## **ACE Warehouse Receipt Finance**

This is the sixth out of seven articles published by ACE to mark 15 years of operation and celebrating the regulatory license recently acquired from the Registrar of Financial Institutions.

This article will focus on Warehouse Receipt Finance, please read article 3 for other elements of the Warehouse Receipt System. As mentioned in article 1, the Warehouse Receipt System was established to enable ACE to guarantee sellers' performance on an Exchange traded contract. There was, however, another element which became the absolute main driver of volume on the warehouse receipt system – finance!

The first ACE warehouse receipt was issued by Farmers World in 2011 to Lawrence Chikhasu, a small trader who deposited 14.5mt of maize. Mr Chikhasu immediately requested finance so he could go and buy more maize. No banks were on board at this time, so ACE, eager to show the potential of the Warehouse Receipt System, scraped what little funds ACE had and disbursed MKW 261,000, being 60% of the market value. Mr Chikhasu managed to aggregate a total of 40mt and sold about half to the World Food Programme on a BVO auction and the other half to a private sector buyer, earning a profit of 18% after storage and finance cost had been settled.

Only 6 receipts were issued in 2011, but with an average profit of 30%, everyone was very excited. All made money - the warehouse operator, the financier, ACE, and the traders. The fundamentals had been proven and all agreed to continue the further development of the Warehouse Receipt System. A task force was established with support from the USAID Southern Africa Trade Hub to create a set of regulations which could attract finance from the banks. ACE saw good support and participation from FCB (then FMB), NBM, CDH, OIBM and Standard Bank and in June 2012 the ACE Warehouse Receipt Rules and Regulations were adopted. By then, the first receipts of the 2012 season had already been issued and the depositors were literally screaming for finance. No bank came forward – this was most frustrating and something ACE had not anticipated after the support creating the ruleset. Again desperate to further develop the system, ACE dug deep and gathered MWK 5 million which ACE offered to the banks as a first loss guarantee for the receipt finance. FCB agreed and offered MWK 20 million receipt finance against ACE's first loss. That was the beginning of Warehouse Receipt Finance in Malawi.

The modality was called "haircut finance", as the bank would take a haircut and only finance a proportion of the commodity value. The default haircut in Malawi was 70%. The haircut was actually meant to be very flexible and change depending on market prices, commodity and time of year. This differentiation never really materialised and a standard haircut of 70% was applied. Despite 2012 also being a good year with average profit of 25%, more banks did not come on board. FCB did increase its finance gradually and didn't request a first loss guarantee anymore. The concern was price risk. Being exposed to the agricultural market was not normal business for banks — they are normally exposed to treasury bills and big balance sheets!

The 2014 election gave a hint to how unpredictable and volatile markets can be. With the election coming up ADMARC started selling maize at about half of the market price and maize prices came tumbling down. This dynamic does not suit the Warehouse Receipt System and maize depositors got stuck and on average lost 20% that year. In comparison, traders with pea receipts made a profit of 20% that year. ACE now had its first systemic loss on the Warehouse Receipt System, caused by Government market interventions. The only positive element from this situation was that the 70% haircut was enough risk margin and bank finance was not at risk – all haircut finance was settled. Even though finance was settled, the situation certainly didn't bring more banks on board.

The main concern then, and it is still the case today, is that ACE needs to come up with a way that the banks can hedge their exposure. It will be the only way to really develop structured finance on the warehouse receipt system. The ability to hedge is what makes the Johannesburg Stock Exchange (JSE) so successful, However, Malawi price fundamentals just do not follow the rest of the world and Malawi can therefore not enjoy the safeguards provided by the global exchanges and the market isolated to Malawi is too small to recreate the instruments here. ACE needed to be innovative.

In 2013 ACE went to Sunseed Oil (SSO), a large vegetable oil processor who was buying large quantities of soya. ACE said: "What is your cost of storage and what is your cost of finance? If ACE takes the market price today and add your own carry-over cost to, say, 5 months from now – would you take it at that price 5 months from now?" Sunseed Oil said: "Yes, but we would like to store it ourselves." And that was the birth of the ACE forward contract for soya.

