# The Financialization of Agricultural Commodities: Implications for Food Security

# S. Ryan Isakson\*, Jennifer Clapp, Phoebe Stephens

### **ABSTRACT**

This chapter outlines the ways in which financialization affects food systems and food security. It makes the case that the growing prominence of financial actors, institutions and motives in food systems creates dynamics that prioritize financial profits over other goals, including those related to food security. These developments can lead to excessive speculation in commodities futures markets that drive food prices higher, which has a disproportionate impact on the world's poorest and most vulnerable populations. High levels of speculative trading in commodities futures markets has been implicated in the 2007-12 food price crisis, which saw food prices spike and an associated rise in world hunger. Similar dynamics are playing out in response to the war in Ukraine, and food prices have reached new highs. Heightened financialization in food systems is largely the product of a weakening of regulatory measures that govern commodity futures markets. The chapter concludes that stronger regulatory measures are required to rein in excessive speculation on agricultural commodities, thereby mitigating market dynamics that compromise food security.

# **KEYWORDS**

Financialization, food commodities, futures markets, speculation, food crises, food security

<sup>\*</sup> Corresponding author. Email: <a href="mailto:ryan.isakson@utoronto.ca">ryan.isakson@utoronto.ca</a>; Tel: +1 416.287.7345

### LEARNING OUTCOMES

- Financialization is a multifaceted process that has shaped food systems at multiple levels, from agricultural production to food retailing and consumption.
- Commodity futures and swaps are financial instruments that can minimize risks for farmers and commercial actors in food systems.
- Speculators hope to profit from trading commodity futures even though they do not
  have a clear interest in the physical commodities. Speculative trading was facilitated
  by deregulation of commodities markets in the late 20<sup>th</sup> century.
- Excessive speculation can drive up food prices and contribute to food price volatility
  in ways that negatively impact food security, especially for poor and other
  vulnerable populations.
- More robust regulation of agricultural commodity markets would help to prevent future food price crises.

### **ACRONYMNS**

CBOT Chicago Board of Trade

CFMA Commodity Futures Modernization Act of 2000

CIF Commodity index fund

CME Chicago Mercantile Exchange

ETF Exchange traded fund

ICE Intercontinental Exchange

FAO Food and Agricultural Organization of the United Nations

OTC Over the counter

UN United Nations

### INTRODUCTION: FINANCIALIZATION IN FOOD SYSTEMS

Over the past four decades, the ability of people to access a sufficient quantity of safe, nutritious, and culturally appropriate food has been profoundly shaped by financialization. Understood as a process wherein financial actors, motives, and markets play a greater role in the operation of economies, financialization has reconfigured economies throughout the world (Epstein, 2005; Levy and Bustamante, 2018). In so doing, it has influenced nearly every aspect of food provisioning, including the types of foods that are produced, how they are produced, who is able to access those foods, and how they do so (Clapp and Isakson, 2018). To be sure, the prevalence of financialization and ways that it operates vary significantly across space and time. Yet, as we argue in this chapter, financialization matters for the food security of populations worldwide, and in many contexts it has exacerbated the food insecurity of the most vulnerable and marginalized populations.

Financialization is a far-reaching process that has shaped the functioning of contemporary economies and societies at multiple levels. This breadth has given rise to three overlapping analytical approaches in financialization studies. First, scholars in the tradition of critical political economy tend to focus upon the so-called "financialization of accumulation." This approach highlights how the decline of the US manufacturing sector in the 1970s contributed to the rise of a suite of policies and practices that have privileged the financial sector, dramatically transforming the nature of capitalism. The growing power of financial actors and the changing composition of profits in capitalist economies is of

particular interest, as profits generated via financial activities have come to dwarf the profits generated from "real" economic activities like trade and commodity production (Krippner, 2011; Palley, 2013). A second approach focuses on the changing relationship between non-financial corporations and financial markets. Scholars of this variant tend to focus upon the so-called "shareholder revolution" of the late 20th century, wherein corporations have come to prioritize returns to shareholders over other business objectives. As shareholders have achieved greater control, corporations have embraced various practices to increase returns on equity like reducing compensation and benefits to workers, selling-off unprofitable ventures, and mergers with competing businesses (Froud et al, 2000; Orhangazi, 2008). A third area of scholarship focuses upon the ways in which financial practices and rationalities have infiltrated the everyday economic activities of ordinary citizens. This "financialization of daily life" is evident in growing prevalence of financial products and logics in a range of quotidian practices such as accessing food, housing, healthcare, and security (Aitkin, 2007; Langley, 2008; Martin, 2002).

