

Commodity Exchanges and Warehouse Receipts in Malawi: Synopsis

Current status and their implications for the development of structured markets

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1. BACKGROUND

Malawi is unusual in having not one, but two commodity exchanges (Comex): The Agricultural Commodity Exchange (ACE), established in 2006, and Auction Holdings Commodity Exchange (AHCX) Ltd, established in 2013. In addition, Malawi has several parallel 'systems' that advance collateral financing using warehouse receipts (WR).

After providing an overview of the international commodity exchange experience, this policy note describes the landscape in which Malawi's two agricultural Comex and warehouse receipts 'systems' (WRS) operate. The policy note concludes with recommendations on how best to maximize the performance and benefits of the commodity exchanges and warehouse receipts.

2. METHODOLOGY

Our study adopted a mixed methods approach, involving semi-structured interviews with 45 key market participants, compilation and analysis of secondary data, and a review of existing literature. We also compiled and analysed secondary data from Malawi's two commodity exchanges, along with data from other African Comex. To assess the extent to which farmers sell their crops via the Comex, we examined data from a nationally representative survey of 3,001 farmers and a structure-conduct performance study of 555 maize traders.

3. REVIEW OF INTERNATIONAL EXPERIENCE

The origins of modern commodity futures markets and warehouse receipts lie in the development of commodity markets in North and South America in the mid-19th century (UNCTAD, 2009). Until the mid-1990s, there were a dozen Comex trading futures and options for agricultural commodities in North America, together with several networks of auctions floors and regional exchanges operating in South America, particularly Argentina and Brazil. However, with the introduction of electronic trading platforms and the World Financial Crisis of 2007–2008, a wave of consolidations occurred. Among these was the takeover of the Chicago Board of Trade and New York Mercantile Exchange by the Chicago Mercantile Exchange.

In other regions, particularly China, Eastern Europe, and the former Soviet Union, Comex were established much later, shortly after the liberalization of their planned economies. In most cases, a large number of new

exchanges were established soon after market liberalization, which soon disappeared in a series of mergers and acquisitions. For example, in 1993, just three years after market liberalization, China had 33 Comex trading agricultural commodities, minerals and other physical commodities. By 1998, just three Comex remained in China, each trading different groups of commodities. The emergence of electronic trading in the 2000s has given further impetus to the consolidation of Comex.

International experience indicates that historically Comex often develop in parallel with WRS, which help stimulate demand from off takers for the standardized contracts traded by Comex, while providing financing that increases volumes traded. A solid legal and institutional framework together with substantial volumes of trade are preconditions for the development of Comex and WRS.

4. AFRICA'S RECENT EXPERIENCE WITH COMMODITY EXCHANGE

Until 1995 Africa did not have any Comex worthy of the name. In that year, the South African Futures Exchange (SAFEX) was established. The preconditions for establishing a Comex in post-apartheid South Africa were favorable with a network of large commercial farmers with their own silos and a system of negotiable silo receipts. SAFEX is the only derivatives-based exchange in Africa and became part of the Johannesburg Stock Exchange in 2001.

In 2008 Ethiopia established its own Comex: the Ethiopian Commodity Exchange (ECX). Around the same time ZAMACE in Zambia and ZIMACE in Zimbabwe were established. The genesis of these exchanges was different from SAFEX, with high level government backing, the involvement of

Table 1. Volumes of selected Comex in Africa

Exchange	Volume (MT) 2016	Volume (MT) 2017
SAFEX, South Africa	130,700,000	128,600,000
ECX, Ethiopia	669,877	672,980
AFEX, Nigeria	47,780	28,377
EAX, Rwanda	15,000*	
ACE, Malawi	60,322	16,373
AHCX, Malawi	48,756	3,622

Sources: African Development Bank 2018; ACE, AFEX, AHCX, ECX, SAFEX
 Note: *2015

international donors, and in the case of ECX a legal mandate for coffee and sesame exports to involve the exchange. ECX is now the second largest Comex in Africa (Table 1).

In 2013 and 2014 there was sudden burst of activity with three Comexes being established in Nigeria (AFEX), Rwanda (EAX), and Malawi (AHCX) along with the G-Soko structured trade and financing platform in Eastern Africa. From the outset, all three exchanges invested heavily in electronic trading platforms.

In addition, a further 12 Comex already exist or are being established: the Nigeria Commodity Exchange (NCX), the Akure Commodity Exchange (GCX), the Uganda Commodity Exchange (UCX), and planned initiatives in Cameroon, Cote d'Ivoire, Egypt, Kenya, Mauritius, Senegal, Tanzania, and Zimbabwe. Beyond the 23 established or nascent African Comex, traders also use established Comex outside Africa for hedging and price discovery in a range of African value chains (AfDB, 2018). For example, African traders make use of Asian Comex, particularly those in Malaysia, India, and Singapore.

