





Gambling on hunger and climate change

Sasha Breger Bush

Due to far-reaching national and international efforts to deregulate and liberalise global financial markets since the 1960s, the global financial system today wields enormous power over national governments, local communities and families. Financial speculation influences prices in markets for basic goods such as food and energy. Debt undermines the well-being and autonomy of consumers, farmers, students and governments. A handful of big banks hold entire economies hostage to their needs and appetites, particularly during times of economic crisis.

Pressures for higher profits originating in the financial system constrain the behaviours of companies in every part of the economy. There has been a proliferation of dangerous financial products designed just for the global poor – a group that used to be largely excluded from global financial markets. Nor has plant and animal life been spared; polar bears, bees and rainforests all suffer from the environmental devastation accelerated by the workings of the financial system. Indeed, through a variety of mechanisms the financial system today often works to undermine social welfare, increase inequality and accelerate environmental damage.

The scope and depth of financial sector involvement in global social problems is well documented,¹ and this essay will focus on one recent case of financial speculation to illustrate in microcosm some of the pathways by which financial actors, instruments and markets exert their power. The case of financial speculation in global commodities markets illustrates how financial innovation and market expansion is connected to the disempowerment and marginalisation of poor and working class people, especially in the global South. It also helps to draw clear lines between gambling in commodities markets, on the one

hand, and land degradation, water pollution, climate change and deforestation, on the other.

The conundrum for social activists is that the financial system today, despite its blatant disregard for people and Earth, has acquired political legitimacy in many circles. Shielded in part by the technical complexity of the field in which they work, financial actors and institutions wield political and cultural power that undermines public debate, financial sector transparency and accountability, and substantive market regulation. The financial system is also quite good at generating financialised "solutions" to the global social and environmental problems that it creates. These purported solutions, from risk management for peasant farmers to carbon trading, provide political cover for financial actors (who are seen to be social problem-solvers), all the while generating a steady stream of new profits. This suggests the need for a multidimensional approach by social activists to simultaneously shed light on global social problems caused by finance and disable some of the mechanisms that currently generate complacency and/or support for financial actors and institutions among politicians and the general public.

The case also generally questions the proper role of the financial system in social life. While most main-stream, neoliberal voices today suggest that a large and sophisticated financial sector relatively free from regulation provides a path to prosperity, the materials reviewed here give reason to think otherwise. At the very least, the commodities market speculation case suggests the urgent need for regulations that limit financial sector power in markets for basic goods and services. The case also suggests that we may want to think deeply about strategies for community protection from predatory and dangerous financial system activities. In the case of food price speculation, this implies thinking about ways for communities to insulate themselves from the consequences of commodity price speculation, for example through local food production.

The reader should be aware that the proper role of finance in the economy is a long-debated topic. In some intellectual traditions, for example the Keynesian tradition, the financial sector is pictured as a potentially supportive system that, with proper regulation, helps society to grow and become more equitable. In the liberal tradition mentioned above, a relatively free financial system helps to increase productive efficiency and works as a check and balance upon the pernicious influence of government in the economy. In contrast, the Marxist tradition sees finance capital as accelerating the exploitation and subjugation of labourers and the Earth, generating inequality, poverty, dependence and, ultimately, crisis. Feminists, ecological economists, anarchists, and voices from the anti-globalisation movement offer still other interpretations. Policy recommendations vary accordingly. As the reader will no doubt glean from the following discussion, it is my general opinion that the financial system should, at the very least, be smaller, simpler, less powerful and better regulated, given its tendencies to excess, abuse, repression and injustice.

Finance-food-environment

In the lead up to the global food price crisis sparked in 2006 and the Great Recession that started in 2007, investors began to move their money into commodities markets *en masse*. By "commodities markets" I mean markets for raw materials (e.g. oil, copper or sugar). Some commodities markets are "spot"

markets where physical products are traded today (these are the markets in which most ordinary folks participate). Others called "commodity derivatives markets" trade raw materials for *future* delivery, that is, they permit trade in materials that are not yet available and may never be. Using complex commodity derivatives – a type of instrument called a "commodity index swap" – investors in the lead up to the food crisis placed large bets on the prices of agricultural goods, metals and energy products, speculating that global commodity prices would continue to rise.