As we have discussed elsewhere, these three dimensions of financialization – the financialization of accumulation, the shareholder revolution, and the financialization of daily life – have all played a role in the transformation of food economies over recent decades (Clapp and Isakson, 2018; Stephens, 2021). Indeed, the prioritization of financial profits over productive activities has figured prominently in recent changes in farmland control and the "global land grab" (Fairbairn, 2020; Ouma, 2020) and the operations of commodity traders (Murphy, Burch, and Clapp, 2012; Salerno, 2017) and food retailers (Burch and Lawrence, 2013; Baud and Durand, 2012). Meanwhile, the growing power of shareholders and other financial actors have played a major role in the recent wave of

corporate mergers in the agricultural inputs sector (Clapp, 2017; 2018) and deteriorating working conditions and corporate concentration in the food processing sector (Jones and Nisbett, 2011; Rossman, 2010); and ordinary activities such as the management of agricultural risk, food purchases, and accessing food aid are increasingly mediated by novel financial products (Isakson, 2015; Clapp and Isakson, 2018).

In this short chapter, we focus upon financialization in agricultural commodities markets. Commodity exchanges are home to some of the longest standing links between finance and agriculture, dating back to at least the 1500s. While financial actors' participation in these markets has long been subject to public condemnation, the criticisms became particularly acute during the 2007-2012 food price crisis, when the speculative activities of banks, hedge funds and other institutional investors were identified as major contributors to dramatic spikes in food prices and their growing volatility. Indeed, speculation has again become a topic of concern in the context of the 2022 war in Ukraine which has reprised sharp price rises on futures markets. As we discuss, the deregulation of financial markets during the latter part of the 20th century enabled the growth of the speculative trading implicated in these food price crises and, given the inability to reregulate the sector, the institutional infrastructure remains in place for financial activity to exacerbate food price crises in the future.

We focus upon financialization in the commodities sector because it is arguably the epicenter of financialization in the broader food economy. As a driver of rising food prices, the financialization of commodities trading played a key role in piquing financial actors' interest in other sectors of the food economy, including farmland, and the firms that dominate agricultural inputs, food processing, and retail (Fairbairn, 2020; Jones and

Nisbitt, 2011; Clapp and Isakson, 2018; Clapp, 2019). Moreover, by impacting food prices, financialization in commodities markets has the most direct and obvious impact on food security, albeit unevenly. Just as the broader process of financialization has exacerbated economic inequalities in populations writ large (Assa, 2012; Godechot, 2020), we argue that financialization in food economies has exacerbated inequalities in the food system, improving food entitlements for some populations while weakening them for others, usually the most food insecure. Given the market power of the US futures exchanges, the global dominance of the US agricultural sector, and the fact the most agricultural trade is denominated in US dollars, our analysis will primarily focus upon financialization in the US commodities sector. As we will explain, the implications for food security are experienced by populations worldwide.

### COMMODITY DERIVATIVES: AN OVERVIEW

The trading of commodity derivatives is among the most longstanding and widely recognized links between finance and agriculture. As early at the middle of the 16<sup>th</sup> century, traders on the Amsterdam Bourse exchanged contracts for the future delivery of grains and fish, expanding to other commodities like spices, tulips, and coffee in the 1600s (Stringham, 2003). Around the same time, feudal lords and merchants developed a formal exchange for bills linked to the future delivery of rice at the Dojima rice market in Osaka, Japan (Schaede, 1989). In the 17<sup>th</sup> century, futures markets were established in England for internationally sourced goods like timber, oil seeds, grain, and flour (Forrester, 1931). In the United States, the Chicago Board of Trade (CBOT) was established in 1846 and hosted the country's first agricultural futures markets, initially focusing upon corn, wheat, and soybeans (Cronon,

1991; Levey, 2006). The US is now home to some of the most prominent and globally significant commodity exchanges, including a progenitor of CBOT, the Chicago Mercantile Exchange (CME) Group, and the Intercontinental Exchange (ICE).