5. MALAWI'S COMMODITY EXCHANGE LANDSCAPE

As mentioned earlier, Malawi is unusual in having two commodity exchanges (ACE and AHCX) in addition to separate auction systems for tobacco and tea, which were established in the 1930s and late 1970s respectively. This commodity exchange landscape puts Malawi in a unique position in terms of competition and risk of market manipulation.

ACE followed the traditional model for establishing a Comex: by gradually diversifying from physical spot auctions to electronic bulletin boards, to a WRS with certified warehouses, to forward contracts. ACE consists of two parts: ACE Ltd, a limited liability commercial company and ACE Trust a non-profit organization that has implemented various development projects. ACE is now arguably the second longest running Comex in Africa (after SAFEX) and has received substantial donor support.

AHCX followed an alternative model and invested heavily in e-trading infrastructure and exchange-owned warehouses, followed by a high-profile launch involving the President of Malawi. AHCX is a 'fully commercial platform' owned by Auction Holding Ltd, which is itself partly owned by the Agricultural Development and Market Corporation (ADMARC), Malawi's main agricultural marketing and processing parastatal. AHCX enjoys considerable

government support. Following the collapse of the pigeon pea export market in mid-2016, and above average harvests, but very low prices in the 2017/18 agricultural year for most crops, both Malawian Comex experienced a serious decline in trading volumes. This resulted in substantial debts to commercial banks and in the case of AHCX to their parent company. The left and right panels of Figure 1 show the annual volumes traded by commodity on ACE and AHCX since 2012 and 2013, respectively. Maize is by far the most important crop traded, which makes the Comex vulnerable to fluctuations in harvests and traded volumes that Malawi often experienced. Paradoxically, poor agricultural years for Malawi are often good ones for the Comex and vice-versa because of higher procurement by food agencies.

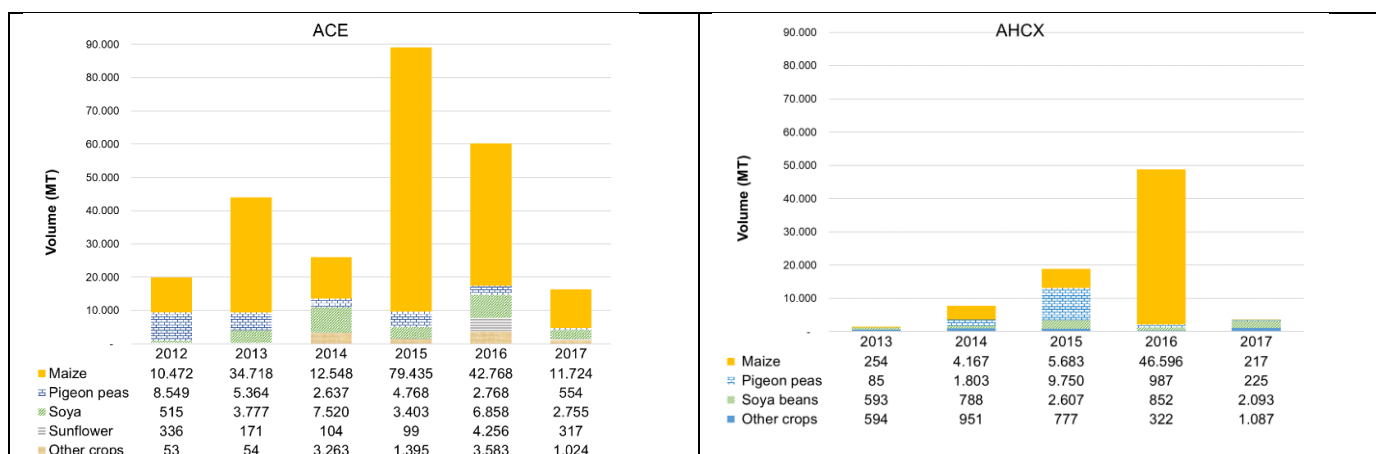
The *Commodity Exchange Directive* was approved on April 3, 2018 and will come into force in April 2019. The Directive includes provisions for the Reserve Bank of Malawi (RBM) to license and regulate the Comex. It prohibits the Comex from trading on its own markets without prior approval by the RBM. In addition to the Commodity Exchange Directive, the Corporate Governance Directive gives RBM the right to veto Comex board members.

Our interviews with financial institutions and different market players indicate that the provisions of Comex Directive are still not widely understood but provide a solid legal basis for the future development of Comex in Malawi.

