrilineal inheritance systems. With land being a key household asset, ownership and transfer rights over land will have a significant effect on gender equality, female empowerment, and investment in future generations. Matrilineal inheritance systems are increasingly coming under pressure, increasing the likelihood that women will be involved in inheritance-related land disputes, as has been the case in Uganda (Deininger and Castagnini, 2006; Lovo, 2016; Place and Otsuka, 2001). This has the potential to negatively impact output, especially women's output (Deininger et al., 2017). Despite a frequently expressed opinion to the contrary, there is no evidence that matrilineal inheritance systems negatively affect investment once other variables are controlled for.

70. Insecure tenure reduces investment in soil conservation measures. With almost half of the households participating in the IHS4 reporting that they had been affected by soil erosion problems, investment in soil conservation measures is vital to build resilience against extreme weather events, the frequency of which is likely to increase in the future. Perceived tenure insecurity significantly reduces the likelihood of households investing in permanent soil and water conservation structures, such as terraces or soil bunds, by an estimated 5.4 points, an increase of more than 50 percent compared to the mean of 9.5 percent (see Table 4, Col. 1 & 2, Row 1). Terraces enhance output by an estimated 9.4 percent (Table 4, Col. 4, Row 4).

Table 3: Determinants of perceived land tenure insecurity

	Overall
Household characteristics	
Had land encroached upon in last 10 years	0.096***
Had land taken away (exploited)	0.103***
Had dispute with relative on husband side	0.213***
Had dispute with relative on wife side	0.159***
Had disputes with other relative	0.149***
Had disputes with non-relative	0.178***
Share of land borrowed	0.068***
Renting out land	0.027*
Share of customary land	-0.016*
Share of land located outside village	0.026***
No. of years cultivating land	-0.001**
Share of land operated by owner	-0.053***
Respondent born in the village	-0.051***
Respondent's main job is non-ag.	0.019**
Village level characteristics	
Households moved out due to land conflict	0.055**
Village had unallocated land	0.026**
Estates within walking distance	0.026**
Unallocated land*estates in walking dist.	-0.062***
Observations	15,472
R-squared	0.083

Source: Regressions using the 2006/07 NACAL.
Note: Figures in the table are estimated coefficients from a regression of individual operator's perceived tenure insecurity on a host of independent variables. District fixed effects are included throughout but not reported as are plot level controls (land area and topography), household controls (number of children, number of adults, number of old people, married or single-headed couples, head's age, gender, education, birth place, main job, ownership of durable goods, housing conditions, value of livestock and poultry, agricultural assets, and shocks) and village controls. Standard errors (not reported) are clustered by village: *** p<0.01, ** p<0.05, * p<0.1.

71. Fear of land loss results in lower levels of productivity, especially by women. Production function estimates suggest that fear of land loss is associated with a 4 percent reduction of output overall, even if investment in soil fertility is controlled for. Contrary to what has been suggested in the literature (Lovo, 2016; Lunduka, 2009; Place and Otsuka, 2001), matrilineal systems of inheritance were associated with higher rather than lower levels of output (see Table 4, Col. 3). Differentiating by operators' gender suggests that fear of land loss does not reduce output for men, but it does in the case of plots operated by women, where the reduction of output value associated with fear of land loss is estimated to be 8.4 percent, equivalent to 15 percent of women's annual crop income (see Table 4, Col. 4, Row 1). This suggests that women and other vulnerable groups, including orphans, may not be able to counter tenure insecurity and, as a result, suffer not only socially but also economically. With some 4 million hectares cultivated by smallholders nationwide, 22 percent to 33 percent of which is affected by tenure insecurity, a lower bound figure for the size of output losses from tenure insecurity in the smallholder sector is US$ 14 million per year (Deininger et al., 2017). Measures to eliminate disputes could have an enormous impact on agricultural productivity, resilience, and gender empowerment.

Table 4: Impact of perceived tenure insecurity on soil conservation investment and crop output

Dep. Var.	Permanent soil and water conservation structures		Crop output	
Fear	-0.054***	-0.054***	-0.040**	-0.084***
Fear*male respondent		-0.000		0.066*
Did crop rotation				0.090***
Built terrace				0.094***
Inheritance patrilineal	0.016	0.016	-0.169***	-0.107*
No. of obs.	9,702	9,702	13,733	13,733
R-squared	0.107	0.107	0.395	0.397
F Tests:				
F-test of Fear+Fear*male=0		28.70***		0.62

Source: Regressions using the 2006/07 NACAL.
Note: Dependent variable is a zero-one indicator of whether permanent soil and water conservation structures were constructed based on the 2016/17 IHS4 (cols. 1 and 2) or the logarithm of output value based on the 2006/07 NACAL. District fixed effects are included throughout but not reported and other controls are identical to those reported in table 3. Robust standard errors are clustered by village. *** p<0.01, ** p<0.05, * p<0.1.

72. Strengthening tenure security could contribute to advancing gender equity. With land being a key household asset, strengthening of ownership and transfer rights over land will have a significant effect on gender equality and female empowerment. This has the potential to have a positive impact on output, especially women's output and their ability to invest in the next generation (Deininger et al., 2017). In total, 67 percent of Malawi's villages, particularly in the South and Central regions, follow matrilineal inheritance systems. Matrilineal inheritance systems are increasingly coming under pressure, increasing the likelihood that women will be involved in inheritance-related land disputes, as has been the case in Uganda (Deininger and Castagnini, 2006; Lovo, 2016; Place and Otsuka, 2001). Despite frequently expressed opinions to the contrary, there is no evidence that matrilineal inheritance systems negatively affect investment once other variables are controlled for. Strengthening of tenure security and efficient land use could contribute significantly to the achievement of gender equity.

73. Rental markets are widespread, but do not fully realize their potential. Some 9 percent of producers are engaged in the rental of agricultural land (see Table 5). Regressions show that rental markets transfer land to households with more limited endowments of land, greater access to family labor, higher levels of assets and education, and greater productivity (see Table 5). While formal documents may not be needed if transfers remain short-term and limited to community members, longer-term transfers involving outsiders may be impeded by the absence of lease registration (Macours, 2014; Sadoulet et al., 1997). Without formal documentation, land transfers through rental markets (or sale) may become a source of conflict, even though they present increased opportunities for out-migration and improvements in productivity. The regularization of tenure can greatly enhance the scope for such transactions, as demonstrated by the case of Mexico (de Janvry et al., 2015).

Table 5: Determinants of land market participation

	Rent in	Rent out	Purchased
Productivity	0.040*	-0.011	-0.012
Owned area	-0.050***	0.007***	-0.008***
No. of family members	0.004*	-0.000	0.002*
Head born in the community	-0.034***	0.005*	-0.005*
Head with secondary educ.	0.039***	-0.004	0.005
Head with college and above	0.105**	0.006	0.078*
Value of durable goods	0.016***	-0.002**	0.006***
Value of agric. assets	0.013***	-0.004**	0.002
Observations	6,829	6,829	6,193
R-squared	0.121	0.023	0.049

Source: Own computation from IHS4 data
Note: Columns report estimated coefficients from probit regressions for whether a household rented in or out in the last season or purchased land in the 5-year period preceding the survey. The productivity measure is the distance to the frontier as measured by a frontier production function. District fixed effects are controlled for throughout and only a subset of coefficients is reported. Robust standard errors are clustered by community. *** p<0.01, ** p<0.05, * p<0.1. Purchase is last 5 years.

74. Land markets' contribution to productivity is below potential. In agrarian economies, development is normally associated with specialization and the movement of labor out of agriculture. In this context, land rental markets allow individuals to move out of the agricultural sector without forgoing land ownership. Functional land markets increase the scope for efficiency-enhancing land market transfers (Deininger and Jin, 2006; Promsopha, 2015). In the Malawian context, the reallocation of land and capital to achieve optimal land use efficiency is estimated to have the potential to increase agricultural productivity by a factor of 3.6, contributing to a process of structural economic transformation. The potential impact of land markets is also illustrated by the finding that gains from reallocation are estimated to be 2.6 times greater for farmers not engaging yet in land markets compared to farms that cultivate purchased or rented-in land only (Restuccia and Santaeulalia-Llopis, 2017).