All of the aforementioned early commodity exchanges housed two types of markets: so-called "spot markets" where physical commodities for immediate delivery were bought and sold and commodity-based derivatives markets. A derivative, simply put, is a financial contract whose value depends upon – or is *derived* from – the price of an underlying asset or group of assets. There are several types of derivatives associated with the commodities trade. Here we briefly describe two.

The most well-known type of commodity derivative is a futures contract. Futures are standardized contracts that oblige the seller to deliver a specified quantity and quality of a commodity for a predetermined price on a set date. For example, a food processor might purchase a futures contract that entitles it to 5,000 bushels of #2 soft red winter wheat to be delivered by December 15 at a price of \$7.00 per bushel. By locking-in a price for the delivery of a commodity at a later date, futures contracts can help to insure the food processor and other buyers should the spot market price for soft red winter wheat rise above \$7.00 per bushel in December. At the same time, it also protects the sellers (e.g. farmers or grain storage operators) should the spot market price for wheat drop below \$7.00 per bushel in December. In so doing, futures contracts provide a degree of economic certainty for food system actors by helping to protect them against adverse spot market prices in the future. The standardized nature of futures contracts means that particular buyers and sellers are irrelevant (e.g. all bushels of #2 soft red winter wheat are ostensibly the same). This uniformity eliminates the need for direct negotiation between buyers and

sellers and allows for the trade of futures contracts on competitive exchanges that serve as a clearing house and guarantor should either party default on their obligations.

Commodity swap contracts, or simply "swaps," are a more complicated type of derivative. Like futures contracts, swaps, can provide protection against adversely high prices (in the case of commodity buyers) or adversely low prices (in the case of commodity sellers) in spot markets. Swaps, however, are different from futures contracts in at least three important ways. First, swaps are not standardized agreements traded on exchanges, rather they are customized contracts mediated by a bank or other financial enterprise. Second, swaps are typically longer-term agreements that allow parties to better predict their cash flow over several years. Third, swaps do not entail the actual delivery of physical commodities, rather they are exchanges of cash flows that are based upon commodity prices. Imagine, for example, a food processor plans to purchase 100 tonnes of wheat every six months for the next three years and it wants to lock in a price of \$150 per tonne. The processor might negotiate a swap agreement through a bank wherein the bank agrees to pay the food processor the difference when the spot market price of wheat exceeds \$150/tonne and, in return, the food processor pays the bank the difference when the spot market price of wheat falls below \$150/tonne. In effect, payments under the swap agreement compensate for variations in the spot market price so that, on balance, the food processor pays \$150/tonne of wheat for the duration of the contract.

# HEDGING, SPECULATION, AND REGULATION

When food system actors like farmers and food processors trade in agricultural derivatives as a means of reducing the risk of unfavorable commodity prices in the future, they are

engaging in a practice known as "hedging." But not all transactions in commodity futures markets count as hedging. Indeed, they are a shrinking minority. Since the turn of the 21st century, commodity futures markets are increasingly dominated by so-called "speculative" activity, wherein traders do not necessarily have a vested interest in producing or using the commodities in question. Rather, they hope to profit from deviations between the predetermined prices specified in futures contracts and the actual prices that prevail in spot markets on the specified delivery date. In short, speculators exchange derivatives contracts as a means of betting on future commodity prices. Though there is some fuzziness, actors like farmers, grain storage operators, and food processors that have an interest in hedging are oftentimes categorized as "commercial" traders in derivatives markets while the financial actors who engage in speculative activity are known as "non-commercial" traders.

Critics have long condemned speculative trading as a form of gambling that has the potential to create economic hardships for agricultural producers and compromise food accessibility (Cronon, 1991; Martin, 2016). However, proponents of financial investment maintain that it is socially beneficial in two important ways. First, they observe that a large number of deep-pocketed traders increases the ease and speed of trading derivatives, thereby adding "liquidity" to markets. Second, promoters argue that speculators contribute to "price discovery" in futures markets, or the idea that the combined wisdom of a large number of traders will help to ensure that futures prices are reflective of the actual conditions in agri-food economies.