6. WAREHOUSE RECEIPT SYSTEMS AND COLLATERAL FINANCING IN MALAWI

The fragmented nature of Malawi's Comexes is mirrored in Malawi's WRs 'system', which encompasses two formal systems operated by ACE and AHCX plus warehouse receipts issued by the commercial warehouses. It is therefore important to distinguish between warehouse receipts (WR) and warehouse receipt systems (WRS). WR issued by a recognized WRS have the advantage that there is a centralized register, usually electronic, that can be checked to see if a particular WR has already been used as a collateral for loan by another bank or financial institution. In contrast, a WR issued by one of the commercial warehouses could be copied and submitted to more than one financial institution. This is one reason why financial institutions often employ collateral managers (such as Grain Securities Ltd. and SIS Inspections in Malawi).

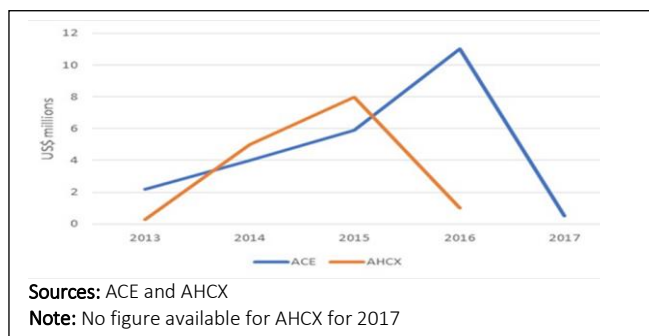
Figure 1. Volumes traded on ACE and AHCX, by commodity and year



Sources: Authors, using data provided by ACE and AHCX

Figure 2 shows the volume of collateral financing advanced through ACE and AHCX since 2013. Collateral financing figures for 2018 are not yet available but it is known that ACE advanced over US\$4 million in collateral financing in 2018. With the tighter agricultural conditions and higher prices in the 2018/19 agricultural year, the volume of collateral financing advanced may be expected to have grown substantially from the low of 2017, although is unlikely to exceed the peaks reached in 2015 and 2016.

Figure 2. Collateral financing advanced through ACE and AHCX, 2013-2017



The *Warehouse Receipt Act*, approved by Parliament in late 2017, defines the legal status of warehouse receipts. It clarifies the rights and obligations of warehouse operators and holders of warehouse receipts in line with international best practices.

7. ALTERNATIVES TO COMEX AND WAREHOUSE RECEIPTS

Comex and WRS are one part of the commodity trading landscape in Malawi. For traders and processors various alternative structures exist including:

Forward contracts purchased through large commodity traders, which are commonly used by processors to hedge the cost of raw materials.

Direct collateral financing of physical stocks available from commercial banks, who are usually prepared to advance around 70 percent of the value of the underlying commodity. However, the banks stipulate certain conditions (i.e. employment of a collateral manager).

Vertically integrated supply chains such as nucleus estates and contract farming arrangements, which provide many benefits without the need for an exchange. Integrated supply chains are most developed for export crops (i.e. coffee, tea, tobacco, sugar). They also offer access to input and extension advice.

8. PERSPECTIVES OF MARKET ACTORS AND OTHER STAKEHOLDERS

This section discusses the perspectives of market actors and other key stakeholders interviewed between May and July 2018. A recent nationally representative survey identified no farmers who had traded directly on the Comex, while a survey of maize traders and semi-structured interviews found only a small number of farmers associations/co-operatives and small traders who had done so.

Farmers' Associations, Cooperatives, and Traders

Farmers' associations/cooperatives and small/medium scale traders who had traded on ACE or AHCX usually reported that they preferred this marketing platform. For farmers' associations, Comex offer readily available markets and

negotiation about prices, which is not the case with spot traders. Most traders recognized the Comex as an open and transparent platform for their procurement. All groups liked the grading, fumigation, and storage services offered by warehouses linked to the exchanges. The option of accessing short-term loans through WRS was another reason highlighted for preferring Comex. Some associations and traders also liked the security offered by the electronic payments made by the Comex.

Challenges mentioned by *farmers' associations* related to: (1) delays in sales, (2) lower prices relative to spot trading, (3) high storage charges, and (4) distance to Comex warehouses. Challenges mentioned by *traders* included the observation that Comex were poorly organized and provided insufficient market information. Some traders complained that Comex do not provide estimated sales dates, which makes trading decision difficult. Despite these criticisms, most traders saw potential value in the Comex and made suggestions on how to improve the operations, including improving warehouse facilities and making sales opportunities available via SMS messages.

Most farmers' associations and smaller traders stated an independent non-political body should be established to oversee Comex activities, improve transparency and accountability, and enforce trading regulations.

Processors and Feed Manufacturers

Processors interviewed in Blantyre and Lilongwe had a more negative view of the Comex. Most had experimented with both forward and spot contracts on the exchanges.

