

The Case for Structured Markets in Malawi

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1. BACKGROUND

The Government of Malawi is promoting structured markets as a solution to inefficiencies in the crop export market. A structured market is an organized and formal place where farmers, traders, processors, millers, banks and others enter into organized, regulated trading and financial arrangements (East Africa Grain Council, 2013). Under the current export system, exporters from Malawi do not need permits to export crops with the exception of rice and maize on which export restrictions have been placed from time to time to ensure food security. Export bans on maize are particularly notable and have been in operation in three-quarters of crop years since 2005/06. With or without restrictions, exporters in Malawi are required to declare and remit export proceeds under the Reserve Bank of Malawi Exchange Control Act of 2005.

Despite this legislation, some exporters either do not remit or under-declare their export proceeds. This is one of the reasons for the existence of informal cross-border trading and lack of access to structured markets by farmers. After reviewing Malawi's recent export experience, this policy note examines the types and potential contributions of structured markets to export marketing with a specific focus on commodity exchanges and export mandates. An export mandate means that a commodity cannot be exported except via a structured market.

2. MALAWI'S RECENT EXPORT EXPERIENCE

Table 1 shows that Malawi's export revenue has stagnated between 2012 and 2016. Tobacco remains the largest export crop contributing about 66% of total exports in 2016. In the recent past, the tobacco industry has faced the anti-tobacco smoking campaign in addition to volatile and poor average prices. Tea is the second most important export crop in the country. Malawi is the second largest tea producer in Africa (after Kenya) and is estimated to grow approximately 10% of the tea produced in Africa. Malawi was the first country in Africa to grow tea on a commercial scale in the 1880s and has been producing tea for well over a century (East African Tea Trade Association, n.d.). Coffee has a lot of potential in Malawi but the volumes of production and exports remain low despite the existence of a ready export market.

3. TYPES OF STRUCTURED COMMODITY MARKETS AND ROLES OF STAKEHOLDER INSTITUTIONS

Prior to the establishment of the Agricultural Commodity Exchange for Africa (ACE) in 2006 and AHL Commodity Exchange (AHCX) in 2013, structured commodity trading in Malawi was limited to the two main export crops, tea and tobacco. The establishment of ACE and AHCX presents great opportunities for the structured trading of cereals and legumes in Malawi. The following sections discuss each of the types of structured markets that exist in Malawi, plus the roles of stakeholder institutions.

Table 1: Malawi export values for 2012-2016 (in USD thousands)

Product name	2012	2013	2014	2015	2016	% Total (2016)
Tobacco	654,556	553,678	646,655	496,186	555,362	66%
Tea	73,140	83,279	77,380	66,820	75,953	9%
Sugar and sugar confectionery	43,126	110,505	126,821	98,312	64,191	8%
Vegetables, roots and tubers	31,095	30,760	46,409	64,741	49,810	6%
Edible fruits and nuts	12,218	13,784	18,976	20,535	21,030	3%
Oil seeds	45,373	77,883	74,901	18,137	15,778	2%
Coffee	4,052	3,929	4,480	3,576	4,908	1%
Spices	2,065	3,046	1,887	1,189	4,111	0%
Cereals	2,181	3,864	4,047	2,349	3,344	0%
Cotton	49,303	25,806	25,939	24,362	1,461	0%
Other exports (non-agric.)	82,715	101,225	258,922	187,444	43,330	5%
All exports	999,824	1,007,759	1,286,417	983,651	839,278	100%

3.1 Tea auctions

There exist two platforms for tea trading in Malawi, namely the Limbe Tea Auction and direct sales to suppliers through private contracts. Although auctions tend to attract higher tea grades, direct sales constitute the largest share of tea trades in Malawi. For example, between 2008 and 2015, an average of 24% of total tea production in Malawi was traded at the auctions (National Statistical Office Quarterly Statistical Bulletins, 2016, 2012).

The Malawi tea industry is losing/has lost its competitive position as a profitable tea growing country due to a combination of poor quality of tea, low prices, heavily seasonal production and other factors such as Malawi's landlocked position leading to high transport costs. In some cases, the tea auctions have not taken place due to lack of buyers. Consequently, some exporters have transported their tea to the auction at Mombasa in Kenya which is much bigger and fetches higher prices buyers than the Limbe auction.