Despite the purported benefits of speculative trading, farmers and other food system actors have long been wary of the practice in agricultural derivatives markets. In the early 1900s, not long after the CBOT introduced the first organized futures markets in

the US, agricultural producers and small business owners began to condemn speculative traders and big market players for using their economic power to manipulate commodity markets and for exacerbating price volatility, oftentimes to the detriment of agricultural producers and food consumers. Their complaints, coupled with the growing public concern about the social dangers of betting on agricultural commodities, helped spur the US Congress to pass a series of regulatory measures in the 1920s and '30s (Martin, 2016; Stout, 2012; Clapp and Helleiner, 2012). The most prominent piece of legislation was the 1936 Commodity Exchange Act, which aimed to curb speculators' outsized influence in futures markets vis-à-vis farmers and other commercial traders. To do so, the Act empowered US regulators to limit the number of agricultural futures that non-commercial traders could hold at a given time with the intent of balancing the liquidity that speculative activity provides in futures markets against what they deemed to be "excessive speculation" that could distort commodity markets or generate extreme price volatility. Since that time, the line between everyday speculation and excessive speculation has been unclear, leading to heated political debates over what constitutes appropriate regulation of these markets.

#### DEREGULATION AND FINANCIALIZATION

US regulators dutifully limited speculative activity in commodity markets for several decades. The situation began to change, however, in the 1980s and '90s, as policymakers slowly caved to pressures from the financial industry to loosen restrictions, ushering in a new era of deregulation which set the stage for financialization in agricultural commodity markets. Initially, the deregulatory changes were *ad hoc*. In the early 1980s, for instance,

Congress allowed for the trading of previously banned agricultural derivative products like options and "over the counter" (OTC) swaps, which are so-named because they are customized contracts that take place off of public exchanges. Later, at the urging of Congress, regulators began to grant "no action letters" that permitted specified financial actors to exceed their position limits on futures trading (Clapp and Helleiner, 2012).

Deregulation in the US was cemented with the passage of the Commodity Futures

Modernization Act (CFMA) in 2000, which essentially excluded all OTC derivatives trading from regulatory oversight. The legislation was similar to the United Kingdom's Financial Services Act of 1986 and brought the US more into line with the lax regulatory regimes in many European countries (Chadwick, 2018; Clapp and Isakson, 2018). Regulatory rules were subsequently relaxed in other countries, including China, India, and Chile (Breger Bush, 2012).

Deregulation in global financial hubs has facilitated the development and proliferation of novel agricultural investment products. Among the more notable innovations are commodity index funds (CIFs) and commodity focused exchange traded funds (ETFs). CIFs are OTC derivatives traded off formal exchanges and, thus, face no limits on speculative investments, while ETFs are traded on stock exchanges and available to non-professional retail investors. Yet CIFs and ETFs share important similarities. For instance, both are index funds that track the prices on a defined basket of commodities over time; investors will experience greater returns when the index of commodity prices increases and may suffer losses if the index of prices decreases. Another important similarity is that the investment banks that deal these types of commodity index products offset the risk of having to make sizable payments to investors by purchasing commodity

futures contracts (Ghosh, 2010; Russi, 2013). While the index providers' purchase of futures contracts had previously been regulated as speculative activity, the 2000 CFMA recharacterized it is a form of commercial hedging, the logic being that the banks that deal index funds can offset the risks of having to pay substantial returns to their investors by purchasing futures contracts that would compensate the banks when commodity prices rise. The CFMA's classification of such activity as commercial hedging enabled the banks to engage in unlimited trading in futures markets (Chadwick, 2018). And because both types of funds do not require purchasers to directly own futures contracts, which are normally closed at a set date, they enabled investors to go "long" in their investments - i.e. to buy and hold these products in the hopes that commodity prices would eventually rise.

Investment funds began to pour into the new commodity-based financial products in the mid-2000s. Seeking refuge from the unfolding global financial crisis, academics and money management experts celebrated the potential of commodity futures to provide the security of a diverse portfolio while generating stable returns (Gorton Rouwenhurst, 2006) while some highlighted the potential for generous returns in the early 21st century context of rising food and energy prices (Rogers, 2007). Growing awareness of the impact of climate change on food production prospects was another factor that led many to believe that food prices could only climb, making these investments even more attractive for many investors. Between 2000 and 2008 the total financial assets under management in commodities increased 15-fold, from some US\$10 billion to US\$150 billion, and then more than tripled to more than US\$450 billion in 2011 (Meyer, 2015a; UNCTAD, 2015). As investment in commodity index products ballooned, the volume of commodity futures trades increased as well, doubling between 2004 and 2007 (Meyer and Authers, 2015).

