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Tobacco Revenue Management: Malawi case study

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Tackling Commodity Price Volatility

This paper is published as part of a larger project, sponsored by the Norwegian Government, on policy options to tackle the problem of commodity price volatility. More research and papers can be found at http://www.iisd.org/trade/commodities/price.asp

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1.0 Introduction

Malawi is a relatively small country in southern Africa bordered by Zambia, Tanzania and Mozambique. It has a total area of 118,480 km^2, a fifth of which is taken up by Lake Malawi. The climate is sub-tropical, with a rainy season lasting from November to May.

Source: CIA World Factbook, 2006

The population is estimated at just over 13 million, nearly half of which is under 15 years of age, and less than three per cent over 65 years. With an annual growth rate of 2.38 per cent (CIA World Factbook, 2006 seen in Stanbic Bank, 2007), rapid population increases are driving land pressures in a country that is critically dependent on agriculture—specifically tobacco.

This paper is not based on extensive fieldwork, but rather on a critical review of the existing and potential measures available to stabilize tobacco incomes in Malawi. The first section of the paper will examine the extent of Malawi's dependence on tobacco and the crop's persistent price fluctuations. The second section will detail approaches used within the country to stabilize tobacco revenues, before concluding in section three with recommendations for moving forward.

1.1 Dependence on agriculture

Agriculture is the driving force in Malawi's economy. Not only do many families depend on crops for sustenance and income, agriculture also directly affects the service sector, dominated as it is by the transport and distribution of agricultural products. Apart from the food crops grown by virtually all independent farmers, the main smallholder cash crops in the country are tobacco (primarily of the burley variety), groundnuts, rice, cotton and maize. Large commercial estates specialize in Virginia (flue-cured) tobacco, tea, sugar, coffee, rubber and nuts (EIU, 2004).

Tobacco, or "green gold" as it is popularly known in Malawi, is the country's primary export and an important cash crop for both smallholder farmers and large estates (Zeller *et al.*, 1997 and FAO, 2003). Malawi grows four different types of tobacco: Burley; Virginia (flue-cured); Oriental, or "Turkish" tobacco; and Malawi Western. There are three strains of Malawi Western tobacco: Northern Division dark fire-cured (NDDF); Southern Division fire-cured (SDF); and sun/air-cured (Matthews and Wilshaw, 1992). Burley tobacco, a staple for smallholders, is the most grown of all tobacco types due to its relatively low production costs (Mwasikakata, 2003).

Tobacco, tea, sugar and coffee account for 90 per cent of commodity exports. Tobacco makes up the majority of this, accounting for between 50 per cent and 70 per cent of total annual earnings, depending on production and prices. In recent years, its importance has fallen slightly as a result of the lower prices fetched at auction and static levels of production.

Despite this, tobacco still plays a significant role in national economic growth, both for rural households and the state. In 2003, the World Bank reported that tobacco made up 60 per cent of Malawi's exports, 13 per cent of its GDP and 23 per cent of its total tax base (Jaffee, 2003). Over time, export markets have become more diverse for the crop; a report by the Food and Agriculture Organization notes that Malawi's tobacco export destinations increased from 45 in 1988 to 78 in 1998 (FAO, 2003). Among these, the top 10 markets for tobacco are Germany (19 per cent), the U.S. (11.4 per cent), Zimbabwe (6.5 per cent), Russia (5.9 per cent), Belgium (5.6 per cent), South Africa (5 per cent), Egypt (4.6 per cent), the Netherlands (4.3 per cent), Poland (3.5 per cent) and Turkey (3.2 per cent) (Standard Bank Group Economics, 2007). With a long history of cultivation, the wealth generated by Malawi's tobacco trade has not only laid the foundation for its cities, but has also been responsible for most of the few signs of "prosperity" which one sees in rural Malawi—from tin roofs to bicycles and radios (Jaffee, 2003).

A smallholder tobacco garden in Chimbiya, Dedza district (Nelson Nsiku, 2007).

1.1.1 Farming household employment

Tobacco has contributed to the dynamic development of the smallholder sector in Malawi over the past 15 years. This development was sparked by the liberalization of burley tobacco production for smallholders in 1990, when the Special Crops Act of 1972 was amended to allow smallholders to grow burley tobacco under a quota system. The smallholders, who had previously been banned from burley production because of concerns that tobacco was being grown in place of essential food crops and that it was affecting soil fertility, responded energetically. Given that burley is more profitable for most smallholders due to low land and capital investments, the number of burley farmers subsequently increased dramatically. Initially, farmers were required to sell their tobacco to the Agricultural Development and Marketing Corporation (ADMARC), but later they organized into clubs and were given direct access to auction floors.

Almost 20 per cent of the farming households in Malawi grow tobacco, and almost 93 per cent of these grow burley tobacco (Mwasikakata, 2003). For these households, 89 per cent of their cash income was derived from the crop in 2003. But this income is not protected; according to the second Integrated Household Survey in 2004–2005, only 25 per cent of tobacco growing households are members of tobacco growing clubs (National Statistical Office, 2005). This means that over 75 per cent of tobacco-farming households must face the harsh realities of growing, logistic and auction processes on their own, rendering them very vulnerable to all sorts of shocks. Additionally, in the tobacco-producing regions of Malawi where such households are concentrated, cash income from other crops is relatively minor—thereby increasing the risk associated with the activity (Mwasikakata, 2003).