3.2 Tobacco auctions

Tobacco is traded under an export mandate using tobacco auction floors in Limbe, Lilongwe, Chinkhoma, Mzuzu and Kabwafu, all owned by Auction Holdings Limited (AHL). The floors have been in place for over 70 years. The tobacco industry continues to face unstable international market prices due to declining global demand (with the exception of China and some countries in Asia). Just like tea, trades through auction floors only form a small percentage of total sales.

There are four types of tobacco sold on the floors and these are Burley, Flue Cured, Northern Division Dark Fired (NDF) and Southern Division Dark Fired (SDF). Burley tobacco accounts for the largest volume (as shown in Table 2) and is generally grown by smallholder farmers.

3.3 ACE

ACE started operations in 2006 and now has 10 years of trading experience. ACE has a diversified shareholding that includes grain trading firms, food processors, and farmers' associations. Its operations have expanded and in 2016 it launched a five-year Rural Strategy to facilitate more inclusive market access and promote rural economic development.

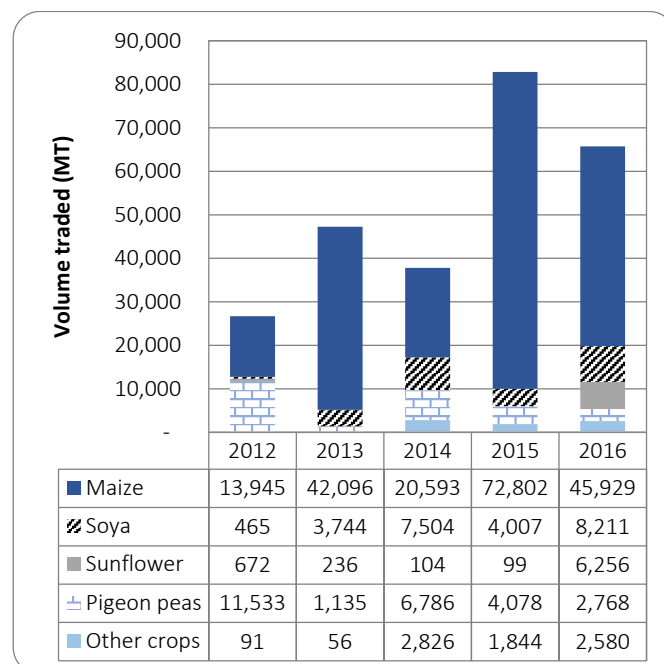
Figure 1 shows that the volume of trades over ACE has expanded over the years. In 2016, just under 66,000 metric tonnes (MT) of commodities were traded on ACE. Maize made up the largest share of volume traded (70%) followed by soybeans (12%) and sunflower (10%). Other crops traded on ACE are beans, processed soya, groundnuts, rice and sorghum. ACE's warehouse receipt system allows farmers access to finance using the deposits as collateral. Over the years, collateral finance offered by ACE has expanded from US\$ 11,370 in 2011 to US\$ 11,031,098 in 2016.

Table 2: Tobacco sales (2015-2016)

Year	Description	Burley	Flue cured	NDDF	SDF	All tobacco
2015	Volume (kg)	168,248,234	23,060,068	1,303,569	78,432	192,690,303
	Value (US\$)	280,209,951	54,199,989	2,818,688	174,426	337,403,054
	Price/kg (cents)	167	235	216	222	175
2016	Volume (kg)	174,902,046	17,558,178	2,496,798	167,972	195,124,994
	Value (US\$)	226,215,286	44,858,974	4,956,950	358,747	276,389,957
	Price/kg (cents)	129	255	199	214	142