Clarifying estate tenure to increase agricultural productivity and public revenue

75. Rather than securing existing rights, Malawi's land institutions have historically promoted a dualistic system, with significant differences between smallholder subsistence farming and commercial farming on estates. Instead of aiming to develop smallholders' productive capacities and to secure their land rights, post-colonial efforts to increase agricultural output were focused on transferring land out of the customary sector to commercial estates to produce cash crops, mainly tobacco. Until 1994, when the tensions generated by the

transfer of land to estates led to the imposition of a moratorium on such transfers, only estates were permitted to market tobacco. Although these reforms allowing the sale of cash crops by smallholders resulted in a rapid and significant improvement to their welfare (Lea and Hanmer, 2009), no efforts were made to formally recognize existing tenure. This, together with estates' preferential access to land, labor, and credit (Binswanger et al., 1995), resulted in the emergence of a highly dualistic agrarian structure (Kydd and Christiansen, 1982; Jaffee, 2003). Most smallholders lack documented land rights.

76. Land transfers to estates were a core component of Malawi's agricultural commercialization strategy. To boost commercial crop production, in the late 1980s, 21-year leases were granted to a large number of estates, most covering from 10 to 30 hectares, with this land being carved out of what was deemed unutilized customary land and transferred to aspiring farmers (Devereux, 1997; Mandondo and German, 2015). Before 1986, 2,277 new leases, with a total area of 237,322 hectares, were awarded. This amounts to 104 leases of an average size of 105 hectares, or a total transfer to leasehold of some 10,800 hectares per year. In a second phase, from 1986 to 1994, the number of leases issued each year increased to 2,626 per year, although the average size declined to approximately 25 hectares, implying a transfer rate of approximately 65,000 hectares per year. Following the 1994 moratorium, the overall issuance of new agricultural leases declined to 176 leases, implying a transfer rate of 7,800 hectares per year (see Table 6). These figures exclude a limited number of freehold estates from before Independence, the records for which are maintained in a separate registry.

Table 6: Number and area awarded annually under agricultural leases

	Leases/year No.	Area/year 1000 ha
1965-86	104	10.79
1987-94	2626	64.85
1995-2006	230	6.71
2007-16	112	9.08

Source: Own computation from the National Geographical Estates Database

77. Approximately 20 percent of Malawi's agricultural land was transferred to estates. The computerization of records related to leases (Deininger and Xia, 2017) suggests that 1.3 million hectares of land (about 20 percent of the country's agricultural area) was transferred to estates, with the average size of these estates standing at about 40 hectares (see Table 7). As long as records were maintained in a paper-based system, data related to the size and performance of the estate sector was difficult and costly to obtain (Gossage, 1997). This made it nearly impossible to effectively implement existing policies; to effectively collect revenues from, for example, ground rent collection; or to design systems and approaches to more effectively harness the sector's potential to facilitate broader rural development. The formal process for contracting leased land consisted of four steps, namely (i) the lodging of an application stating the size, intended use, and location of the desired piece of land, together with a 'no objection' document by the chief; (ii) validation and issuance of an offer letter by Government with the length of the lease, permitted land use, assessed fees, and annual ground rent, ideally accompanied by a survey plan; (iii) formal acceptance of the offer letter via a preliminary lease contract; and (iv) formalization of the lease contract through a registered deed (van Setten, 2016).

Table 7: Characteristics of agricultural estates

	Agric. estates			
	All	**North**	**Center**	**South**
Total area (1,000 ha)	1,348.76	230.63	871.61	246.52
Mean area (ha)	39.80	39.49	35.12	76.23
Has deed (%)	42.03	43.33	40.07	54.49
Has offer but no deed (%)	37.09	27.70	41.91	17.86
Sketch plan (%)	51.65	52.07	52.85	41.94
SD plan (%)	46.47	46.61	45.94	50.23
Deed plan (%)	1.87	1.32	1.21	7.83
Lease expired (%)	69.65	63.13	74.64	43.98
Lease term <= 10 a (%)	2.64	1.55	2.43	6.27
Lease term > 10 a (%)	5.46	4.82	4.04	17.30
Annual rent (US$/ha)	0.79	0.37	0.53	3.59
No. of obs.	35,140	6,181	25,560	3,399

Source: Own computation from the National Geographical Estates Database.

78. The quality of estate documentation is variable. Overlaying spatial information from the database of estate records with satellite imagery points towards a high frequency of overlaps and, in most cases, a lack of correspondence between the stated land use purpose and actual land use patterns. These gaps can be attributed to three main factors. Firstly, before 1994, access to tobacco marketing quotas required a minimum holding of 12 hectares of estate land. Thus, a significant number of smallholders proceeded to establish so-called 'ghost estates,' registering land as estates in office-based processes that may have involved some side-payments without any correspondence to reality on the ground. Second, a desire to reduce the requirement to pay fees or side-payments means that paper records are often incomplete, with records indicating that only 42 percent of estate owners have a deed and 37 percent have an offer letter only (see Table 7). Quality standards for spatial documentation also vary, with 52 percent of registered estates relying on a sketch map; 46 percent on a survey drawn plan; and less than 2 percent having a deed plan. An examination of the records suggests that this leads to some 140,000 hectares having been registered twice, with 28 percent of estates having at least some of their area overlapping with that of another estate, and 11 percent having more than 20 percent of this area overlap (Deininger and Xia, 2017).

79. Close to 70 percent of agricultural leases have expired. Records indicate that, by 2016, close to 70 percent of estate leases had expired and the status of around 22 percent was indeterminate. Only 8 percent are clearly still valid, with only 5.5 percent having a remaining lease term of more than 10 years in 2016. This is likely to reduce the motivation for estates to make long-term investments and may encourage short-term soil mining. Failure to clearly identify the tenure status of such land would also reduce the likelihood of unused estate land being made available to tenants, thus reducing the intensity of cultivation and implying that Malawi is making sub-optimal use of its scarce land resources.

Table 8: Estate characteristics by size

	All	Size category in ha				
		5-10	10-50	50-100	100-500	>500
Estate ownership						
Years run by the current owner	18.99	12.54	15.28	21.13	19.84	30.77
Owner is Malawian (%)	72.58	82.76	92.42	80.21	50.52	29.75
Owner is expatriate (%)	10.48	0.00	1.18	4.17	29.17	20.66
Owner is government (%)	2.19	0.00	0.00	3.13	5.21	4.96
Land and labor use intensity						
Area owned	433.86	8.52	21.61	74.28	272.36	2,544
Area operated	66.98	5.77	10.27	27.42	80.21	294.53
Total wage bill per ha (US$)	131.95	144.42	133.60	174.62	138.21	77.64
No. of obs.	860	29	422	96	192	121

Source: Own computation from 2006/07 NACAL.

80. Non-payment of ground rent results in significant revenue losses. With the average annual ground rent standing at US$ 0.79 per hectare for all estates, the value of this rent has been eroded by inflation. As a result, even the full renewal of all estate leases at these rents would raise revenues to a value of less than US$ 1 million. With the prevailing average lease rate for agricultural land standing at US$ 89 per hectare per year (see Table 11), there is considerable scope to either increase the total value of ground rent collected from existing estates or to make land that is not currently utilized available to new investors. To inform relevant policy decisions, greater clarity on the extent to which land is used and the efficiency of such use is essential. Unfortunately, reliable nationally representative information related to land use and to the economic performance of estates is limited. In addition to the 2006 NACAL, there only exists a complete listing of all estates in the eight districts with the highest number of estates.