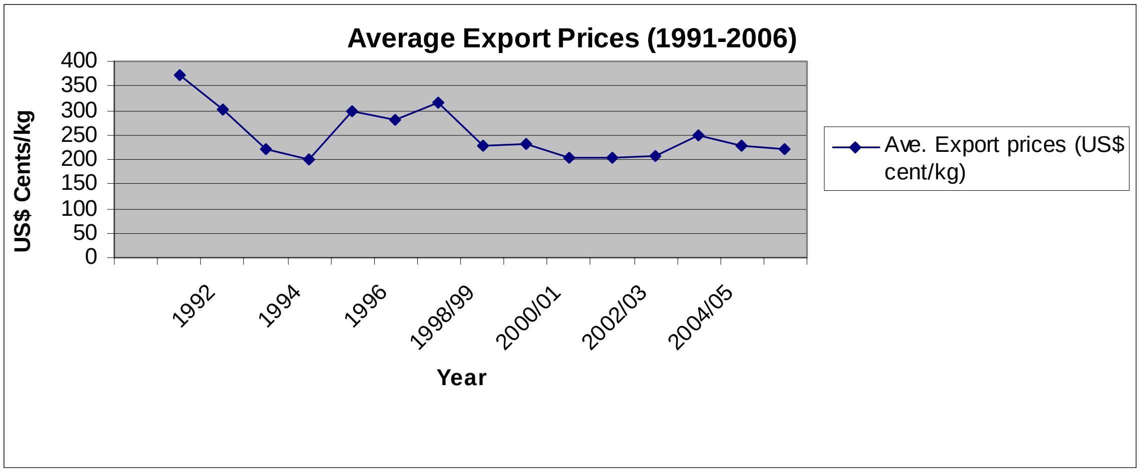
1.1.2 Tobacco production

Tobacco production was tightly controlled by the government before 1990 under the Special Crops Act. All tobacco producers had to obtain a licence from the government regulatory body, the Tobacco Control Commission (TCC). The TCC often granted licences only to estates and landowners. In addition, a grower had to reach a certain production scale to be eligible to sell tobacco leaf directly on the auction floor, thereby excluding most smallholders.

With the repeal of the Special Crops Act in 1990 and the subsequent economic reforms up until 1995, hundreds of thousands smallholder farmers were allowed to produce tobacco. In 1990–1991 about 7600 smallholder farmers were registered to grow burley tobacco on a pilot basis (Zeller *et al.,* 1998). By 1993–1994, more than 30,000 smallholders were organized in 1,318 clubs. Since that time, the number of smallholder tobacco producers has increased. According to a recent estimate, some 315,000 to 330,000 smallholders are producing tobacco (Jaffee, 2003), while other estimates of farmers and workers engaged in tobacco production, marketing and processing range from 650,000 to nearly two million. Although there was still a minimum quantity requirement to sell output in the auction market, the introduction of "intermediate buyers" for tobacco made it possible for every farmer to produce tobacco, regardless how much they wanted to produce. The intermediate buyers functioned as the middlemen between small-scale tobacco growers and the auction market, buying tobacco leaf from many small-scale growers at a negotiated price and them selling them on the auction floor at the market price. Thus, every farmer was able to produce tobacco without any quantity restriction.

Malawi's tobacco export revenues peaked at US$338 million in 1998, but were estimated to have fallen to US$249 million by 2003, according to the TCC. Figure 1 reflects the simultaneous drop Malawi saw in average export prices. Some have attributed falling prices to a reduction in the quality of the leaf and because of the failings of the intermediate buyers system (Kadzandira *et al.,* 2004). Intermediate buyers were supposed to purchase tobacco from smallholder farmers and allow savings through economies of scale in grading, baling and presentation, but many of them lacked experience, and guidance from the industry was not forthcoming. The system was abolished in 1998 (Mwasikakata, 2003).

Figure 1: Average export prices, 1991–2006



Source: 1991–1997 (adapted from FAO, 2003); 1999–2006 (adapted from TCC, 2006)

Tobacco production rebounded in 2002–2003, however, with better weather conditions and an increase in the production of flue-cured tobacco, which fetches a higher price than burley (which is grown mostly by vulnerable smallholder farmers). Despite continued good growing conditions, burley production fell in 2003, as farmers' concerns about food security, following the 2001 famine, made maize cultivation more pressing than the production of cash crops.

Some of the early harvested tobacco leaves drying in the sun/air: (Nelson Nsiku, 2007)

However, movements towards flue-cured production are expected to continue to rise as tobacco merchants aim to compensate for the collapse of the crop in Zimbabwe following that country's land disputes.

1.2 Major trends affecting revenue

Malawi's tobacco producers face three main problems. First, the declining international price of tobacco has had adverse effects on their profitability. Malawi tobacco producers face stiff competition not only from the EU, but also from other developing countries, particularly Brazil (AfDB/OECD, 2006). Second, EU subsidies to European tobacco farmers make competitive prices difficult to achieve for Malawi's sector; for instance, EU countries like France, Germany, Spain and Greece, to mention a few, receive a subsidy of US$1.60 per kg of tobacco, an amount higher than the average auction price of tobacco in Malawi, which was US$1.11 per kg (see Figure 2, Reserve Bank of Malawi, 2005).[1] Finally, the demand for tobacco in developed countries has stagnated because of the anti-smoking lobby.[2] Some analysts question the extent to which this is an issue; Koester argues that there is no demand constraint for Malawian tobacco, but rather that there is a need to be quality and cost conscious (Koester, 2005). This is echoed by a Philip Morris spokeswoman, who stated that, "prices are not related to demand. They can be influenced by the amount of sale and quality" (Vidal, 2005).

Price volatility

Tobacco prices have been sliding on the auction floors for the past 15 years (see Figure 2). During that time, farmers have fought buyer cartels, claiming that prices have been artificially depressed through buyers' collusion (Maeresa, 2006). In Malawi, three firms control most tobacco procurement (versus 16 in Zimbabwe): Limbe Leaf, Dimon and Standard Commercial/Alliance-One, who together hold nearly 95 per cent of the buyer market (Gwaza, 2005). These buyers operate as a cartel through their monopoly on processing, and have maintained their share over time with only minor variations. Producers bear the weight of these compounded rents and inefficiencies, depressing their incomes and returns on investment.