Source: Tobacco Control Commission

Figure 1: Volumes of commodities traded on ACE per year



Source: ACE

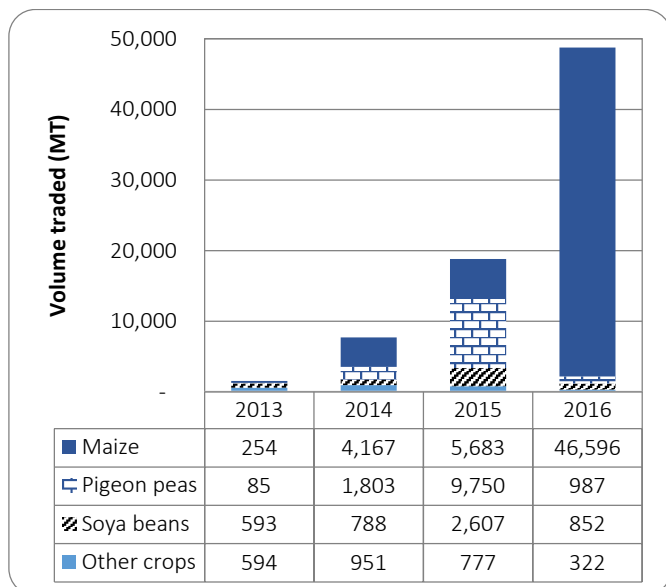
ACE does not own or rent warehouse infrastructure; it only certifies privately owned warehouses. In 2016, the exchange had certified storage space of over 186,672 MT at its 54 certified warehouses located throughout the country- 31 rural warehouses (with a capacity of 24,440MT) and 23 urban warehouses (with a capacity of 162,272MT). However, only 49,583 MT of commodities were actually deposited at the warehouses in 2016. Clearly, there is still room for more deposits to be made at the warehouses.

3.4 AHXC

AHXC is wholly owned by the AHL Group which has for a long time provided a trading platform for tobacco. It was established with the aim of diversifying AHL's income in the wake of declining global demand for tobacco. Unlike ACE, AHXC rents and manages twelve (12) permanent warehouses across the country, with a combined storage capacity of 15,000 MT. It also operates additional temporary warehouses in strategic places on a need basis.

Figure 2 shows that the volumes of traded on AHXC have been increasing over time and nearly tripled between 2015 and 2016, driven by a large increase in the volume of maize trades. In 2016, maize continued to make up the largest proportion of total trades (96%), followed by pigeon peas and soya beans (each at 2%). Other crops traded on AHXC are beans, cowpeas, groundnuts, sunflower, and rice.

Figure 2: Volumes of commodities traded on AHXC by year



Source: AHXC

3.5 ADMARC's activities

ADMARC was established as parastatal in 1971 but has been a limited liability company since December 2003 and is the largest shareholder of AHL with a stake of 42.64%. It trades beans, cotton, groundnuts, pigeon peas, soybeans, rice, fertilisers and pesticides, in addition to maize and maize flour. ADMARC operates three cotton ginneries and a rice mill. Profits from other crops are believed to cross-subsidize its commercial and 'social' maize market operations.

ADMARC has an extensive network comprising 10 depots, 24 parent and 343 unit markets, plus 411 seasonal markets. It owns around 220 warehouses with a storage capacity of about 137,000 MT (Chirwa, 2015; PwC, 2016). Through this network, ADMARC has a significant effect on the commodity market outcomes. The government uses ADMARC to intervene in the market and influences both distributions and prices of commodities. These interventions generally provide little incentives for private trading. Previous research shows that ADMARC's buying and selling prices are either too cheap or too high for most of the period (Edelman, 2016). Furthermore, ADMARC usually enters the market some months after the onset of the harvest season, largely because its financing is subject to the approval of the National Budget which rarely happens before mid-June.

3.6 Stakeholder institutions

Finally, we discuss the roles played by selected key stakeholder institutions in structured trading in Malawi.

- Financial institutions provide collateral finance required by grain owners to pay expenses, buy inputs for the next season and purchase stock. The Export Development Fund (EDF) was established in 2012 to build the productive capacity of export-oriented enterprises in Malawi. It is 100% owned by the Reserve Bank of Malawi (RBM). However, one of the key challenges facing borrowers is high interest rates combined with an environment of high inflation rates.
- The Ministry of Agriculture, Irrigation and Water Development develops policies and sets minimum farm gate prices. Some of the policies recently reviewed or

drafted by the ministry are the National Agricultural Policy, the Contract Farming Strategy, and the Fertilizer Policy, Seed, Seed Policy and the Tobacco Bills. These policies and strategies can potentially contribute to the development of structured trading in Malawi.