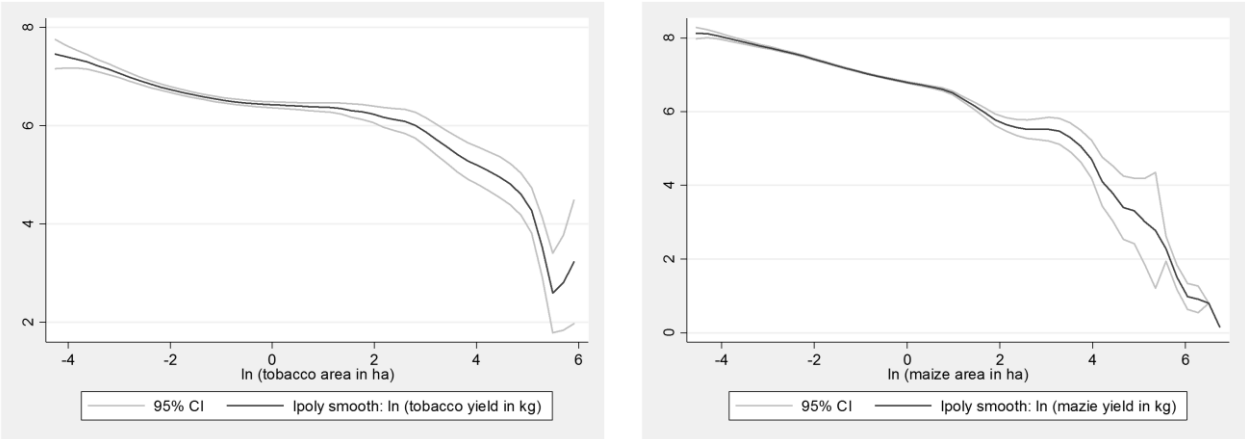
81. Estates' intensity of land use is often low. Most estates are owned by Malawian individuals, although the proportion of corporate and foreign ownership increases in the case of larger estates (see Table 8). According to NACAL data, only 15 percent of allocated estate land is self-operated, a share that decreases from 88 percent in the case of landholdings of less than 5 hectares, while the percentage in the case of landholdings in excess of 500 hectares stands at 12 percent. Production structure and cropping patterns differ between smallholders and estates, with a higher share (42 percent) of estate land area used for the cultivation of tobacco, compared to 1.8 percent in the case of smallholders, followed by maize (39 percent), groundnuts (7 percent), and other crops.

82. The average level of productivity on estates seems below that on smallholders' plots. Non-parametric regressions of productivity on size that implicitly compare the levels of productivity of smallholders with estates

suggest that, for main crops, smallholders' yields are significantly higher than those of estates (see Figure 27) at using 2006/07 NACAL data. Although these figures refer to yields rather than profits and are based on data collected 10 years ago, the fact that estates are more likely to use purchased inputs and spend a greater amount on them per hectare than smallholders suggests that the same is true for profits (Deininger and Xia, 2017). The scope for large farms or estates to contribute to structural transformation by providing neighboring small producers with access to input or output markets, technology, credit, or insurance, as found in Mozambique (Deininger and Xia, 2016), or, to a more limited extent, in Ethiopia (Ali et al., 2015), has been used as an argument to support the establishment of these units of production. However, with estates' level of productivity lower than that of smallholders, the likelihood of such spillover benefits seems to be limited. Empirical analysis based on the NACAL indeed suggests that, unless productivity of estates improves, Malawi's smallholders are unlikely to benefit from being located close to an estate and opportunities for productive partnerships go unutilized (Deininger and Xia, 2017).

Figure 27: Non-parametric regressions of yield for main crops for smallholders and estates

Tobacco (left hand side), maize (right hand side)



Source: Own computation from 2006/07 NACAL.
Note: As explained in the text, both smallholder and estate samples are included.

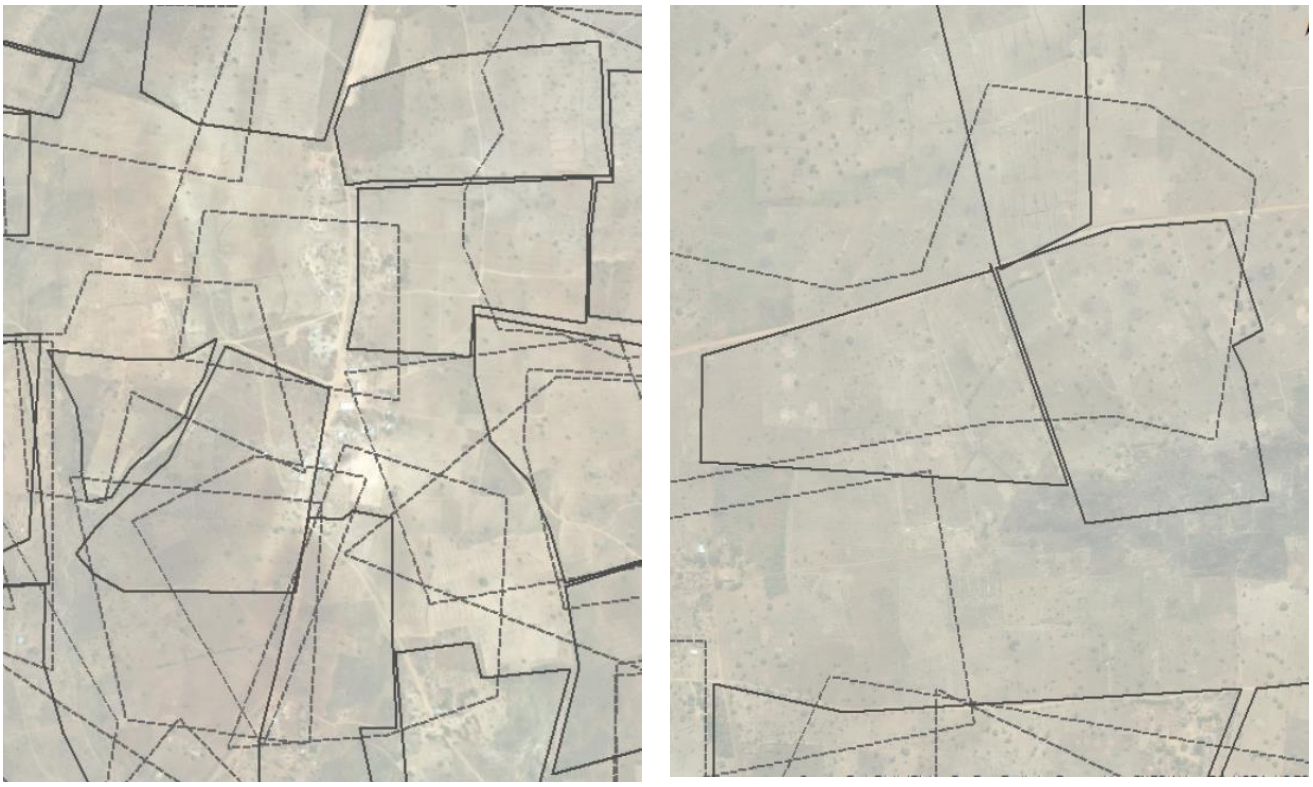
83. Productive estates can be labor intensive and create jobs. In contrast to other countries where large farms produce bulk commodities and often generate little employment, many of Malawi's estates are labor intensive. Permanent or temporary male (female) labor is hired by 64 percent (27 percent) and 70 percent (56 percent) of estates respectively. Demand for permanent labor per hectare increases with size to about 0.9 males and 0.6 females in the largest category though the pattern for temporary labor is more volatile (Deininger and Xia, 2017). With an average wage bill of US$ 131 per hectare and with about two thirds of estates hiring permanent labor, estates provide significant employment opportunities (see Table 8).

84. Field data indicate that many estates have disintegrated or use less land than was allocated to them. As actual field boundaries are often very different from registered ones, any attempt to regularize estates will require some form of field-based verification and mapping. The 2017 LUANAR/World Bank estate listing conducted such a mapping for a sample of operational estates (approximately 5,500 in total) in the eight districts with the highest number of estates. Two examples of the divergence between what is recorded in official records (dashed lines) and cultivated on the ground (solid lines) is presented in Figure 28. While some estates may have existed only on paper or not had their boundaries well described to start with, differences can arise from subdivision, expansion, or transfer of all or part of the estate's land. With technologies to do so cheaply available, recording actual use and reconciling it with official records is a first step to allow users to invest and use the land most effectively. As per the survey, such differences are widespread: of the 5,500 operational estates in the eight provinces, only 20 percent (or 1,108) are still operated exclusively by the owner or his/her successors, while 21 percent have ceased to exist as an estate due to subdivision, and 59 percent have land used jointly by both owners and tenants (see Table 9, Panel A). Of the average figure of 32 hectares claimed by owners, 12 hectares, or 37 percent, is cultivated by tenants, with owners cropping an average of only 3.7 hectares (11 percent of the claimed area), leaving an additional 4.7 hectares (15 percent) fallow or in forest.