On the ground, tobacco prices remained disappointingly low in 2005, averaging US$1.11 per kg, compared to US$1.14 per kg in 2004. Of great concern were burley tobacco prices, as burley makes up the bulk of tobacco grown in Malawi: prices averaged US$0.99 per kg in 2005, down 9.2 per cent from 2004. In fact, at the beginning of the 2006 auction sales season, burley tobacco fetched an average of US$0.60 per kg, down from US$0.67 per kg at the beginning of the sales (TCC, 2006). Since 2003, prices at auction floors start low, often forcing frequent buyer–seller stand-offs until an agreement is reached. In March 2006, the situation led Malawi's President, Dr. Bingu Wa Mutharika, to threaten to expel the largest tobacco buyers (Limbe Leaf, Dimon and Standard Commercial) if they continued to offer prices lower than the government's minimum price of US$1.10 (Maeresa, 2006). He said that

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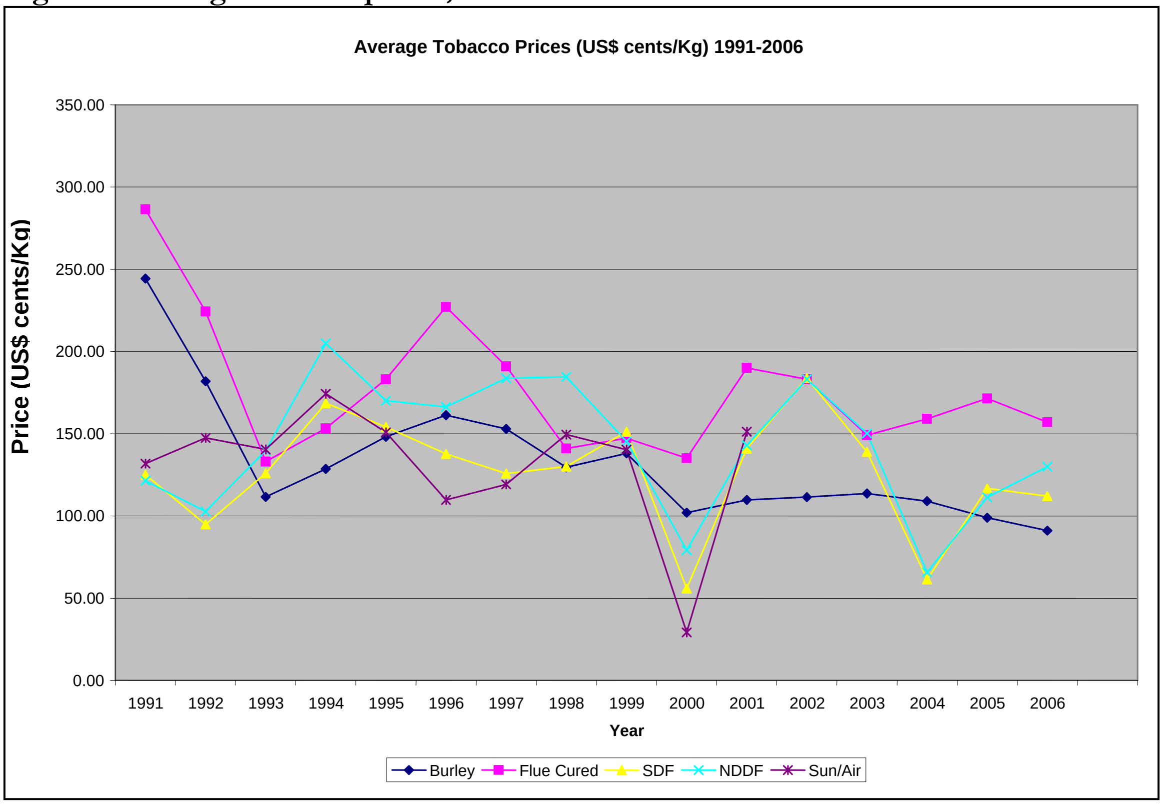
[1] Producers in Italy, Greece, Spain, France, Germany, Portugal, Belgium, Austria and a other new members of the EU receive these subsidies under the Common Market Organizations (CMO). (Allamanis, N., 2005).

[2] WHO's Framework Convention on Tobacco Control (FCTC), adopted in May 2003, commits countries worldwide to act to reduce the toll of death and disease caused by smoking.

poor smallholder farmers in Malawi have remained poor because they are cheated by international cartel buyers that collude to buy tobacco at exploitative prices and sell the same tobacco for high profit. It must be noted that minimum prices are often recommended prices only. In a liberalized economy, prices cannot necessarily be fixed, but the government may apply other forms of threats—such as the revocation of licences. However, the prices paid to Malawian farmers are nowhere near the cost of production, which is estimated to be US$1.22 per kg (Maeresa 2006). Should current low prices continue, the incentives to produce tobacco will be even lower in subsequent years.