- The Ministry of Industry, Trade and Tourism determines export bans and other agricultural trade restrictions based on the 1968 Control of Goods Act, which has been revised and is expected to be tabled in parliament in November 2017. The Ministry has recently drafted a Warehouse Receipts System (WRS) Bill, which was approved by the Cabinet Committee on Legal Affairs in May 2017. It has also drafted the Commodity Exchanges Legal Framework, which proposes that commodity exchanges be registered with the Reserve Bank as self-regulating organizations. The WRS bill and the Legal Framework are good developments for structured markets in Malawi.
- The Ministry of Finance, Economic Planning and Development has the mandate to formulate economic and fiscal and manage public resources, including the setting of taxes and tariffs on export commodities.

4. THE CASE FOR COMMODITY EXCHANGES

Malawi's two active commodity exchanges offer many benefits to buyers and sellers in addition to the facilitation of trades. These additional benefits include access to collateral finance through warehouse receipt systems; better price premiums through aggregation and quality enhancement of commodities; reduction of post-harvest losses; availability of up-to-date information on prices and trading processes; and, smoothing of surpluses that occur during harvest. The higher the volumes traded on the exchanges, the greater these benefits will be.

More generally, commodity exchanges perform many vital functions including facilitating price discovery, promoting standardized contracts and grading systems, and the enforcement of contracts (Tomek and Kaiser, 2014). Well-functioning commodity exchanges tend to be associated with less rather than more volatility of the prices of the commodities they trade. When they mature into future and/or options markets, as has occurred with the South African Futures Exchange (SAFEX), commodity exchanges also allow large farmers and trading companies to lock-in purchase or sales prices by hedging. In addition, by purchasing calls on options contract, commodity exchanges can allow large processors, traders and even (small) countries to assure the supplies needed in future seasons.

The presence of two active commodity exchanges puts Malawi in a unique position in terms of competition and risk of market manipulation. The combined trade volumes by the two exchanges are still very low when compared to the entire commodity market. Malawi is evidently underutilizing its two commodity exchanges if we compare their volumes with the Ethiopian Commodity Exchange (ECX), where over 750,000 MT of agricultural commodities were traded in the 2015/16 fiscal year. 'Thinly' traded commodity markets tend to have greater volatility of prices and be more susceptible to cornering and manipulation (Gray, 1964). For example, the Zimbabwe Agricultural Commodity Exchange (ZIMACE) operated successfully for six years from 1994 before it was closed down in 2001 due to suspicion of market manipulation (Rashid, 2015).

5. WHAT ARE THE POLICY OPTIONS?

A number of policies can be explored to promote structured markets in Malawi, namely putting in place export mandates for specific commodities; removal of trade restrictions; merging of ACE and AHCX, and provision of better infrastructure for market development. We discuss these policy options below:

5.1 Export mandates

Export mandates (where no commodity should be exported unless it goes through a structured market) are one way to promote the development of structured markets in Malawi. Currently, export mandates are in place for two commodities in Malawi: tea and tobacco. Expanding export mandates to cover other commodities (such as soybeans, pigeon peas and sunflower) could help Malawi to diversify its foreign exchange earnings in the face of declining demand for tobacco.

There are several advantages of trading under an export mandate system. First and foremost, export mandates usually increase the volumes trade through formal exchanges, which helps commodity exchanges succeed. For example, the Ethiopian Commodity Exchange is “successful” due to large trade volumes for coffee, which is due to an export mandate requiring all coffee exporters to pass through the ECX. Second, Malawi’s current export system is very susceptible to under-declarations and non-remittance of export proceeds, which results in loss of tax revenue for the government. Third, giving farmers access to structured markets increases options to farmers and can significantly improve the prices and revenues they receive by trading over a competitive platform. Finally, trading over formal exchanges reduces the informality of trades and improves the reliability of trade statistics and wholesale price data.