When depositors delivered soya to SSO and got a warehouse receipt, ACE would also issue a contract between the depositor and SSO, where SSO would pay the calculated price and take delivery at a future date. ACE would now send both warehouse receipt and forward contract to the bank and request finance for the depositor. The bank would disburse to the depositor and the bank would be settled in full when the forward contract matured. In effect, ACE had just swapped the price risk, of the volatile agricultural market, with the balance sheet of a larger off-taker. This was what banks had been looking for and appetite for this type of receipt finance quickly materialised.

This was an incredible revelation to ACE, volumes on the Warehouse Receipt System increased; trade increased and most importantly, for the first time, significant levels of commission were being realised. ACE firmly believed that it had found the core commercial model. This was all good. However, ACE was also acutely aware that forward contacts, although providing crucial market access, didn't provide farmers with a market premium. The way the forward prices was calculated, the seller was only receiving the spot price as determined by the forward buyer. What was needed was more competition on the forward market and ACE expected that one day, a buyer would say: "I will take the ACE January price plus 1." This premium in the forward market would translate into a premium for the farmers in spot markets. In other words, the increased liquidity in the forward markets should push prices in the spot market. To ACE's huge regret, this never happened. The banks really only approved forward contract finance from a handful of large traders. Not enough to create competition in the forward market.

ACE also launched an unsuccessful receipt finance modality – bridge finance. In the early years where depositors saw significant profits, traders were naturally excited and hungry for finance. ACE got many requests and many small traders didn't have capital to bring the first load of commodity to warehouse. ACE came up with the bridge finance modality where ACE, in the beginning of the season, would advance to the trader for the first 5MT and get the 70% when the bank would disburse after deposit. In 2014, ACE trained and certified 23 commodity brokers, with the bridge finance modality becoming a central component of the services that the ACE brokers could offer their clients. Unfortunately, too many bridge finance recipients did not honour the modality, often depositing less than what they were supposed to deposit, which carved out any profits upfront and sometimes made the receipt go into loss, which meant bridge finance was not settled in full. ACE had to stop the modality when it became clear that undercutting the system seemed be the norm, rather than just actions from a few. The 2014 maize collapse also realised losses on the bridge finance modality. In all, one can say that bad timing coupled with a naïve belief and trust in the ACE brokers and other recipients put an end to ACE bridge finance.

By 2016, ACE could walk on water: That year ACE did 90,000mt of trade, 50,000mt on the Warehouse Receipt System, USD 12 million in disbursed warehouse receipt finance and USD 150,000 in realised commissions, just shy of being sustainable. What could possible go wrong? Well – a series of very unfortunate events, which could maybe have been anticipated and mitigated against if they happened in their own right, but when they happened simultaneously, it looks a lot like a Black Swan event.

Firstly, India stop buying pigeon peas, a contract to NFRA which would have saved all pea depositors never materialised, prices dropped 80% and the market was in complete collapse and disarray. Several banks lost significant amounts on pigeon pea finance and that was the end of the haircut modality. A crude realisation of just how vulnerable agricultural services and structures can be.

Secondly, in 2016, the Government had called for significant food aid and estimated that Malawi was short 1 million metric tonnes of maize. Resources were made available by DFIs and Development Partners and by October 2016 significant volumes were contracted for import from Mexico. In November 2016, private sector flagged that market indications showed that there was not a shortage. ACE called for meetings to raise the flag, push for Government to allow export and try to get the Food Aid Industry to divert imports and switch to local procurement.

Private sector was right, there was indeed an oversupply of maize and prices were in steady decline. Private sector was sitting on about 100,000mt and ADMARC the same. Tanzania was short of maize and wanted to buy it all at very attractive prices. Government refused and instead of exporting surplus Malawi maize to Tanzania, Malawi was importing Mexican maize – to underline the absurdity – the import came through Tanzania!