85. The actual location and size of estates often differ significantly from the records. For 3,401 estates with registry (letter of offer or lease) and performance listing data, 31 percent claim an area that is more than 10

percent above the officially recorded figure, while 43 percent claim an area the size of which is lower than this figure by at least 10 percent. Disaggregation by district suggests that the share of claimed area operated by tenants is highest in Dowa, with this share standing at 90 percent, followed by Ntchisi (47 percent) and Mchinji (43 percent) and lowest in Mzimba (11 percent) and Rumphi (15 percent). The only district where owners cultivate more than 20 percent or 10 percent of claimed area are Rumphi and Dowa and Kasungu, respectively.

Figure 28: Comparison between registered (dashed lines) and actual (solid lines) estate boundaries



Source: Spatial data captured by the 2016/17 LUANAR/World Bank estate performance listing.

86. The incidence of disputes related to estate land is high. The estate listing shows that 12.5 percent of estates overall are affected by conflict, with this figure decreasing to 8 percent in the case of completely owner-operated estates and increasing to 15 percent in the case of completely subdivided estates (see Table 9, Panel C). The overall rate is highest in Mchinji and Dowa, standing at about 16 percent. While assessing the impact of conflict on productivity requires more detailed data, preliminary evidence suggests conflict reduces productivity.

87. Ground rent payment discipline has eroded. While 70 percent of estates reported having paid ground rent at some point, discipline in the payment of these rents has eroded significantly (see Table 9, Panel D). Only 26 percent of estates covered by the listing indicate that they paid rent in any year after 2009, with only 12 percent doing so in 2016. With 99 percent of respondents indicating willingness to pay in principle, more systematic collection of rent by the Government, combined with an adjustment of ground rent rates to match the land's capacity, could generate significantly higher levels of revenue. Allowing the Ministry of Lands, Housing and Urban Development (MoLHUD) to retain a proportion of the collected revenues may enhance incentives for rent collection.

88. Estate operators are willing to pay ground rent. Estate operators may well prefer paying ground rent to the current situation, where they enjoy de facto occupation rights but have little or no long-term security. To explore this trade-off in more detail and also to obtain a lower bound of potential revenue, estate users in the performance listing were asked what they would be willing to pay if leases were to be renewed for an additional 20-year period. As illustrated in Table 10, the mean value of MK 3,340 (US$ 4.6) for claimed land and MK 12,037 (US$ 16.6) for cultivated land points to a considerable untapped potential to enhance own-source revenue generation in the estate sector. To illustrate orders of magnitude, multiplying owners' stated willingness to pay ground rent for cultivated area (US$ 16.6) with the area of land actually cultivated (20 hectares) on the 27,000 estates in the eight districts covered by the estate performance survey suggests a revenue potential of

about US$ 9 million in annual ground rent in these districts alone. If willingness to pay is similar in districts not covered by the survey, this would result in a national ground rent potential of US$ 11 million per year.

Table 9: Current estate characteristics

	Total	North	Central	Owner	Operated by Owner& tenants	Tenant only
Panel A: Size & land use intensity						
Claimed size (ha)	32.32	45.79	30.16	41.59	31.92	24.63
o/w tenant cult.	11.97	5.09	13.07	0.00	15.11	14.64
of which own cult.	8.35	14.65	7.34	20.96	6.96	0.00
o/w own cropped	3.68	4.43	3.56	9.20	3.09	0.00
Share with forest	0.629	0.431	0.677	0.504	0.692	0.595
Share cropped	0.484	0.208	0.552	0.221	0.570	0.595
Panel B: Nature of documentation and correspondence of area to registry data						
Has formal title	0.296	0.414	0.277	0.253	0.336	0.228
Has offer only	0.529	0.530	0.528	0.484	0.584	0.417
Claimed area g > 10%	0.316	0.373	0.309	0.333	0.298	0.348
Claimed area l > 10%	0.427	0.384	0.432	0.465	0.422	0.405
Informal sales receipt	0.346	0.271	0.358	0.322	0.383	0.266
Informal document/map	0.300	0.518	0.265	0.282	0.366	0.135
Panel C: Ownership, transfers, and disputes						
Owned by orig. owner	0.603	0.627	0.599	0.642	0.621	0.514
Original owner deceased	0.302	0.246	0.311	0.186	0.316	0.374
Orig. owner transferred	0.096	0.126	0.091	0.172	0.063	0.112
Panel D: Historical rent payment						
Ever paid rent	0.702	0.661	0.709	0.628	0.773	0.580
Paid rent in 2016	0.115	0.070	0.122	0.152	0.111	0.095
Paid rent after 2010	0.261	0.303	0.254	0.339	0.265	0.162
No. of obs.	5,485	759	4,726	1,108	3,210	1,167

Source: Own computation from LUANAR/World Bank estate performance listing.

89. Revitalizing Malawi's estates requires clarity on policy and systematic implementation. To realize potential increases from own-source revenue and higher levels of productivity in the estate sector, policy decisions are required on a number of key issues including (i) how to define an estate, how to define idle land, and what to do with land that was previously leased to estates but that is no longer used for its designated purpose (for example, in cases where it is used for subsistence farming following sub-division or transfer); (ii) what action to take in case of lessees' failure to comply with lease conditions (either in terms of non-compatible land uses or failure to pay ground rent); (iii) how to adjust estate boundaries in cases of imprecise original surveys and/or of the expansion or contraction of the originally leased area; (iv) the levels of ground rent to be charged for renewal of leases on land that is legitimately occupied by estates; and (v) procedures for re-allocating unused estate land and the definition of the roles of traditional authorities and local government in this process.

Table 10: Self-reported willingness to pay for lease renewal by owners

	Owners only		
	Total area	Used area	N
Rumphi	2.83	12.97	46
Mzimba	3.88	19.68	294
Kasungu	5.73	14.66	408
Nkhotakota	3.57	25.64	128
Ntchisi	2.20	17.22	42
Dowa	5.88	12.49	96
Salima	2.27	18.06	46
Mchinji	3.96	9.54	48
Total	4.62	16.59	1108

Source: Own computation from LUANAR/World Bank estate performance listing.

The potential of urban land tenure

90. Urban areas have great potential for own-source revenue generation from the collection of ground rent. With a mean size of 0.035 hectares and an average sales price of US$ 60,532 per hectare for land and structure, land holdings in urban areas are significantly more valuable than in rural areas. Rapid rates of urbanization together with the public provision of infrastructure and services in urban areas have led to rapid increases in the value of such land. The documentation of property rights in urban areas would not only give owners the confidence to make land-related investments and allow them to use land as collateral for credit, but also facilitate the systematic collection of land taxes (ground rent) and other land-related fees that would allow the public to capture a share of recent increases in land values (World Bank, 2017c). This in turn could allow part of the revenues generated in this way to be used for providing infrastructure and other services and to plan for expansion to enhance cities' competitiveness and job creation.