Much of the increased futures trade was speculative. In the Chicago wheat futures market, for instance, speculators accounted for 61% of trades in 2011, a five-fold increase from their share in 1996, when hedgers were involved in 88% of transactions (Worthy, 2011).

### FINANCIALIZATION AND THE 2007-2012 FOOD PRICE CRISIS

Many analysts have linked the dramatic increase in commodities speculation to the 2007-2012 food price crisis. As investment funds poured into commodity markets, real food prices surged to a 33-year high in 2008, increasing more than 60 percent over a five-year period (FAO, 2022). Though food prices dropped somewhat thereafter, they remained above pre-crisis levels and were significantly more volatile, vaulting to yet another record high in 2011 (FAO, 2022). The extent to which financial speculation has contributed to the food price crisis has been hotly debated. Many early studies attributed the crisis to "market fundamentals" like rising fertilizer and transport costs, the diversion of crops into agrofuels, and depreciation of the US dollar, while dismissing speculation because the causal relations were unclear (Heady and Fan, 2008). The question at the heart of the debate is whether excessive speculation in commodity futures drives food price volatility or whether food price volatility drives speculative activity. A number of economists have attempted to unravel the relation using statistical causality tests. The results of these studies, however, have been mixed and provide no definitive answers (Haase, Zimmermann, and Zimmermann, 2016; Wimmer et al, 2021).

Despite the mixed outcomes of econometric studies, there is little question that the financialization of commodities markets has changed the nature of speculative trading.

Rather than trying to profit from short-term variations between futures prices and

expected spot market prices, as was traditionally the case, index investors take a long-term perspective that aims to profit from the momentum of commodity prices over time (Chadwick, 2018). That is, index investors are able to take a long position because the sellers of those funds continually roll-over expiring futures contracts and reinvest the proceeds in new contracts to remain hedged in the market. As a result, the vast sums of money invested in index funds translates into fund dealers acquiring an ever-expanding number of futures contracts, a practice that one hedge fund manager likened to "virtual hoarding" (Masters, 2008). This virtual hoarding undercuts the aforementioned potential of futures markets to contribute to price discovery, or an accurate reflection of future supply and demand conditions in spot markets. Instead, the funneling of large-scale investments into commodity futures not only drives up futures prices but sends the signal to raise prices in spot markets as well (Ghosh et al, 2012; Isakson, 2014; van Huellen, 2018). Moreover, the magnitude of funds controlled by financial traders means that they have tremendous influence over futures prices. In 2009, for instance, just six traders linked to index funds controlled up to 60 percent of the wheat futures contracts in Chicago. The dominance of financial traders in futures markets means that the transactions of a single deep-pocketed institutional investor can cause significant price movements and volatility (Clapp and Isakson, 2018; van Huellen, 2018).

There is widespread recognition that supply and demand conditions alone cannot account for the magnitude of the price swings experienced during the 2008-12 global food crisis. While speculation may not have been the sole cause, many analysts agree that, at the very least, speculation on commodity-based derivatives exacerbated underlying price movements (Algieri, 2016; Tadesse et al, 2016). A joint policy report by a number of

Organization, the International Monetary Fund, and the World Bank acknowledged that increased participation by speculative actors in financial markets "probably acted to amplify short term price swings and could have contributed to the formation of price bubbles in some situations" (FAO et al, 2011, p. 12). The Bank for International Settlements (BIS, 2011) and other UN bodies have expressed a similar perspective, albeit more forcefully (UNCTAD, 2011; DeSchutter, 2010). Indeed, given that financial actors generally have limited knowledge of circumstances in agricultural markets, they often behave in a herd-like fashion of investing how other investors are doing, thereby amplifying price fluctuations beyond what can be explained by actual market conditions (UNCTAD, 2011; Ghosh, Heintz, and Pollin, 2012). In March 2008, for instance, the Food and Agricultural Organization of the United Nations (FAO) estimated that wheat prices were more than 60 percent higher than their expected value, while maize and soybean prices were some 30 percent greater (FAO, 2008).