Maize was carried into the new season with significant negative impacts. Private sector realised huge losses, ADMARC needed at multimillion dollar bailout, banks retracted finance, no demand materialised for new season maize which saw the lowest farm gate prices ACE had ever recorded, and farmers lost billions of kwachas. It is a vicious circle and the economic impact on Malawi was huge, and yet it could have been so easily prevented. It is astounding that Government refused to export excess maize, and it was equally surprising to discover that the Food Aid machinery was completely unequipped to recognise and respond to a changing situation on the ground. There is a real need to make sure this doesn't happen again.

Nearly all value chains were affected and most warehouse receipts made significant losses. Many private sector companies were struggling and bank appetite to finance agriculture was nearly non-existing. Forward contract finance dropped from USD 12 million to USD 0.5 million and the modality did not recover. By 2018 finance started picking up again. However, banks were requesting ACE to offer more traditional collateral management services, rather than the forward contract modality. ACE established Commodity Service Limited (CSL) to handle this new demand and further develop commodity and warehouse services integrated with the Warehouse Receipt System. In essence the modalities are the same, but the paperwork is different. ACE sees this demand for Collateral Finance as the latest phase in the Warehouse Receipt Finance evolution. It is great relief to see warehouse receipt volumes and finance reaching 2016 levels again. Although this time, ACE is walking with caution, not on water!

A significant catalyst for ACE's ability to facilitate finance, develop new modalities and engage with banks, is the regulatory framework now adopted in Malawi. The process was started in 2014 by the World Bank Group and only finalised with the licensing this year. It has been a great process to have been involved in – great dedication from the Ministry of Industry, Trade and Tourism, the Reserve

Bank of Malawi and industry leaders. We have international experts exclaiming that Malawi has adopted a first class regulatory framework for commodity exchanges and Warehouse Receipt Systems. It is now ACEs job to convert this into first class finance and risk modalities.

There can be no doubt as to the importance of agricultural finance. The more finance, the more liquidity, the more demand and therefore better farm gate prices. The state of agricultural finance is directly related to the state of the agricultural sector as a whole. But when it comes to access to finance in rural areas, the answer is not that clear cut. Accessing finance always comes with a risk. If your added value does not match your interest on the finance, then you will be making a loss. Most agri-industry participants have different tools at their disposal to navigate the risks. Rural farmers, on the other hand, do not and are therefore left exposed to the market forces.

ACE has an exhaustive dataset of all warehouse receipts ever issued on the system and ACE asked IFPRI if they would be interested in doing a detailed analysis of the data, to identify if certain behaviours were leading to losses and others to profit. The balancing act for ACE is to determine whether ACE should promote access to finance to rural farmers or if this is too risky. The hope was that IFPRI could create a set of rules, as in, if market price for soya is less than USD350/mt then there is a 90% chance to make profit if the farmers store, access finance and sell within 6 months. IFPRI agreed to do the study, but our hope was quickly squashed. The reality presented itself much more complex and complicated. Please find more info on IFPRI website <a href="here">here</a>.

Clearly the 2014 and 2017 event explained most of the losses experienced on the Warehouse Receipt System, but there were also other losses. There is a negative relationship between the duration of storage and the returns that the depositor makes. For example, maize and soya stored less than 180 days generally made a profit. However, a duration of less than 90 days was the case for pigeon peas. It is also important to point out that cost of finance was a significant share of total receipt cost. Some of these receipts had a cost of finance as high as 35%, it is good to note that today this has come below 20%. There are many nuances to this study and ACE can only recommend that readers study it for themselves.

What does stand out is that receipt finance sometimes is not beneficial and can be very risky if the market experiences external interventions. Unfortunately, this is the reality. On the other hand, access to finance is also the tool the farmers need to be able to delay a sale in a year where the prices are extremely low, like 2017. But again, according to the study, even extreme low post harvest prices, does not mean the receipt will make a profit. ACE does believe in providing farmers with choices and access to finance is a crucial and important element, even if the choice is hard to get right. The biggest take away, however, stands out even clearer – Government needs to stop unhealthy and detrimental interventions in the agricultural markets which have devastating outcomes for all value chain actors.