Table 11: Land rental and sales prices in Malawi

	All	North	Center	South
Panel A: Urban residential land				
Area (ha)	0.035	0.023	0.042	0.042
Sale price ($/ha)	60,532	73,594	58,308	46,704
Rental price ($/ha)	11,008	13,337	10,379	9,165
Share with title	0.069	0.069	0.068	0.070
Pays ground rent	0.024	0.032	0.019	0.023
Pays property tax	0.013	0.019	0.011	0.011
No. of households	2,427	590	841	996
Panel B: Rural agricultural land				
Area (ha)	0.617	0.640	0.763	0.504
Yield (US$/ha)	455	590	490	383
Profit (US$/ha)	388	485	425	328
Hypothetical sales price ($/ha)	1,794	2,006	1,735	1,762
Hypothetical rental price ($/ha)	104	130	99	99
Rents in some land	0.090	0.074	0.116	0.077
if yes, price ($/ha)	89	125	83	83
Purchased land last 10a	0.027	0.023	0.027	0.029
Sold land last 10a	0.004	0.005	0.005	0.004
No. of households	9,960	1,890	3,370	4,700

Source: Own computation from IHS4

91. Collection of urban ground rent and land-related fees remains well below potential. Despite the potential, coverage and yield of land-related taxes remain limited. According to IHS4 data, only 2.4 percent of urban residents paid ground rent and only 1.3 percent paid property tax. Moreover, current rates of ground rent were last revised in 2005 and, for Lilongwe, are set at a rate of MK 46,900 (US$ 65) per hectare, or 0.1 percent of land value for residential areas. Even without changing rates, this would point towards an annual ground rent potential of US$ 1.6 million in Lilongwe alone, more than three times what MoLHUD collected in the entire country in the fiscal year ending in July 2017. As with rural areas, if linked to formal land registration, ground rent payment could help to greatly increase tenure security and to increase the proportion of documented landholdings significantly beyond the 7 percent of IHS4 households who reported having formal documentation to secure their tenure (see Table 11, Panel A). To realize the potential to improve local service delivery through the more effective collection of land-related fees, improvements in collection incentives, rate structure and coverage, and data sharing across Government departments would be needed.

92. Clear urban land tenure will help to address urbanization-related challenges. Although its share of rural population remains high, Malawi is expected to urbanize rapidly over the coming decades. To avoid problems such as high levels of informal settlements that lack appropriate services, increased disaster risk due to occupation of lands unsuitable for settlement, and the high cost of providing infrastructure ex-post, an integrated process of planning, led by local councils, is needed (World Bank, 2017c). Well maintained digital land records are an essential input into this process.

The urgent need to strengthen the quality of land data and to improve service delivery

93. Malawi's land administration system has significant weaknesses. Malawi ranks 96 out of 190 countries in terms of the 2018 World Bank's Doing Business 'registering property' indicator, significantly reducing its

attractiveness to investors needing to access land. This low ranking is not only because it takes 69 days and six steps (with total associated costs of 1.6 percent of the land value) to transfer a parcel of land that is already registered, but also because of weaknesses in a set of variables measuring the land administration systems' reliability, transparency, and coverage. A comparison of Malawi with Rwanda, a country that has greatly improved its ranking over the last decade, illustrates not only some of the gaps in Malawi's land registration system, but also points to areas for reform (see Table 12). Contrary to the case in Malawi, in Rwanda all databases are fully digital and linked, enabling online access (for example, by banks and during mortgages) and the exchange of information across registries.

Table 12: Reliability of infrastructure and land administration transparency between Malawi and Rwanda

	Malawi	Rwanda
Panel A: Reliability of land registry infrastructure		
How are registry records stored	Paper	Fully digital
Electronic database for encumbrances	No	Yes
How are cadastral records stored	Paper	Fully digital
Electronic database with cadastral info	No	Yes
Registry and cadaster linked	No	Yes
Unique property ID	No	Yes
Link to national ID database	No	Yes
Panel B: Transparency of land registry information		
Registry records available online	No	Yes
Registry fee schedule available online	No	Yes
Registry has service standards	No	Yes, online
Registry has complaints mechanism	No	Yes
Registry statistics available publicly	No	Yes
Cadastral records available online	No	Yes, online
Surveying fee schedule available online	No	Yes, online
Survey Dep't has complaints mechanism	No	Yes
Panel C: Time and cost for a property transfer & overall ranking		
No. of steps for transfer	6	3
Days needed to complete transfer	69	7
Monetary outlay for transfer (% of land value)	1.6	0.1
Overall rank(1=top)	96	2

Source: 2018 World Bank Doing Business Database (http://www.doingbusiness.org/data/exploretopics/registering-property)

94. Land information is difficult to access and registries are not customer oriented. Table 12 (Panel A) shows that in Malawi, textual registry records and cadastral maps are still maintained in a paper-based system rather than being held digitally. This increases the cost of transactions in Malawi, as all entries and inquiries are conducted manually. It also reduces the scope for implementing protocols to enhance record security and to trace alternation, increasing the potential to tamper with or lose records. Contrary to international good practice, Malawi lacks unique parcel IDs that would allow the establishment of linkages between personal and property registration or textual and spatial information. Unique IDs would be essential to improve the quality and reliability of land registry data; to allow interested parties in the public or private sectors to consult land registry information at low cost; and to directly enter or remove restrictions (such as a mortgage or a court dispute pertaining to a land parcel) without the direct intervention of registry officials. Panel B of Table 12 shows that at present there are no service standards for either registry or survey departments, no mechanisms to lodge complaints, and no regular public reporting, with even fee schedules not being available online. All these factors limit the level of customer orientation and the ability to objectively assess progress towards reducing costs and better meeting customer needs in Malawi. Thus, improvements to address these issues are essential, together with efforts to store data digitally to enable online access to registry and/or cadastral data.

95. Past reform efforts to improve land administration have been incomplete and unsustainable. Historically, Malawi's reform efforts have been frustrated by complex, centralized, and often discretionary manual processes and a lack of clear procedures and public awareness (Land Equity International, 2010). To improve Malawi's position in terms of the Doing Business 'registering property' indicator, a Global Title and Deeds Registration System (GTDDRS) was implemented in 2011. This resulted in a reduction in the time required to register a transfer of registered land from 89 to 69 days – still a relatively long time by international standards. The GTDDRS system had a very narrow impact, failing to address the lack of transparent processes or to allow interoperability to add value to land records by linking them with the cadaster, the courts, the mortgage registry, tax records, use plans, and the personal ID system that Malawi is in the process of establishing (Vincent

et al., 2015). While the textual components of land records were computerized by GTDDRS, the spatial components were not. No thought was given to any subsequent expansion of records to include workflow management, valuation and revenue collection, or planning. In addition, a proprietary system was used without making provisions for the payment of software license fees. This led the system to fall into disrepair and instead triggered adoption of a number of partial, unconnected, ad hoc approaches to deal with urgent needs (such as in planning).

96. Approval requirements increase transaction costs and reduce land market activity. The operation of land markets and the use of land as collateral to obtain credit is also impeded by restrictions that increase the transaction costs associated with transferring land through sale. The property transfer process starts with an application to the Regional Commissioner for Lands, who then forwards this application, together with an accompanying memo, to the Principal Secretary responsible for Lands, Housing and Urban Development, who then passes it to the Minister's office. Disaggregating the 69 days required to transfer property shows that the main bottleneck is the need to obtain the Minister's consent for any property transfer. This requirement makes land transfers unnecessarily complex and time consuming and introduces a large element of discretion without adding significant value. To better serve customers, to meet the economy's needs, and to improve Malawi's performance in terms of the Doing Business indicator and its attractiveness to investors, it is necessary to explore alternative means to govern land transactions.

97. Reliable, complete and up-to-date land information is essential for financial and mortgage markets. Global experience shows that one of the main benefits of a land registry is to make reliable information related to land ownership publicly available, thereby reducing constraints on contracting parties acquiring such information and thus reducing both the cost and risk of land transactions. This has been the key justification for establishing public registries (Arrunada, 2009). Easier access to such information has indeed been shown to be associated with an increase in the number of registered mortgages and in the volume of credit, as demonstrated by the example of India (Deininger and Goyal, 2012). If land registry information remains incomplete, of low quality, or not accessible at low cost to interested parties, these benefits are unlikely to materialize. This suggests that a more thorough dissemination of standard procedures and measures to achieve greater transparency may be an essential first step towards successful reform. A more detailed review of these issues ad of progress made under different initiatives, and additional measures required to address them is thus needed.