A commodity index swap is a contract made between two parties to "swap" the rate of return on a commodity index (a weighted, moving average of commodity prices) for the rate of return on some other asset (often a short-term US Treasury bond). The deal thus involves an opposite bet by each party on how commodity prices will move relative to returns on the bond. The megabanks ("swaps dealers") that offered these bets to other financial institutions ended up taking the losing side of the bet in our case – they lost because commodity prices rose more rapidly than bond income. In order to limit their losses, the swaps dealers made offsetting bets in a different set of derivatives markets, the commodity futures and options markets. These secondary bets were very large and came to influence the prices of food, metals and energy around the world. These large bets, most of them made in the US, were actually exempted from regulatory limits, and traders were permitted to take larger positions than regulators normally allow speculators to take. The illustration in Figure 1 depicts an oversimplified commodity index swap deal.

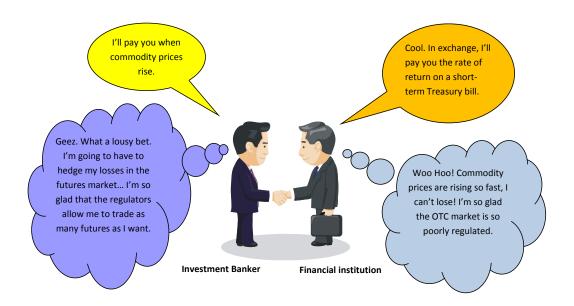


Figure 1: Trading commodity index swaps in the over-the-counter derivatives market. Source: Prepared by the author.

Speculative financial activity in commodity derivatives markets grew so quickly from 2003 to 2008 that commodity index deals grew to nearly double the volume of all other market transactions. It is estimated that as much as 20 per cent of the increase in global food prices from 2007-2008 was caused by commodity index speculation by financial firms.² Index speculation also played a role in the rapidly rising prices of energy and metals commodities like oil and copper around the same time.

There are at least two major pathways by which activities in derivatives markets impact prices in spot commodity markets. First, the future prices established in derivatives markets are often used as "benchmark" prices in spot markets, meaning that traders of today's commodities often look to derivatives markets to see what they should be charging. This provides a direct conduit for future prices to influence spot prices. Second, future prices impact decisions to store or sell physical commodities. Rising futures prices encourage hoarding, while falling futures prices encourage sales. As futures prices rise – as they did in the case under examination here – participants in the spot markets hold commodities, anticipating higher prices and more profits in the future when they finally decide to sell. This very act of withholding commodities from the market for future sale pushes spot prices upwards.

In this way, financial speculation in commodities markets makes the prices of agricultural, mining and energy commodities more volatile. This volatility has a variety of negative consequences: it creates hunger and food insecurity, hurts peasant farmers, fuels civil unrest, leads to land grabbing, and causes an array of environmental problems. There is a further element of global injustice here in that the negative consequences of financial speculation, largely generated in Northern markets by Northern financial firms, are in many cases disproportionately borne by people in the global South.

Hunger and food insecurity

When speculators push food prices upwards in derivatives markets located in the world's major financial centers (as they did in 2007-2008), food prices also rise in local communities. Researchers have extensively documented that rising food prices, while negatively impacting almost everyone worldwide, disproportionately affect people who are already marginalised by the global economy, many of whom reside in the global South and many of whom are women and children. The UN reports that the recent food crises pushed 20 million people into poverty in the Caribbean, 21 million in Latin America, 5.7 million in the Philippines and 14.7 million in Pakistan. In Mexico, the food price shock caused the average poor household to effectively lose 18 per cent of its food budget. In Sierra Leone and many other countries, this pressure on family budgets has led children to withdraw from school.³