#### FINANCIALIZATION OF COMMODITIES AND FOOD SECURITY

By contributing to higher and more volatile food prices, the financialization of commodities futures markets has had direct impacts on food security throughout the world. The impacts, however, have been uneven and have tended to exacerbate inequalities in the global food system. When food prices spiked in 2008, for instance, poor countries that are heavily dependent upon imports of staples generally experienced greater increases in food prices than countries that are relatively more self-sufficient; their food prices remained stubbornly high beyond 2008, even as global prices began to fall (Ghosh, 2010). Such

dramatic and sustained increases in food prices can be particularly devasting for the world's poorest people, who allocate 60% or more of their income to the purchase of staple foods (FAO et al, 2021). Indeed, when the FAO's food price index jumped 45 percent over a nine-month period in 2008, the organization estimated that 50 million additional people had lost access to sufficient food, swelling the global number of chronically malnourished people to more than one billion (FAO, 2009). Meanwhile, the rising cost of food import bills can strain resources for poorer countries, impeding their ability to implement policies to assist vulnerable populations (Ghosh, 2010).

Within countries, the impacts of the crisis upon food security were uneven across regional, gendered, and economic lines. In developing countries, for instance, the decreased ability to access food was generally more widespread among the urban poor than their rural counterparts, where the impacts on food security were more mixed (Ivanic and Martin, 2008; Verpoorten et al, 2013). In rural areas, some agricultural producers were able to benefit by selling higher priced output, but this was generally limited to larger scale and wealthier households that produced a surplus of marketable staple commodities. Meanwhile their poorer neighbors who were net food buyers experienced declining food entitlements (Verpoorten et al, 2013; Hella, Huang, and Kamile, 2011; Baines and Ravensbergen, 2019). In a study of nine low income countries, Ivanic and Martin (2008) concluded that, on average, rural households experienced net losses that translated into declining food access. Even if households managed to consume a sufficient quantity of food, they often did so at the expense of dietary diversity, consuming cheaper and less nutritious foods, particularly in poorer and female-headed households (D'Souza and Jolliffe, 2013; Hossain and Scott-Villiers, 2019). Within households, women were more likely forego food

or eat less nutritious foods in order to make them available to other family members, a practice that deprived many pregnant and nursing mothers of essential nutrients (Botreau and Cohen, 2020; Quisumbing et al, 2011).

In addition to the challenges posed by rising food costs, the increased price volatility resulting from financialization has also compromised food security. In many poorer countries, volatile commodity prices can translate into exchange rate volatility that undermines the stability of food imports, thereby compromising the availability and accessibility of food for an entire population (Chadwick, 2018). Agricultural producers face additional challenges. Fluctuating prices can complicate the already challenging process of making cropping decisions, including which crops to plant and whether to invest in resources and technologies. If farmers receive incorrect signals from market prices they are more likely to incur significant financial loses that could compromise their ability to access food (Clapp and Isakson, 2018). These challenges are further compounded for smallscale producers of internationally traded commodities like cocoa and coffee, as the intermediaries to whom they sell their crops protect themselves against the potential of falling global prices by paying farmers less for their products (Newman, 2009; Purcell, 2018). Moreover, poor farmers generally have limited access to storage, meaning that they may be forced to sell when prices are low. Meanwhile, their wealthier counterparts with greater access to storage can hold on to their product in order to sell when prices rise, thereby compounding already unequal food entitlements (von Braun and Tadesse, 2012).

In response to widespread public outcry and the detrimental impacts of financialization on food systems, US and European policymakers included provisions to reregulate commodity derivatives markets in their major reform policies following the 2008

financial crisis. Both the US's Dodd-Frank Wall Street Reform and Consumer Protection Act and the European Union's Markets in Financial Instruments Directive included provisions for more regulatory oversight and to establish stricter position limits on speculative trading of commodity futures. However, intense lobbying from the financial sector and wealthier agricultural interests worked to significantly relax the proposed restrictions and delayed their implementation for years, leading critics to suggest that they would do little to prevent harmful speculative activities in the future (Helleiner, 2018; Clapp and Isakson, 2018; Williams, 2015; Baines and Ravensbergen, 2019; Kornher et al, 2022). By the time that they finally went into effect, the new regulations seemed irrelevant, as financial actors' interest in commodities had dampened significantly following the 2011 spike in food prices (Meyer, 2015b).