However, there are also disadvantages of placing export mandates. Firstly, just like the state marketing boards of the 1980s, giving the exchanges a monopsony on crop export means they may lower their prices to meet government revenue needs or cover their operating costs. Secondly, commodities may need to be transported longer distances domestically to get to the exchange and then from the exchange to the exporter. Exporters will only be willing to incur these extra costs if going through an exchange has clear benefits for them. In some circumstances, export mandates may actually increase informal market activities as it could drive more actors to circumvent exchange fees.

Ultimately, whether the benefits of export mandates exceed their costs is an empirical issue and depends on the commodity and characteristics of the export market.

5.2 Removal of export restrictions

The current policy of the Government of Malawi is not to levy tariffs on the export of raw materials except for commodities that are subject to periodic and *ad hoc* export restrictions. The most notable example of the later is an export ban on maize since November 2011 (ostensibly to protect national food security). The ban on maize exports remains in force despite favorable production estimates for the 2016/17 cropping seasons and attractive prices in neighboring countries. Removal of such export restrictions should increase the volumes traded via structured markets. So too would a more stable and transparent policy environment that would allow private sector traders and commercial farms to develop without fear of well-intentioned but disruptive government interventions (Edelman and Baulch, 2016; Edelman et al., 2016).

Domestically, export restrictions can limit price increases in the short run by increasing supply to the domestic market. However, with time, producer prices are also likely to be pushed downwards thereby resulting in production disincentives in the domestic economy. The effectiveness of export restrictions, whether in the form of export taxes or quantitative limitations, can be further undermined by unregistered activities which are not visible to authorities. Globally, export restrictions placed by several exporters at the same time may reduce international supplies and contribute to volatilities and uncertainties in markets (Food and Agriculture Organisation, 2015).

5.3 Merging of ACE and AHCX

Malawi is unique in having two agricultural commodity exchanges. This is surprising given the limited volumes of agricultural commodities that are produced in and exported from Malawi; neither of the exchanges could continue to operate without implicit subsidies. One of the necessary conditions for the success of commodity exchanges is the ability to generate enough revenue to sustain its operations. Commodity exchanges can increase their revenues by either increasing the volumes of trade or charging higher commission and other fees. However, if the latter are set too high, this will discourage exporters and other traders from using the commodity exchange thereby reducing traded volume. As discussed earlier, the volumes traded by both ACE and AHCX are rather low thereby casting doubt on the financial sustainability of their operations. This is not surprising: a previous study by Rashid (2015) has shown that most of the commodity exchanges in Africa have either failed (or only exist on paper) because of their limited traded volumes. Merging ACE and AHCX would likely reduce operating costs through economies of scale/scope and reduced commissions, thereby enhancing volumes traded and revenue in the long-term.

5.4 Better Infrastructure

Finally, the development of better infrastructure (in particular better transport linkages and storage facilities) may be expected to play an important supporting role in promoting structured markets in Malawi. Malawi’s road network is one of the poorest in southern Africa, with vehicle operating costs that exceed those in neighboring countries. Building better roads and maintaining the existing network properly could, therefore, significantly reduce transportation costs and improve trader’s margins. The successful rehabilitation and operation of the Nacala rail corridor (connecting to Malawi’s Central East African Railway with the port of Nacala in Mozambique) could reduce freight costs for Malawi’s overseas exports by at least US\$30 per MT (The Nation, 2016). Similarly, the extension and rehabilitation of storage facilities in the country, could do much to both facilitate trade and promote Malawi’s emerging warehouse receipts system (Edelman et al., 2014). Better markets and storage facilities may also reduce the high post-harvest losses experienced in Malawi while simultaneously promoting food safety. Finally, current initiatives to improve Malawi’s telecommunications infrastructure and internet connectivity will improve access to information for participants at most stages of the export marketing chain.

Thus while the promotion of structured markets, specifically commodity exchanges, has a number of important potential advantages for Malawi, the use of export mandates to promote them should be treated with due caution.

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