Figure 2: Average tobacco prices, 1991–2006

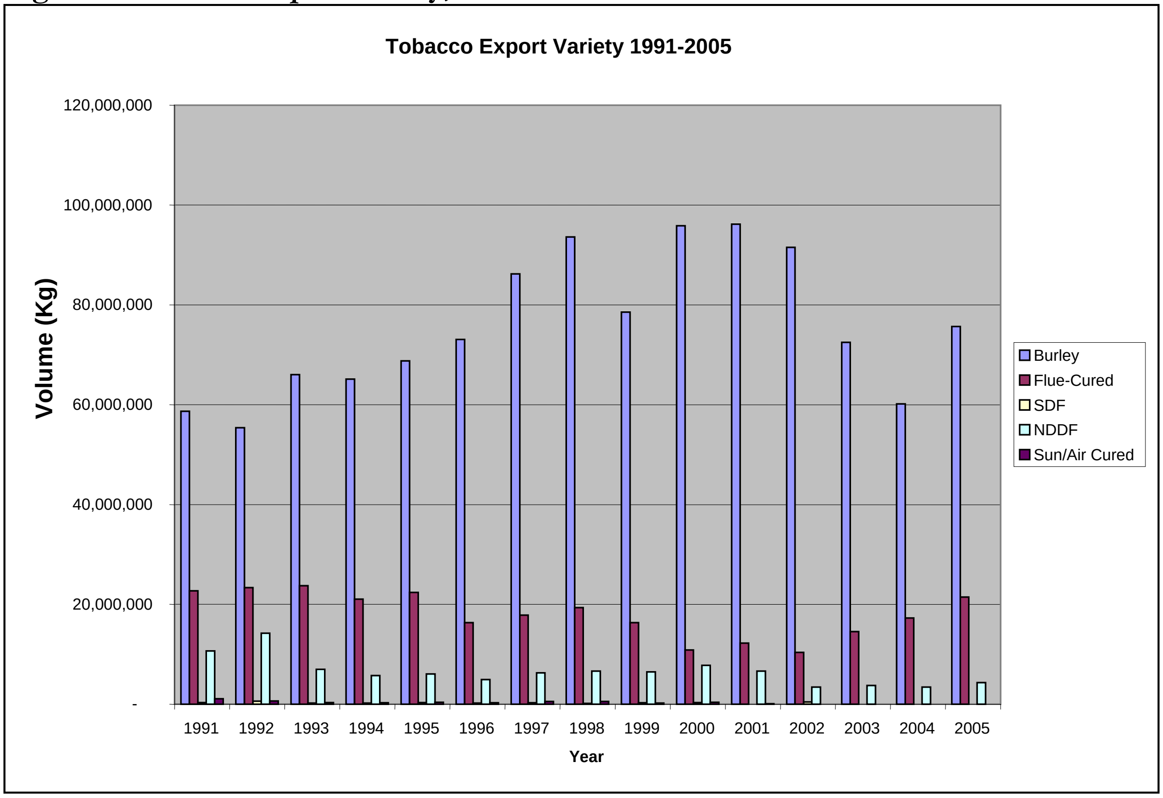


Source: TCC, RBM Monthly Economic Review, 2006

1.3 Impact of price volatility

With developed countries discouraging smoking, Malawi has chosen to diversify its export crops—to paprika, macadamia nuts, citrus fruits, vegetables and cut flowers. Yet despite various initiatives by the state to diversify Malawi's income base during the past three decades, tobacco continues to be the country's major source of export earnings, albeit with declining revenues.

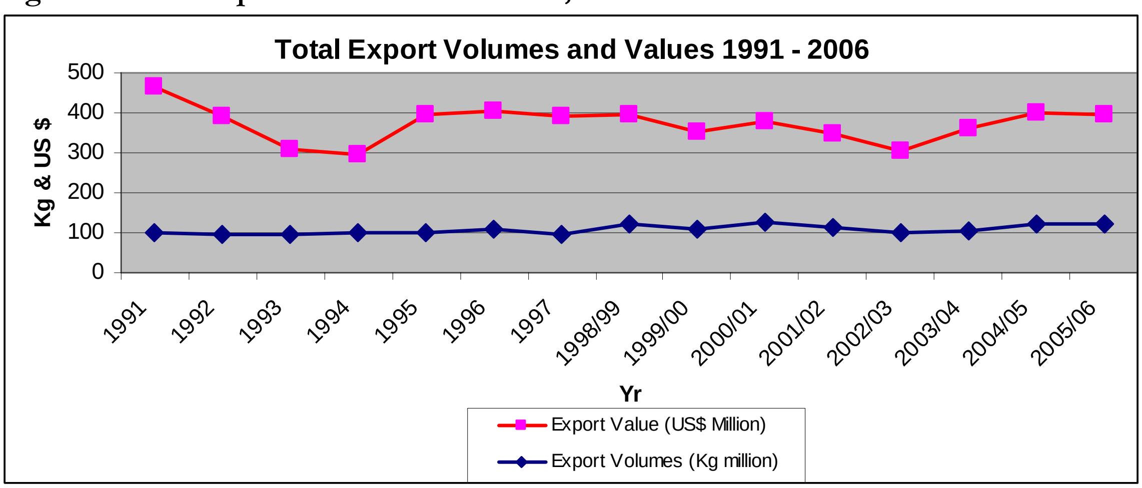
Figure 3: Tobacco export variety, 1991–2005



Source: Tobacco Control Commission, TCC (2006).

Tobacco has earned approximately US$400 million in foreign exchange annually for the past three decades, with yearly variations. This accounts for approximately 60 per cent of the country's total export earnings. Fluctuations are largely attributed to prices rather than volumes (although the latter can be influenced by the former—for export volumes, see Figure 3). Despite highly fluctuating prices, the export volumes smoothen out between 100 and 125 million kgs, suggesting some difficulties in diversifying (Figure 4).

Figure 4: Total export volumes and values, 1991-2006



Source: Adapted from IMF, NSO/RBM, TCC (data for 2006 is forecast)

The general tobacco price level as measured by the weighted average of four main types (flue-cured, burley, northern division and southern division dark fired) has been declining since 1991 (Figures 2 and 3). The average price of burley reached a high of US$2.36/kg in 1991 only to decline to US$1.16 by 1993. It rebounded to US$1.69/kg with the repeal of the Special Crops Act in 1994 to 1996, but has since continuously fallen, to an average of US$0.91/kg in 2006. Beyond burley, overall tobacco prices averaged US$0.99/kg in 2006, down from US$1.68/kg more than a decade ago. The only exception is NDDF, whose average price increased to US$1.30/kg in 2006 from US$1.11/kg in 2005 (Reserve Bank of Malawi, 2006). The Malawi Growth and Development Strategy (MGDS) is attempting to capitalize on this NDDF price increase by promoting its cultivation (MGDS, 2006).

