Global markets, local implications: understanding the drivers and implications of the cassava boom and correction

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Keywords

Global trade, trade policy, market booms, cassava

Introduction

Throughout mainland Southeast Asia, cassava (*Manihot esculenta*) has become an important smallholder crop grown by millions of upland farmers. During the last decade, the area of cultivation has expanded rapidly to meet the growing demand for carbohydrates. This has included expansion in the mountainous regions of North-West Vietnam, particularly Son La province.

The market outlook for cassava has a long history of being influenced by changes in global markets and policies (Jackson 1968; O'Connor 2013; Henry and Hershey 1998; Sathirathai and Siamwalla 1987). This includes not only changes in the supply and derived demand for the intermediate products themselves (cassava chips and starch), but also changes in the supply and demand for a range of substitutes. In some applications, cassava competes strongly with substitutes based on superior function properties (Sánchez, T., et al. 2010). However, in many applications it competes mainly on price with commodities such as maize, sugar, wheat and crude oil. Therefore, changing agricultural and trade policies, in both production and consumption countries, have strongly influenced the cassava market and the prospect of smallholder farmers.

Research approach

To help demystify the recent downturn in the price of cassava we draw on market data that are largely publicly available. We demonstrate the need to understand global value chains beyond the local context in which production and consumption occur.

Results

The initial expansion of commercial production in Thailand (and later Vietnam), was largely driven by price support for grains under the Common Agricultural Policy (CAP) of the European Community (EC). However, with trade reform under GATT and WTO, the demand for cassava chips and pellets in Europe almost completely disappeared by the late 2000s (Figures 1a and 1b).



Figure 1a. Import volume of cassava chips by region; 1b - Import value of cassava chips by region; 1c - Import volume of cassava starch by region; 1d - Import value of cassava starch by region

The market was reoriented towards domestic consumption and markets in East Asia, as well as significant investment in starch processing (Curran and Cooke 2008). In the Asia-centric export market, Thailand remains the market leader when it comes to international cassava trade with Vietnam the second largest exporter. China was the destination for 99.84% of cassava chip exports and 45% of cassava starch exports from Thailand. Vietnam's starch exports are also predominantly destined for the Chinese market.

China is the world's largest producer of maize, cultivating over 37 million ha. During 2012–13, Chinese authorities intervened in the maize market, making purchases at the support price when the country's maize market again faced downward pressure on prices. Under pressure from growing stocks, in March 2016 the Chinese government announced an end to the floor price for maize. The result was a significant fall in maize prices and imports of maize alternatives declined, with the impact being felt throughout the cassava sector. The prices of cassava chips and cassava starch have fallen to more closely reflect the world price for the main alternative – maize – and farm-gate prices throughout mainland Southeast Asia fell accordingly.



Figure 2a – Maize prices (FOB Bangkok) and Chinese Nearby Futures (DCE); Figure 2b – Cassava starch and Cassava chip price (FOB Bangkok)

Discussion and conclusion

When deciding which crop to grow, farmers do not consider factors such as: the global price of oil, sugar, wheat, or distiller's dried grains with solubles (DDGS); changes in the demand for pork, or paper and cardboard; or whether a biofuel mandate is developed. Yet as a global commodity trade, understanding the connection between cassava and these markets in essential to understanding the outlook for the crop.

The picture of a smallholder farmer growing cassava on a half hectare in a mountainous village of Son La Province may seem far removed from European feed markets, maize production in the mid-west USA and the Chicago Board of Trade. However, the movements of global markets influence the farm gate prices that these farmers will receive. An understanding of the global market context in which these localised value chains (farmer-trader-processor) operate helps recognize the market risk that farmers and processors are exposed to. This can help develop informed scenarios with farmers and government agencies regarding the potential for intensification and diversification strategies improve farmer livelihoods.

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