### LOOKING AHEAD

We have argued that financialization in agricultural commodity markets poses food security risks, albeit unevenly, for populations around the world. Deregulatory policies over the course of several decades have facilitated financialization in the commodities sector, helping to drive higher and more volatile food prices. High and volatile food prices threaten the most vulnerable communities in rich and poor countries, leading to calls for stronger regulatory measures, particularly after the 2007-2008 food crisis. As we have explained, however, regulatory measures to date have not adequately reined in speculative activity and, in some cases, have even strengthened the power of private actors in the global food system.

We, and others, have expressed elsewhere that loosely regulated agricultural commodity markets have created a context of instability that sets the foundation for another food crisis (Clapp and Isakson, 2018; Clapp, Collins and Stephens, 2021). Indeed, as we write this piece in the spring of 2022, there are indications that the financial instruments and practices instituted over the previous three decades are exacerbating yet another food crisis. Food prices have rocketed to new records, volatility has returned, and there are signs of renewed financial interest in commodities (FAO, 2022; AMIS 2022). Even before Russia's invasion of Ukraine, financial analysts were predicting a new "supercycle" of sustained high commodity prices (Pregin, 2022; Currie, 2021) and funds have flooded into commodity-based investment vehicles. Natural resource funds secured record levels of investment during the first months of 2022, most of it pouring into commodity index funds (Preqin, 2022; Klasa, 2022). Commodity-focused ETFs have also experienced significant investment from actors seeking to profit from soaring grain prices (Johnson, 2022). Similarly, speculators' positions in the US grain and oilseeds future markets have set new records (AMIS, 2022). As of April 2022, speculators held half of the long positions in wheat futures markets, mirroring conditions during the early phases of the previous food price crisis (Kornher et al, 2022). Though it is still too early to determine the extent to which the renewed financial activity in commodity derivatives markets is responsible for the recent spike in food prices, many analysts have observed that supply and demand factors alone cannot explain the degree of the increase and warn that speculative activity may be playing a role (Kornher et al, 2022; IPES, 2022; AMIS, 2022). It is highly likely that, once again, financialization in commodities markets is exacerbating food insecurity.

The World Bank recently released a report on commodity markets describing the directions they will likely take over the next few decades as well as the ways in which countries, particularly developing economies, can insulate themselves from impending boom and bust cycles (Baffes and Nagle, 2022). The report acknowledges how disruptive commodity shocks can be and provides a series of recommendations for governments. These include building "rainy-day funds" to be deployed in emergencies; adopting "market-based risk mechanisms" to guard against price volatility; and diversifying their economies. Notably missing from the report are any recommendations on curbing financialization or dampening the speculative activity that fuel commodity market volatility. This stance reflects a neoliberal approach to governance which often dominates mainstream policy circles. However, given the lessons learned in recent decades about the ways in which the financialization of agricultural commodity markets has wreaked havoc on the food security of populations around the globe, more proactive and binding measures to limit financialization in the food system are necessary.

**BIOGRAPHIES** 

**S. Ryan Isakson** is an Associate Professor of Global Development Studies and Geography

at the University of Toronto. His research focuses upon the political economy of food

systems and agrarian change, particularly in Latin American contexts. Along with Jennifer

Clapp, he is the co-author of *Speculative Harvests: Financialization, Food, and Agriculture* 

(Fernwood Publishing and Practical Action Publishing, 2018).

Email: ryan.isakson@utoronto.ca

**Jennifer Clapp** is a Canada Research Chair in Global Food Security and Sustainability and

Professor in the School of Environment, Resources and Sustainability at the University of

Waterloo. Her recent books include *Food, 3<sup>rd</sup> Edition* (Polity, 2020), *Speculative Harvests:* 

Financialization, Food, and Agriculture (with S. Ryan Isakson, Fernwood Press,

2018), and Hunger in the Balance: The New Politics of International Food Aid (Cornell

University Press, 2012). Professor Clapp is Vice-Chair of the Steering Committee of the

High-Level Panel of Experts on Food Security and Nutrition of the Committee on World

Food Security and a member of the International Panel of Experts on Sustainable Food

Systems.

Email: jclapp@uwaterloo.ca

**Phoebe Stephens** is an assistant professor in the Department of Business and Social

Sciences at Dalhousie University. Her research focuses on the role of intermediaries in

supporting transitions to more sustainable food systems. She has published articles in

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academic journals including Agriculture and Human Values, Canadian Food

Studies and Globalizations as well as several book chapters on the topic of finance and food

systems.

Email: phoebe.stephens@utoronto.ca

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