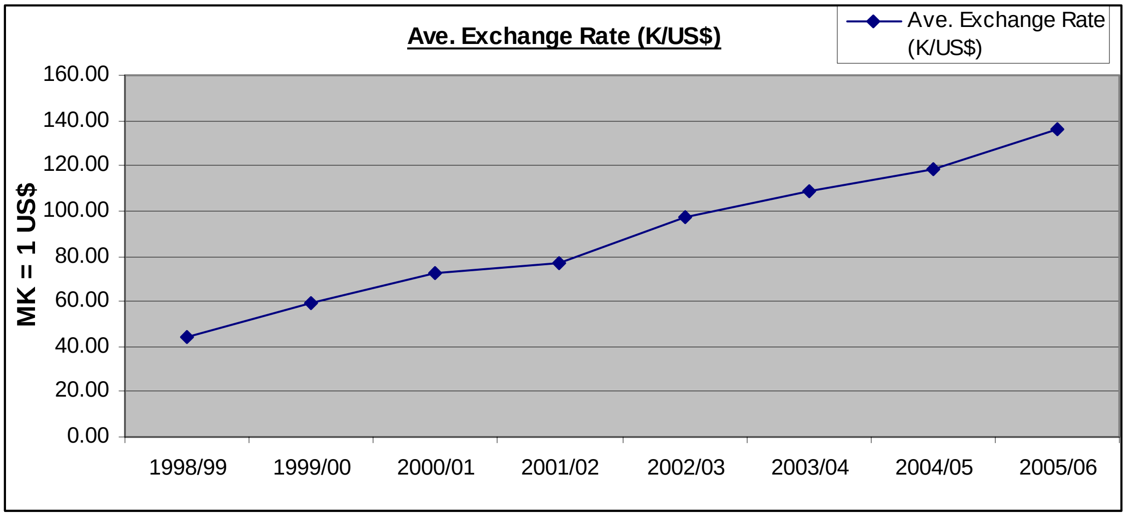
Overall, the challenges to tobacco market stabilization in Malawi include the small-scale nature of production, the poor performance of the state and public institutions such as ADMARC, inadequate market information and unequal benefit-sharing for tobacco revenues between producers and buyers.

Other challenges remain. According to the Reserve Bank of Malawi, poor access to productive assets (leading to poor quality tobacco), overproduction, poor physical infrastructure, erratic weather patterns and a general decline (or, as one leading central bank economist argues, slow growth) in global demand for tobacco are behind unsatisfactory recent prices (Reserve Bank of Malawi, 2006). This paper does not attempt to pursue these constraints, as they either require broad macro-economic interventions or exist outside of the state's sphere of influence. However, we will pursue the former set of challenges, as they are the most immediately manageable.

Tobacco farmers in Malawi appear to have little control over tobacco prices.
Tobacco prices are largely influenced by buyers. This is a function of both historical factors and the market structure itself. Tobacco leaf is generally sold in auction markets owned by Auction Holding Limited (AHL), in which the government, through ADMARC, used to hold a slight majority of the shares; by 1997, the government was attempting to dispose of the remaining 11.6 per cent it held through the privatization process (Privatization Commission, 1997). Sales through the auction markets are generally subject to a variety of charges and taxes: a commission of 3.95 per cent is imposed on sales, and all fees and payments, including input credit, Tobacco Association fee, tobacco research contributions and other payments, are directly deducted at hammer fall.

Secondly, although buyers (i.e., tobacco exporters) pay U.S. dollars for tobacco at auction, most sellers receive payment in local currency calculated at the exchange rate at the time of sale. However over the course of the growing season farmers and other groups whose economic activities depend on tobacco will be purchasing inputs such as petroleum and fertilizer, inputs which become more expensive as the local currency depreciates (see Figure 5). Inflation, having been high in recent years, therefore presents a real problem for producers; it has ranged from 30 per cent in 2000 to 15 per cent in 2005—and thankfully continued to drop to nine per cent in early 2007 (National Statistical Office, 2007). Against this background, banks and money-lending institutions had to charge interest rates commensurate with inflationary levels; in 2001, for instance, the rates were at annual average of 50 per cent and are now estimated to be 20 per cent according to the Reserve Bank of Malawi.

Figure 5: Average exchange rate



Source: Adapted from IMF, NSO/RBM (data for 2006 is forecast)

Third, differences exist between farmers and buyer classification schemes at the point of sale. This often leads to disagreement as to what constitutes top-grade (grade A) tobacco: what buyers perceive as lower quality farmers may judge as high grade. This problem makes farmers fail to relate price offers to the quality characteristics of their tobacco (Kadzandira *et al.,* 2004). Grade A tobacco fetched US$2.45 per kilogram on the auction floor in 1995 as compared to US$1.75 in 1998. Overall, the average price was US$1.48 in 1995, as compared to US$1.30 in 1998—showing a general price decline over the period. Low-grade tobacco is thereby indirectly encouraged while high-quality crops are not given the appropriate incentive; without receiving the prices they should at auction, farmers (especially burley producers) do not see the economic rationale to invest in the more expensive crops. Prices should be determined at auction through interactions between buyers and sellers, but these price discrepancies suggest that farmers are not getting the information they require to earn fair revenues. However the urgent need for cash by small-scale growers to pay back loans and avert inflationary effects accords buyers a stronger market position than sellers. Although the Tobacco Association of Malawi (TAMA) is in the market to represent small-scale growers, it has limited influence on the auction price (FAO, 2003 and Kadzandira *et al*., 2004).

The tobacco auction floor system is further undermined by the growing problem of tobacco smuggling. There are reports that 15 per cent of the tobacco on the Zambian market is smuggled from Malawi (Tobacco Farm Quarterly, 2005). According to Zambia's Eastern Province Tobacco Sponsors Association, the tobacco is being smuggled into Zambia because it can fetch more money on auction floors there than in Malawi (Tobacco Farm Quarterly, 2005). This occurs because the trading system used in neighbouring countries such as Mozambique and Zambia differs from the auction system used in Malawi.[3] In these countries, tobacco is bought at buying stations established by merchants at strategic points in the growing districts. Smallholders are reported to get a better deal as they do not have to pay the associated costs of the auction system, the relatively high transport cost to market, and the withholding tax on gross proceeds (EIU, 2004).

Both the buyers and smallholder farmers (including TAMA) have been calling for urgent reforms in the tobacco sector—particularly to disband the auction system. The auction system currently requires that flue-cured tobacco be sold on auction floors, however tobacco buyers are keen to lift this requirement and see an increase flue-cured production due to the premiums that the leaf can charge in the market. Flue-cured tobacco is favoured due to its flavour, which is good for blending and particularly valued in some emerging markets like China. Malawi has introduced two main initiatives to increase production: contract farming (an agreement between farmers and buyers for the production and supply of tobacco leaf under forward agreements); and buyers producing their own flue-cured tobacco. If they succeed, the auction system is likely to collapse rapidly, leading to rural buying systems. The biggest losers of an auction system collapse would be the shareholders in AHL, including the government, which will lose its ability to levy the withholding tax at source. In addition, the major revenue the government has collected from tobacco exports has been from a tax on tobacco exporters' profit. Thus, while government would not stop collecting tax on profits, the AHL and other domestic revenues would be lost.