Harnessing the 2016 Land Acts for inclusive development

98. The Land Acts, passed in 2016, could make Malawi's land institutions more inclusive. Under the old legal regime, formal recognition of land ownership rights remained limited to estates, so that Malawi's land policy and institutions exacerbated pre-existing inequalities and excluded most of the country's citizens. Following a lengthy debate on legal reform that started with the establishment of a Presidential Commission in 1996 and the submission of draft legislation to Parliament in 2006, in 2016, ten land-related acts were passed by Parliament. By enabling registration of customary land and adoption of low-cost and more decentralized means of delivering land services, these acts provide a legal framework to address some of the key challenges described above.

99. The Survey and Registration Acts have the potential to significantly reduce the costs associated with current land registration and transfer processes. The Survey Act provides for the use of modern technology to facilitate land surveying processes, potentially reducing costs and time by an order of magnitude. The Act, if accompanied by appropriate subsidiary regulation, would permit reliance on general boundaries to register land, at a total cost of US$ 5-6 per parcel, as in Rwanda (Nkurunziza, 2015). This is extremely significant, given that surveying costs have traditionally accounted for the bulk of the costs associated with increasing coverage of registration. Another significant innovation is the Registration Act, which decentralizes registries to the district level. The demarcation of Traditional Land Management Areas (TLMAs) which it mandates could demarcate traditional authorities' rights and responsibilities, thus providing a basis for the coordination of land administration between traditional authorities with local governments.

100. The Customary Land Act (CLA) recognizes customary tenure and establishes local institutions to manage it. For the first time in Malawi's history, the CLA provides a framework to recognize and document rights to customary land. To overcome the dichotomy between statutory and customary systems in Malawi, the CLA aims to provide customary land holders with security of tenure and to enable them to transfer land without having to abandon customary arrangements. Traditional Land Management Areas (TLMAs) at Group Village Headman (GVH) level form the basic spatial units and are identified by a certificate and map kept in a special registry. In each TLMA, a Customary Land Committee (CLC) with six elected members (half of whom must be women) and chaired by the GVH chair will be supported by a Land Clerk, an employee of the local assembly.

The CLC, in collaboration with the Traditional Authority, can grant individuals customary estates for indefinite duration and register rights to these estates either through a systematic or a sporadic process.

101. Registration efforts need to be appropriately sequenced to prevent land grabbing or double registration. As most of Malawi's land farmed by smallholders is currently unregistered, this is an extremely significant development. At the same time, it creates a significant risk that ill-considered efforts will lead to unintended negative consequences. A sporadic registration process of customary estates that has not been preceded by the demarcation of public land and thorough awareness raising or that does not follow a fully transparent public process could result in influential individuals grabbing public or private land. It can also result in the double registration of land that had earlier been assigned to estates, thereby exacerbating polarization and conflict rather than reducing it. To avoid this danger, it is essential to sequence processes appropriately, as follows: (i) the identification and demarcation of TLMAs and of public land within them; (ii) the systematic confirmation or cancellation of estate leases; (iii) the implementation of extensive publicity campaigns and a systematic process to register private customary estates; and, once these are completed, (iv) the initiation of sporadic allocation and adjudication processes of any remaining unclaimed land.

102. Designing cost-effective processes to ensure wide coverage and long-term sustainability of land registries is key. While the CLA describes the institutional requirements for implementing the act in detail, these have not been costed. The development of appropriate survey standards, the ability to delegate responsibility to local government and local commissions, and the establishment of registries to maintain records are vital to achieve the opportunities created by the promulgation of the new Land Acts in a cost-effective, expeditious, and sustainable manner. Also, institutional reform at the central level will need to be carefully linked with models to manage information related to land ownership, to respond to demand in a decentralized setting, which currently does not exist.

103. Ways to effectively secure women's and vulnerable groups' rights are particularly important. Studies show that tenure insecurity results in large output losses on land cultivated by females, suggesting that women and other vulnerable groups may find it more difficult to exercise their rights. Experience in other countries suggests that, unless measures to ensure that land registration processes specifically incorporate safeguards for women's rights and rigorously evaluate gender impacts before a national roll-out, they run a risk of inadvertently contributing to a systematic disempowerment of women (Ali et al., 2014). Matrilineal systems prevalent and unique to certain regions in Malawi imply that how women's rights are dealt with will have particularly far-reaching impact in the country. As the CLA provides little guidance on issues related to gender and inheritance, careful study and design procedures will be important.

104. Arrangements will need to be carefully piloted to prevent implementation arrangements from becoming unaffordable or unsustainable. Pilots rely on existing institutions and personnel (who can perform land-related functions part-time until demand is sufficiently high) and on the use of IT to reduce personnel requirements and costs wherever possible. Experience in Rwanda suggests that a nation-wide program to systematically demarcate, adjudicate, and register smallholders' land (as 'customary estates'), preceded by a systematic TLMA registration process and the renewal or cancellation of estate leases is possible within a 5-6-year time frame and an investment of US$ 30-40 million, i.e. less than the productivity losses from land disputes during the same period (Deininger and Xia, 2017). The first 2-3 years of such an effort will need to be devoted to careful piloting and impact assessments to safeguard and to enhance existing rights, especially the rights of women, and to establish sustainable and cost-effective arrangements for first-time registration and data maintenance. Immediate financing requirements for such a program will be only about 10 percent of the estimated total.

How to realize the land sector's potential to benefit Malawi as a whole

105. Effective land institutions and the documentation of tenure may stimulate smallholder investments and facilitate the emergence of functional land markets. Improved land tenure security is likely to drive an increase in investments in productivity-enhancing measures, to enhance efficiency of land use, and to generate positive externalities. The documentation of land ownership provides a basis for efficiency-enhancing transactions in rental markets, which can support positive structural transformation and the growth of the rural non-farm economy. Tenancy is widespread in Malawi and rental markets are also used by women and youth to access land. If land sales markets are sufficiently liquid and their functioning not impeded by constraints in financial and other markets, land may also serve as a form of collateral. Such a development can be expected to facilitate the development of financial markets.

106. A policy review of estate leaseholds has significant potential to improve productivity, to increase fiscal space, and to promote efficient land use in both urban and rural areas. Weak or expired leasehold records cost

the Government more than US$ 10 million annually in foregone ground rent from estates and urban areas alone. With estate owners willing to pay much higher ground rents than what is currently collected in return for tenure security and with only a fraction of the potential land-related fees in urban area being collected, there is considerable scope to increase land-related revenue. To realize this, there is need for:

- The revision of lease fees for (expired) estates in a manner that encourages the efficient utilization of land and the divestment of non-utilized land to those able to make better use of it through market or non-market mechanisms;
- Strengthening urban land valuation functions and quantifying the revenues that could be raised through the more effective collection of land-related fees in urban areas by improving assessment and by allocating urban plots for purposes other than social housing through a competitive auction process; and
- The regular publication of key land data and the development of systems to ensure registry information is up to date and can be accessed online by banks for mortgage lending and land price information, by local governments for land use planning and updating of the tax roll, and by the courts to indicate presence of disputes pertaining to a certain land parcel.

107. Malawi can rapidly and sustainably improve land administration building on recent good practice in other African countries. The passage of new legislation, in particular the CLA, provides an opportunity and momentum for Malawi to rapidly improve tenure security and land administration in ways that build on best practice in other African countries in an equitable, cost-effective, and sustainable manner. Strengthening land registration makes it easier to manage public land, guide private investment in the agricultural and other sectors, and plan urban expansion. Land registration informs property tax and valuation and helps with financing urban expansion. This will enhance own-revenue resource generation, producing fiscal space for the provision of services.

108. Registration efforts need to be appropriately sequenced to prevent disputes, loss of rights and land speculation. To avoid these risks, appropriate sequencing is essential. Delays in taking these steps or making needed decisions on policy will jeopardize the ability to realize these benefits and could contribute to non-sustainable use of fragile lands or exacerbate the intensity and impact of land-related conflicts, at significant economic and social costs. The steps are as follows:

- Certification and publication of TLMAs to establish local authority and accountability;
- Review and renewal of all estate leases based on realistic fee schedules, with provisions to ensure that unused or sub-optimally used estate land is put to effective use;
- Systematic registration of customary estates through well-designed processes that safeguard the rights of individual land users, especially women, and the public at large, in a financially sustainable manner (i.e. with social benefits exceeding implementation costs and charges levied on individuals in line with their overall willingness and ability to pay). Careful piloting and monitoring of gender-sensitive approaches to area-wide recognition of existing land rights as envisaged in the new Land Acts, is essential. It will provide metrics for up-scaling once their impact has been rigorously demonstrated; and
- Setting internal and external targets and regularly monitor the extent to which these are met.