However, due to the plentiful supplies of maize and soya in the 2017/18 agricultural year, most processors had not felt the need to use the Comex recently. Most large processors felt that vertically integrated contract farming arrangements offered more potential than trading through the Comex. Two firms commented that their companies' reputation allowed them to obtain cheaper financing from commercial banks. Two other firms were reluctant to use WRS because charging interest violates Islamic banking principles.

Large Traders and Food Agencies

All interviewees under this category were aware of the Comex but had mixed views about them. As most traders have their own warehouses, they can obtain direct collateral financing at cheaper rates from banks rather than via WRS. However, most found it convenient to use the WRS to obtain supplementary financing or to supplement their own warehouse capacity in the immediate post-harvest season. Food agencies interviewed used Comex periodically for procurement of supplies in bad years and believe that the Comex could help stabilize and improve the prices that farmers receive.

Currently, a withholding tax of three percent is levied on food commodity transactions over MWK60,000, including trades on the Comex. Some larger traders complained that withholding was not consistently applied with some large companies and parastatals not required to pay it, which gives them an unfair trading advantage. In addition, many smaller traders wish to avoid paying withholding tax and ask larger traders to divide their purchase into multiple small lots and pay in cash. This is inefficient as it multiplies paperwork and discourages use of electronic payments.

Financial Institutions

Over the last five years, five commercial banks and one government backed fund have advanced financing via the Comex. Terms are typically base rate plus three or four percent for a fixed period (usually three months) with around 70 percent of the underlying value of the commodity advanced as a loan. Most commercial banks have only piloted WRS backed loans because of the perceived risk of such lending. However, one commercial bank and the government backed fund advanced more substantial financing and have suffered substantial defaults on export contracts for pigeon peas.

Most commercial banks make direct commodity financing available to the large trading companies and processors. The volumes loaned here are much larger than by the official WRS and are linked to third party collateral managers appointed by the bank. As the reputations of these large trading companies are well-known to the banks these loans are generally regarded as more secure than WR loans. However, there have been two or three cases of default of direct commodity financing agreements by large traders. For the financial institutions one advantage of Comex backed WRS schemes is that the Comex performs the role of the collateral manager/monitors. As collateral managers typically charge over US\$2,000 per warehouse per month, using the Comex to monitor stocks is financially attractive to the banks.

Government, Development Partners and Civil Society Organizations

Government agencies saw the Comex as a way to promote structured markets in Malawi. They advocated the use of export mandates along the lines of the ECX model to both increase the volume of commodities traded on the exchanges and to control the 'exploitative practices' of traders and 'middlemen'. There was limited appreciation of empirical evidence that restricting trade in this way sometimes backfires and leads to higher rather than lower volumes of cross-border trade.

Development partners and civil society organizations interviewed typically believed that Comex and WRS were a way to promote the commercialization of agriculture while ensuring higher prices for farmers and promoting competition among traders. Such views are largely contrary to international experience, which indicates that larger traders and warehouse operators are the primary beneficiaries of the introduction of Comex and WRS.

9. RECOMMENDATIONS AND POLICY SUGGESTIONS

Three categories of recommendations and policy suggestions should be explored: (1) quick wins, around which is a considerable amount of agreement, (2) medium and longer-term recommendations with a reasonable degree of agreement, and (3) three more controversial proposals.

1. Quick Wins

- Harmonize ACE and AHCX's grading systems
- Promote storage using WR to farmers' associations/ small traders without linking them so closely to collateral financing
- Financial institutions should set 'strike prices' for sale of stocks and establish term limits for collateral-based loans. This would limit their financial exposure.
- Promote collateral management as an alternative income stream for Comex to commissions and fees
- Comex should strictly adhere to regulations on own-account trading in the Commodity Exchange Directive

2. Medium- and Longer-Term Recommendations

- Rationalize ACE and AHCX operations. This would include standardization of their grading systems along with adoption of a common system for clearing payments.
- Offer Zambian Commodity Exchange/Johannesburg Stock Exchange futures contracts on Comex in Malawi. This would help spread hedging and other commodity trading strategies using futures.
- Set-up a single WRS for Malawi. ACE and AHCX operate their own WRS in parallel, together with other warehouse receipts issued by large trading companies, which makes collateral financing more costly, complicated, and risky than it need be.

3. Some Controversial Proposals

- Establish an independent body to oversee the Comex, in addition to financial regulation by the Reserve Bank of Malawi. This body should be representative of different stakeholders and also be independent of Government.
- Merge ACE and AHCX into a single exchange. Given the limited volumes of agricultural commodities that are traded, neither exchange can continue to operate without implicit subsidies. Merging ACE and AHCX would reduce operating costs through economies of scale and reduce commissions, thereby enhancing volumes traded and revenue in the longer-term.
- Remove withholding tax on food commodity transactions greater than MWK60,000. This will further the development of an electronic payment system.

RESOURCES

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