1.4 Concerns about the health risk of smoking

There are global efforts to reduce smoking. Demand is dropping, and cigarette companies, especially Western ones, are having to balance increased taxes and litigations with price demands (often through governments and producer associations such as NASFAM in Malawi) from producers (Lewis-Fuller, 2006; Vidal, 2005). While emerging markets—specifically China—may open up for some producers, the prospects for Malawian tobacco in the Chinese market are limited by the failure of the major cigarette manufacturers to promote demand for American blend products in the country. These contain burley, Malawi's chief crop, as opposed to the flue-cured cigarettes currently favoured by Chinese consumers. For now, Malawi is going to have to concentrate on its traditional markets in the EU and the U.S. (Koester, 2005).

[3]In Malawi, auction floor charges and the withholding tax levied at the auction floor cost farmers around 13.5 per cent of the gross price in 2003. For the 2004 season the TCC levy was reduced to 0.10 US cents/kg, from 0.13 US cents/kg, the TAMA levy from 0.85 US cents/kg to 0.70 US cents/kg and the hessian levy from 0.92 US cents/bale to 0.30 US cents/bale. The levy charged by Auction Holdings, the operator of the auction floors, has also been cut, from 3.95 per cent to 3.25 per cent (EIU, 2004).

2.0 National Approaches to Managing Tobacco Revenues

While it is not encouraging to note the declining total revenue as prices fall, there are clear strategies in place to stabilize national revenues as well as producer incomes. The current approaches to stabilize national incomes are through a focus on specialty tobacco crops that fetch higher unit prices (i.e., not burley), and addressing institutional constraints. Recently, the MGDS spelled out the following as the main national revenue stabilization mechanism aimed at increasing production of higher valued flue-cured and NDDF tobacco (both niche markets): (1) increased focus in terms of production; and (2) the creation of a more efficient and fair system between farmers and auction houses (MGDS, 2006) through (*all italicized comments are our own emphasis)*:

- Establishing cooperatives (*presumably farmers' clubs similar to those established through National Association of Smallholder Farmers of Malawi – NASFAM*);
- Promoting tobacco products processing (*value addition, a broad national economic objective*);
- Providing farmers with inputs such as seed, chemicals and fertilizers; and
- Enhancing agricultural extension services (a system of sending out instructors to teach farmers on modern methods and technologies) and expertise.

The MGDS is set to address the current and real issues so far identified: price volatility, the auction system and quality improvements.

The government—even before independence—and producers have attempted to address the problem of commodity market instability. Prior measures have typically fallen within supply management and support for diversification mechanisms; we will now explore how some of these mechanisms have performed.

2.1 Supply management experiences

Supply management entails overall control of supply and the allocation of market share between participating producing members. The concept of national tobacco output management dates back to the British colonial government, when the Native Tobacco Board (NTB) was founded in 1926 to take responsibility for the production and marketing of tobacco.

Although this paper concentrates its analysis on the past 15 years, the NTB provides a very interesting illustration of supply management over time. It was founded on concerns for food security, soil fertility and low quality tobacco due to the malpractices of an earlier system called the Tenant Farming Scheme. The NTB controlled the production, quality and marketing of the tobacco grown by smallholders throughout the country.

To do this the NTB registered all buyers and both the growers on Trust Land and the tenant farmers on estates. The NTB was financed by a levy based on the weight of tobacco produced on Trust Land and purchased by a buyer. The government would make loans to various estate owners (who were assumed to have incurred losses rather than their tenants—arguably one of the means of income distribution) if prices fell or refund of customs duties (referred to as Imperial Preference) to buyers if freight rates increased. In addition, the government increased the number of Agricultural Supervisors to support bankrupt farmers and to spread the knowledge of soil conservation. The assumption therein was to motivate producers and buyers in order to promote the tobacco crop. It was important for Malawi to develop and retain market share in the world, hence the need to sustain supplies.

Increasing transportation costs and lower prices eventually led to widespread complaints and the introduction of an American-style[4] auction system. Here, in a move to improve quality, presentation and packaging to fetch higher prices, the government demanded that growers grade their tobacco and introduced a simple system of classification.

By 1938 the NTB was responsible for buying the crop and selling it over the Auction Floors in Limbe. Estate owners were confined to buying tobacco from their own tenants. Up until then, tobacco was purchased by individual buyers and there was no system of guaranteed or fixed prices (Matthews and Wilshaw, 1992; McCracken, 1983).

The second phase of supply management started in 1952 when the NTB changed to the African Tobacco Board, then to Farmers Marketing Board in 1962. Other than a change of name and the scope of the crops covered, ATB and FMB operated in the same way as NTB, although the stabilization of producer incomes remained the elusive goal of these reforms. A state-owned marketing authority, the Agricultural Development and Marketing Corporation (ADMARC), essentially took over after independence in 1964. Recognizing that the income which smallholders received was central to increasing production and improving quality, ADMARC set to fix domestic prices in relation to fluctuating global prices, supported by adequate stabilization funds (Malawi Tobacco Yearbook, 1985). ADMARC, in consultation with the government, would guarantee minimum buying prices and announced this set price before planting for the season began. Thus farmers knew what to expect at the market when harvesting began. Once the crop reaches the market, these prices were either confirmed or increased, depending upon the prevailing export parity values. The government absorbed the difference between the price paid to the smallholder growers and the global market price.