109. Clear leadership on taking the next steps is essential and can yield enormous returns for Malawi. While far-sighted legislation to allow low-cost participatory clarification, recording, and management of land rights has been passed, the pace of building institutional capacity and of implementation, jointly with local and traditional authorities, remains slow. Its ultimate impact in terms of increasing the productivity of land use, improving socio-economic outcomes, and establishing a sustainable system for land administration and management will depend on how key implementing regulations are framed. A clear vision and leadership by Government will be essential to harness this opportunity and in doing so set Malawi on the path towards increasing the its' attractiveness as a destination for investment, a more diversified economy, and higher and more sustainable growth. While implementing these steps represents a challenge that can be met only with a high level of determination, lessons from other African countries can be drawn upon with enormous benefits.

Data

Table 13: Selected macroeconomic indicators

	2013	2014	2015	2016	2017 Proj.
National Accounts and Prices					
GDP at constant market prices (percentage change)	5.2	5.7	2.8	2.5	4.5
Agriculture	6.6	5.9	-2.0	-2.3	5.0
Industry	3.5	4.7	3.5	2.4	3.2
Services	6.3	5.8	4.7	4.4	4.6
Consumer prices (annual average)	27.3	23.8	21.9	21.7	11.8
Central Government (percent of GDP on a fiscal year basis)					
Revenue and grants	27.5	23.2	21.4	21.6	23.5
Domestic revenue (tax and nontax)	17.3	19.7	18.6	17.8	20.0
Grants	10.2	3.5	2.8	3.7	3.5
Expenditure and net lending	28.0	28.9	27.1	27.6	28.2
Overall balance (excluding grants)	-10.7	-9.2	-8.5	-9.8	-8.2
Overall balance (including grants)	-0.5	-5.7	-5.7	-6.1	-4.8
Foreign financing	1.9	2.0	2.5	1.9	2.5
Domestic financing	0.1	4.2	3.3	1.7	0.9
Amortization (zero coupon bonds)	0.0	0.0	0.8	2.5	1.3
Privatization Proceeds	0.0	0.0	0.0	0.0	0.3
Money and Credit					
Money and quasi money (percentage change)	35.1	20.7	23.7	21.1	22.0
Credit to the private sector (percent change)	14.4	20.0	29.9	24.3	20.1
External Sector (US$ millions, unless otherwise indicated)					
Exports (goods and services)	1,657	1,737	1,616	1,527	1,412
Imports (goods and services)	2,315	2,399	2,346	2,563	2,422
Gross official reserves	397	588	670	620	640
(months of imports)	2.0	3.1	3.4	2.9	3.0
Current account (percent of GDP)	-8.7	-8.5	-9.2	-14.7	-12.5
Exchange rate (MWK per US$ average)	369.2	424.4	499.6	713.8	-
Debt Stock and Service					
External debt (public sector, percentage of GDP)	30.8	33.1	37.3	33.1	30.7
Domestic public debt (percentage of GDP)	19.8	14.9	17.3	21.2	18.8
Total public debt (percentage of GDP)	50.6	48.0	54.6	54.3	49.5
Poverty					
International Poverty rate (US$1.9 in 2011 PPP terms)		69.3	69.4	69.6	69.2
Lower middle-income poverty rate (US$3.2 in PPP terms)		87.4	87.5	87.3	87.0
Upper middle-income poverty rate (US$5.5 in PPP terms)		95.6	95.6	95.7	95.5

Source: World Bank staff calculations based on MoFEPD, RBM and IMF data

References

Aberman, N., Meerman J., and Benson T. (2015) 'Mapping the Linkages between Agriculture, Food Security and Nutrition in Malawi', Malawi Strategy Support Program Report, Lilongwe: International Food Policy Research Institute.

Ali, D. A., Deininger K. and Goldstein M. (2014) 'Environmental and Gender Impacts of Land Tenure Regularization in Africa: Pilot Evidence from Rwanda', *Journal of Development Economics*, 110: 262-275.

Ali, D. A., Deininger K. and Harris C. (2015) 'Large Farm Establishment, Smallholder Productivity, Labor Market Participation, and Resilience : Evidence from Ethiopia', Policy Research Working Paper No. 7576, Washington, DC: The World Bank.

Aragie, A., Pauw K. and Pernechele. V. (2016) 'Achieving Food Security and Industrial Development in Malawi: Are Export Restrictions the Solution?', Rome: Food and Agriculture Organization of the United Nations.

Arrunada, B. (2009) 'Building Market Insitutions: Property Rights, Business Formalization, and Economic Development', Chicago: University of Chicaco press.

Asfaw, S., McCathy N., Paolantonio A., Cavatassi R., Amare M., and Lipper L. (2015) 'Livelihood Diversification and Vulnerability to Poverty in rural Malawi', ESA Working Paper No. 15-02, August 2015, Rome: Food and Agriculture Organization of United Nations.

Binswanger, H. P., Deininger K. and Feder G. (1995) 'Power, Distortions, Revolt and Reform in Agricultural Land Relations', *Handbook of Development Economics*, 3B: 2659-2772.

Bridges, K. and Woolcock M. (2017) 'How (Not) to Fix Problems that Matter: Assessing and Responding to Malawi's History of Institutional Reform', World Bank Policy Research Working Paper, Washington, DC: The World Bank.

Bruce, J. W. and Migot-Adholla S. E. (1994) *Searching for Land Tenure Security in Africa,* Kendall/Hunt Publishers, Dubuque, IA.

de Janvry, A., Emerick, K., Gonzalez-Navarro M. and Sadoulet E. (2015) 'Delinking Land Rights from Land Use: Certification and Migration in Mexico', *American Economic Review*, 105(10): 3125-3149.

Deininger, K. and Castagnini R. (2006) 'Incidence and Impact of Land Conflict in Uganda', *Journal of Economic Behavior & Organization*, 60(3): 321-345.

Deininger, K. and Goyal A. (2012) 'Going Digital: Credict Effects of Land Registry Computerization in India', *Journal of Development Economics*, *99*(2): 236-243.

Deininger, K. and Jin S. (2006) 'Productivity and Equity Effects of Rental Markets: Evidence from China', Policy Research Working Paper, Washington, DC: The World Bank.

Deininger, K. and Xia F. (2016) 'Quantifying Spillover Effects from Large Land-Based Investment: The Case of Mozambique', *World Development*, 87: 227-241.

Deininger, K. and Xia F. (2017) 'Assessing Impacts of Large Scale Land Transfers: Challenges and Opportunities in Malawi's Estate Sector', Policy Research Working Paper No. 8200, Washington, DC: The World Bank.

Deininger, K., Xia F. and Holden S. (2017) 'Gender-Differentiated Impacts of Tenure Insecurity on Agricultural Performance in Malawi's Customary Tenure System', Policy Research Working Paper No. 7943, Washington, DC: The World Bank.

Devereux, S. (1997) 'Household Food Security in Malawi ', Discussion Paper No. 362, , Brighton: Institute of Development Studies.

Edelman, B. and Baulch B. (2016) 'Are Malawi's Maize and Soya Trade Restrictions Causing More Harm than Good? A Summary of Evidence and Practical Alternatives', Malawi Strategy Support Program Policy Note 25, Lilongwe: International Food Policy Research Institute.

Famine Early Warning Systems Network (FEWS NET), 'Malawi Food Security Outlook Update August 2017', FEWSNET. http://www.fews.net/southern-africa/malawi/food-security-outlook-update/september-2017

Gossage, S. J. (1997) 'Land Use on the Tobacco Estates of Malawi: Report of the Land Use Survey of Tobacco Estates in Malawi, 1996', Lilongwe: Government of Malawi and Overseas Development Institute.

Government of Malawi (2017a) *Annual Economic Report 2016*, Budget Document No.2, Lilongwe: Ministry of Finance, Economic Planning and Development.

Government of Malawi (2017b) *2017-18 Financial Statement*, Budget Document No.3, Lilongwe: Ministry of Finance, Economic Planning and Development.

Government of Malawi (2017c) *The third Malawi Growth and Development Strategy (MGDS II), d*raft document dated 23rd September, 2017, Lilongwe: Ministry of Finance, Economic Planning and Development.

Jaffee, S. M. (2003) 'Malawi's Tobacco Sector: Standing on One Strong Leg Is Better Than on None', Africa Region Working Paper Series No. 55, Washington, DC: The World Bank.

Jones, A.D., Shrinivas A., and Bezner-Kerr R. (2014) 'Farm Production Diversity is Associated with Greater Household Dietary Diversity in Malawi: Findings from Nationally Representative Data', *Food Policy* 46: 1-12.

Jul-Larsen, E. and Mvula P. (2007) 'Security for Many or Surplus for the Few? Customary Tenure and Social Differentiation in Southern Malawi', CMI Working paper 2007:9, Bergen: Christoph Michelsen Institute.

Kandoole, P., Stylianou E. and von Carnap T. (2016) 'Malawi's Growth Performance in a Historical Perspective – Implications for Future Growth Strategy', Malawi Country Economic Memorandum background paper series, Washington, DC: The World Bank.

Kankwamba, H., Mapila A. T. J. M., and Pauw K. (2012) 'Determinants and Spatiotemporal Dimensions of Crop Diversification in Malawi', Lilongwe: International Food Policy Research Institute.

Koch, C. (2015) 'Political Economy Analysis of Malawi', Lilongwe: GIZ and Irish Aid.

Kydd, J. and Christiansen R. (1982) 'Structural Change in Malawi since Independence: Consequences of a Development Strategy Based on Large-Scale Agriculture', *World Development*, 10(5): 355-375.

Land Equity International (2010) *Malawi Business Environment Strengthening and Technical Assistance Project (Bestap) - Review, Design, and Specification of Title and Deeds Registration System* for the Ministry of Lands, Housing and Urban Development.

Lea, N. and Hanmer L. (2009) 'Constraints to Growth in Malawi', Policy Research Working Paper No. 5097, Washington, DC: The World Bank.

Lovo, S. (2016) 'Tenure Insecurity and Investment in Soil Conservation. Evidence from Malawi', *World Development*, 78: 219-229.

Lunduka, R. (2009) 'Land Rental Markets, Investment and Productivity under Customary Land Tenure Systems in Malawi', PhD Thesis, Aas: Norwegian University of Life Sciences.

Macours, K. (2014)'Ethnic Divisions, Contract Choice, and Search Costs in the Guatemalan Land Rental Market', *Journal of Comparative Economics*, 42(1): 1-18.

Malawi Vulnerability Assessment Committee (2017) 'National Food and Nutrition Security Forecast, April 2017 to March 2018', Lilongwe: Ministry of Finance, Economic Planning and Development.

Mandondo, A. and German L. (2015) 'Customary Rights and Societal Stakes of Large-Scale Tobacco Cultivation in Malawi,' *Agriculture and Human Values*, 32(1): 31-46.

Mazunda, J., Kankwamba H., and Pauw K. (2015) 'Food and Nutrition Security Implications of Crop Diversification in Malawi's Farm Households' *In Mapping the Linkages between Agriculture, Food Security and Nutrition in Malawi*, Chapter 5 pp. 44-49, Lilongwe: International Food Policy Research Institute.

Nkurunziza, E. (2015) 'Implementing and Sustaining Land Tenure Regularization in Rwanda' in T. Hilhorst and F. Meunier (eds.), *How Innovations in Land Administation Reform Improve on Doing Business*, Wachington, DC: The World Bank.

O'Neil T. and Cammack D. (2014) 'Fragmented Governance and Local Service Delivery in Malawi', London: Overseas Development Institute.

Pennings S. (2017) *Long Term Growth Model (LTGM v4) - Model Description*, Internal note, Washington, DC: The World Bank.

Place, F. and Otsuka K. (2001) 'Tenure, Agricultural Investment, and Productivity in the Customary Tenure Sector of Malawi', *Economic Development and Cultural Change*, 50(1): 77-99.

Promsopha, G. (2015) 'Land Ownership as Insurance and the Market for Land: A Study in Rural Vietnam', *Land Economics*, 91: 460-478.

RBM (2017a), *Monthly National Payments Systems Report*, Issue No. 6 Volume 5, June 2017, Lilongwe: Reserve Bank of Malawi.

RBM (2017b), *Monthly National Payments Systems Report*, Issue No. 8 Volume 5, July 2017, Lilongwe: Reserve Bank of Malawi.

Restuccia, D. and Santaeulalia-Llopis R.(2015) 'Land Misallocation and Productivity', Working Paper, Department of Economics, University of Toronto.

Ricker-Gilbert, J., Jumbe C. and Chamberlin J. (2014) 'How Does Population Density Influence Agricultural Intensification and Productivity? Evidence from Malawi', *Food Policy*, 48: 114-128.

Sadoulet, E., de Janvry A. and Fukui S. (1997) 'The Meaning of Kinship in Sharecropping Contracts', *American Journal of Agricultural Economics*, 79(2): 394-406.

van Donge, J. K. (1999) 'Law and Order as a Development Issue: Land Conflicts and the Creation of Social Order in Southern Malawi', *Journal of Development Studies*, *36*(2): 48-70.

van Setten, D. (2016) 'Data Entry of Lease Contracts of Estate Land in Malawi: Guidelines for Operators', Lilongwe: Ministry of Lands and Geographical Estates Data.

Vincent, E., Brown M., Boothroyd C. and Knowles S. (2015) 'An Assessment of the Legal, Procedural and Dispute Resolution Issues Affecting Land and Deeds Registration in Malawi', Land registration commissioned by iFUSE, London: Her Majesty's Land Registry.

World Bank (2015a) *Malawi Economic Monitor – Managing Fiscal Pressures*, Macroeconomics and Fiscal Management Global Practice, Washington, DC: The World Bank.

World Bank (2015b) *Malawi Economic Monitor – Adjusting in Turbulent Times*, Macroeconomics and Fiscal Management Global Practice, Washington, DC: The World Bank.

World Bank (2016a) *Malawi Economic Monitor – Absorbing Shocks, Building Resilience*, Macroeconomics and Fiscal Management Global Practice, Washington, DC: The World Bank.

World Bank (2016b) *Malawi Economic Monitor – Emerging Stronge*r, Macroeconomics and Fiscal Management Global Practice, Washington, DC: The World Bank.

World Bank (2017a) *Africa's Pulse, No. 16, October 2017: An Analysis of Issues Shaping Africa's Economic Future*, Office of the Chief Economist of the Africa Region, Washington, DC: The World Bank.

World Bank (2017b) *World Development Report 2017: Governance and the Law*, Washington, DC: The World Bank.

World Bank (2017c) *Malawi Economic Monitor – Harnessing the Urban Economy*, Macroeconomics and Fiscal Management Global Practice, Washington, DC: The World Bank.

World Bank (2018a) *Doing Business Report 2018: Reforming to Create Jobs*, Washington, DC: The World Bank.

World Bank (2018b, forthcoming) 'Productive Diversification in African Agriculture and Effects on Resilience and Nutrition (PRODIVA) with focus on Zambia and Malawi', commissioned by the World Bank and conducted in collaboration with the Center for Tropical Agriculture (CIAT), Indaba Agricultural Policy Research Institute (IAPRI), and the Food and Agriculture Organization of the United Nations (FAO).

World Food Program (WFP), NEPAD, UNECA and African Union Commission (2015) 'The Cost of Hunger in Malawi: Social and Economic Impacts of Child Undernutrition in Malawi. Implications on National Development and Vision 2020', Rome: World Food Program.

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