The scheme failed because of declining world prices made support untenable and subsequently IMF and World Bank-led liberalization programs challenged the supply control aspects of this management scheme. First, the IMF and World Bank viewed these as conflicting with the market principles of demand and supply. Supply controls would artificially sustain high prices. Secondly, the government of Malawi—it would be argued—could not continuously be paying for losses arising from low world prices through subsidizing ADMARC. While the liberalization of trade enabled farmers to earn prices closer

[4] A representative of each licensed buying company takes up a position in a line parallel to the bales which are laid out in long rows. On the opposite side of the bales, facing the buyer, is the Auction Holdings selling team: the starter, the auctioneer and ticket marker. The starter announces a price at which bidding starts and the bale/lot is then sold (selling between 600 and 1,800 per hour depending on the skill of the starter in choosing a price close to the assessment of the buyers for each bale/lot). The auctioneer advances the bidding to completion in a personalized sing-song chant. The ticket marker then records on the bale/lot ticket the final price, the buyers' name and the grade mark. Representatives of the buyers then follow up the quality check to confirm the quality of the bale—which they may end up rejecting. Growers' representatives also check the prices—which they may also reject. The TCC, as the arbitrator, makes final decision to accept or reject.

to the world market prices, it exposed them to fluctuations in the international market. Declining prices in the end proved too much for the supply management scheme.

Until the 1990s, when the IMF/World Bank sponsored reforms took effect, smallholders were permitted to grow only fire-, sun- or air-cured varieties, which could be sold only to ADMARC at fixed prices, whereas estates grew flue-cured and burley, which were sold at auction. With the repeal of the Special Crop Act in 1994, there was an increasing level of smallholder participation in flue-cured and burley production and increasing auction prices per unit from 1994 to 1996.

2.2 Support for diversification

Malawi cannot attempt to raise tobacco's profile through marketing campaigns; such actions would be met with scorn from health-conscious governments and international bodies such as the World Health Organization. Financing the tobacco sector is similarly difficult; the World Bank has a formal policy that it will not lend directly for, invest in, or guarantee investments or loans for tobacco production, processing or marketing (policies laid out in the World Bank's 1991 and 1999 "operational policy" on the tobacco issue, in Jaffee, 2004).

There are exceptions, however. World Bank operational policy states that it will support diversification in countries that are heavily dependent on tobacco as a source of income and foreign exchange (i.e., more than 10 per cent of exports). As Malawi qualifies under this exception, a *de facto* compensatory finance mechanism has been set up by the Bank to give support to the sector with a view to enhance participation to increase wealth for the poor (the 1997 World Bank Growth Prospects Paper, in Jaffee, 2004). For instance, a World Bank project extended technical assistance and increased the availability of credit to smallholders, primarily through the Malawi Rural Finance Company (MRFC).[5] The company came to serve as the leading source of finance for smallholder tobacco growers organized into burley clubs. There was a need, as Malawi's commercial bank lending to the agricultural sector had declined by some 75 per cent in real terms between 1990 and 2000 due to increasing risks associated with lending to tobacco farmers, such as loan defaults due to poor harvests (CBM, 2000). The increased lending of the MRFC only partially cushioned the blow caused by this contraction (Jaffee, 2003). The idea behind increased access to credit, and flow of cash, in the rural areas is to increase economic activity. Improved tobacco productivity would enable rural populations to invest (diversify) into other secondary activities like retailing and small-scale agro-processing. The World Bank and other donor agencies have and will continue to provide support to facilitate the diversification of the rural and national economy in Malawi. The country simply has no (realistic) alternative as of now and support for diversification is a long-term intervention. The success of diversification strategies depends on the maintenance of a competitive and profitable tobacco sector from which savings can be derived and invested in other economic activities such as trading and agro-processing activities (Jaffee, 2003).

[5] The MRFC, established in 1993–1994, is an autonomous, though government-owned company.

2.3 Other forms of tobacco income management in Malawi

By definition, commodity price risk management instruments, also called commodity derivative instruments, are financial innovations intended to reduce risks from price uncertainties. While traditional stabilization schemes, whether national or international, transfer risks from producers and consumers to governments, these are instruments that reallocate risks among private traders (South Centre, 2004). In general, commodity derivative instruments include contracts where the principal or interest payments, or both, are indexed on a commodity price.

Private partnerships

Early forms of such agreements have been in place for years in Malawi. In 1920, Andrew Falconer Barron, owner of Mbabzi estates, provided seed to neighbouring African growers for growing tobacco, and later bought the crop at a previously agreed-upon price. While this arrangement worked initially, as the scheme expanded it became mired in malpractice and poor quality. Nonetheless, it was a long-term contract designed to ensure stable price and incomes.

Similar systems continued after independence in 1964, with large estates providing land, training, supervision and finances for production of the crop. The seedlings were raised jointly and the owner then bought the crop at a predetermined price. The system eventually had to be regulated by TAMA (an umbrella organization of smallholder farmers), who recommended a minimum price in order to avoid exploitation and curb pirating between estates. After the agreed price has been paid to the farmer, the estate took the surplus as profit or absorbed the loss. Experience has shown that price collapses present serious problems for such agreements. In some government owned estates like the Kasungu Flue-Cured Tobacco Authority, stabilization funds were set aside to cope with losses but could not prevent the estates from going into liquidation (Matthews and Wilshaw, 1992).

In 2002–2003, Limbe Leaf Company (through Baleke Investments in Kasungu) and Dimon Malawi engaged smallholders in the production of flue-cured tobacco. These companies provide all the inputs, equipment, food and extension services which are needed for flue-cured production. They then buy the tobacco from the farmers directly. It was reported that the contracted farmers earned "bigger" profit margins (according to their assessment) than they would by obtaining farm loans from the other agencies (Kadzandira *et al.*, 2004).

Individual smallholder farmers face some risk in signing up to such agreements due to the unequal bargaining power involved. But in the Kadzandira report, farmers maintained their preference for dealing with a company rather than an individual. As such agreements remain in their infancy, there is need within Malawi for clear legislation to regulate the contracts.

These two forms of contract farming indicate that innovative methods for distributing price and income risk are being applied to Malawi's tobacco sector. Since the government can only manage risk to a certain extent, private initiatives such as the Malawi Agricultural Commodity Exchange (MACE) have to play a role–although at the moment the MACE does not yet include tobacco.

3.0 Conclusions and Recommendations

This paper has described the tobacco market and its operations in Malawi. As with most commodities, tobacco prices are unstable, and affect government and farmer revenues. In general terms, concerns with this can be simplified to short-term price volatility and the long-term need for diversification. And while the government should actively address the challenges inherent in tobacco production, farmers and the private sector also have a role to play.

Income stabilization depends on implementing measures aimed at reducing marketing costs and bringing efficient markets closer to farmers through increased competition and/or better control of monopolies. It requires the development of efficient market-based risk management instruments, overcoming technical complexities, and ensuring that the concerns of the poor are adequately addressed (Parimal, 2006).

Above all, income stabilization depends on diversification away from tobacco cultivation over time. However, due to the long-term nature of economic diversification, tobacco incomes will be crucial for generating the savings and providing the additional purchasing power needed to build a diversified national economy. In the short term, resources must be used to improve tobacco production, quality and marketing in order to yield higher returns. Achieving productivity gains and radically reducing transaction costs within the tobacco supply chain would improve and help stabilize incomes.

The following are a series of specific proposals on the recommendations and concerns highlighted earlier.

3.1 Introduce exchange markets closer to farmers

Whatever the format, exchange markets (such as the Malawi Agricultural Commodity Exchange (MACE), or the National Smallholder Farmers Association of Malawi Commodity Exchange (NASCOMEX), both of which have not yet extended their services to tobacco), if they venture into tobacco, will shift the burden of logistical complexities from farmers to private institutions—with, of course, government regulation. In seriously considering this option, experiences from the failure of the Intermediate Buyers system should not be overlooked at local level. As they are operating now, the MACE and NASCOMEX are markets in themselves, linking producers of crops to buyers (including those in the international markets). With international buyers, the NASCOMEX has typically entered into future contracts, which could prove useful for tobacco farmers once extended to that crop. Additionally, the MACE has been disseminating market information using various means, including text messages via mobile phones.

To improve farmer access, Koester proposes Local Commodity Exchanges (LCEs), which are essentially decentralized auction houses with mobile teams of auctioneers and buyers working exactly as they would on auction floors but with increased mobility (Koester, 2005). LCEs can also offer commercial internet outlets to farmers, where they can access market information to improve their pricing position. Through increased trading and access to information, farmers can in turn reduce the margin between the auction price and the farm price.

3.2 Contract farming

Contract farming is being championed as an alternative to the traditional auction system in Malawi. It consists of an agreement between farmers and buyers for the production and supply of agricultural products under forward agreements (often at pre-determined prices). Brazil is one country engaging in contract farming. As a result, it has generated a shorter and more efficient marketing chain where exporters get lower costs and farmers get more money for their crop. By comparison, in Malawi contract growers have to go through the silent auction with a whole series of marketing costs and sales deductions; whereas in Brazil tobacco incurs costs of US$1.55 per kg, in Malawi costs are higher at US$1.67 per kg (Koester, 2005).

Contract farming is not only about getting a better price for the farmer. It is also about increasing investment, commitments and partnerships between growers and buyers, a relationship long fraught with problems in the past. Contract farming should be able to increase the buyers' involvement in the promotion of productivity and in the management of commercial and other risks faced by growers. It is only through some type of contractual arrangement, interlinking input supplies, advice and product sales, that the trend of declining revenues can be slowed—if not reversed for sustained profitability for growers.

Experiments involving contract farming in Malawi have been successful so far. Some of the benefits observed, even though they have not yet been quantified, include increases in employment, input sales (such as fertilizers), incomes and consumption. Moreover, in spite of some dissatisfaction among flue-growers at their lack of relative bargaining power with buyers, there is no evidence of farmers trying to exit their contracts or even switch buyers, which is surely a sign of the success of these arrangements (Gwaza, 2005).

Contract farming also introduces competition to the current tobacco auction system. Although contract farming, to some extent, lacks transparency, may reduce market power to buyers and could threaten smallholder farmers, it can also offer them higher yields and incomes, and possibly increase the efficiency of the marketing chain. This gives some incentive to the AHL to quickly decentralize by moving closer to clients and efficient farmer associations—driving competition among buyers. With these arrangements, farmers would be better suited to manage price risk, while improved contact with buyers would increase the flow of accurate of information about prices and market needs.

The Malawi government has recently given its support to promoting flue-cured tobacco production (MGDS, 2006). Contract farming for this tobacco crop seems to have the support of the overwhelming majority of small estates and smallholders, who are now requesting that it be extended to burley to drive investment in production capacity. It appears as though this is the direction in which the industry is moving (EIU, 2004). However, the environmental implications must be considered; curing flue-cured tobacco requires an intensive use of wood, which could lead to increased deforestation. As such, other technologies like the use of sugar cane waste must be explored as alternative sources of energy.

3.3 Diversification

Given that commodity prices will always be volatile, the government and development partners should continue pursuing diversification strategies. In doing so, they will be spreading out the risks associated with price volatility. At the moment, producers in developing countries are deemed more risky and hence need to pay a higher risk premium or provide higher-value collateral to lenders, which are usually beyond their means. To date, the success of diversification efforts is blurred, but what is clear is that an over-dependence on tobacco continues. This scenario justifies the advice that donors should invest in tobacco productivity—as a strategy to diversify—in order to build a savings base for diversification.

The sector seems to be cautiously accepting proposed improvements in marketing through local commodity exchanges (Koester, 2005) and the extension of contract farming to burley (Kadzandira *et al.*, 2004 and Koester, 2005). The success of these efforts will require improved institutional capacity to manage numerous LCEs and to regulate contracts that would be negotiated between parties of unequal power. Any initiative will also have to be piloted before scaling up (Gwaza, 2005).

Smooth and more predictable revenues will allow producers and the government to plan more strategically. For tobacco farmers, addressing income volatility will help reduce personal risk profiles, thereby increasing their ability to borrow and eventually diversify out of tobacco-dependency, freeing up resources for education and other value-adding investments at the national level.

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