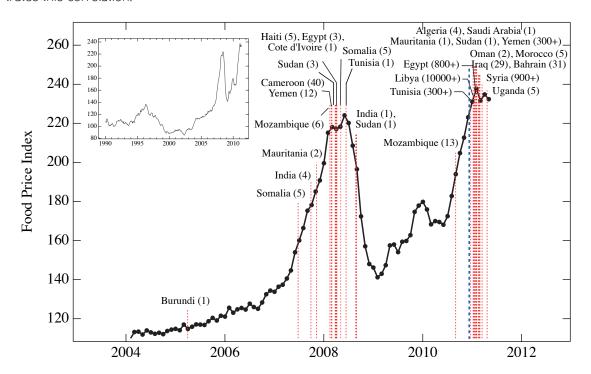
Surprisingly, the world's peasant farmers – most of whom live in the global South (many are women) and produce almost 70 per cent of the world's food – also experienced massive food insecurity with the recent food price crisis. Because many peasant farmers have since the 1980s converted their farms to production of cash crops, they rely on a stable relationship between the price of cash crops and the price of food for family well-being. In other words, crop specialisation has made many peasant farmers dependent on market purchases of food, much of it imported, to meet their needs. While crop prices were indeed rising during the recent food crisis, food prices for farm families were in many cases rising more quickly. Of course, when crop prices fall – as they did when index speculators pulled out of commodities markets in late 2008, only to resume their trading in subsequent years – peasant farm families are also likely to experience food insecurity and growing debts as income from farming falls. Hardship among peasant farmers also often translates into rural unemployment, as agricultural labourers are laid off to cut costs.

Rising food prices also impact the decisions that families make at home about how much and what kinds of food to eat. In the South, higher food prices generally mean that families have less food of poorer qual-

ity to eat. In many cases, the burden of higher prices is borne by women and girls, who often sacrifice meals to feed 'productive' men and boys.⁴ In the North, where food that is bad for your health is usually cheaper, rising food prices can induce families to purchase lower quality foods that are calorically dense instead of fresh fruits and vegetables and high quality protein, contributing to obesity and other health problems.⁵ In the US and UK, food is also quickly becoming a source of debt for consumers, sometimes via 'payday loans' that charge usurious rates of interest. Such financial arrangements may further constrain food choices.

Civil unrest

High food prices act as conflict catalysts, often pushing tense social and political situations to a critical breaking point. For example, food price spikes in 2007-2008 were accompanied by deadly violence in India, Yemen, Haiti and Cameroon, among other countries. Even some Northern countries experienced unrest, such as the 2007 Italian "pasta riots". High food prices in 2011 contributed to the Arab Spring, with spikes contributing to unrest in many countries in the Middle East and North Africa. Figure 2 illustrates this correlation.



Time dependence of FAO Food Price Index from January 2004 to May 2011. Red dashed vertical lines correspond to beginning dates of "food riots" and protests associated with the major recent unrest in North Africa and the Middle East. The overall death toll is reported in parentheses.

Figure 2: Food prices and civil unrest, 2004-2012.

Source: Lagi, M., Bertrand, K. Z. and Bar-Yam, Y. (2011). The Food Crises and Political Instability in North Africa and the Middle East. Cambridge, MA: New England Complex Systems Institute, page 3.

Land grabbing

Rising food prices encourage more food production for profit, intensifying use of soil and water, and motivating farmers to clear more land. In one type of 'land grabbing', foreign financial firms looking to diver-

sify their portfolios (especially after the US housing market crash) scour the globe buying farmland. With demographic growth, soaring demand for meat and dairy, and environmental degradation that reduces arable land area, they expect that the prices of agricultural goods and farmland will rise dramatically. Indeed, the purchase of so much global farmland by investors is itself already driving up the price of land, resulting in a vicious circle of greater price increases for food and other crops.

Often the land being sold to domestic and foreign financial investors has been taken away from people, usually peasant farmers or indigenous peoples who have been working the land for years. In some cases, Southern governments have been working to consolidate small plots into large lots, and then leasing or selling these large parcels to financial firms, capitalising on poor national systems for land title and registration. Those whose land has been sucked into the financial system may resort to deforestation (to get more land) or farm on marginal lands in order to survive, both of which intensify ecological destruction.

In most cases, the land purchased by financial firms is used to grow cash crops for export using unsustainable, industrial farming practices such as monocropping, petrochemical fertiliser and pesticide use, genetically modified seed use and wasteful irrigation practices. These practices are key factors explaining soil degradation, climate change, water over-use, and species extinction, among other problems. Further, they are very technology-intensive, meaning that few jobs are created for local residents. Growing crops for export also undermines local food security, as food that could be eaten by hungry local residents is shipped abroad.

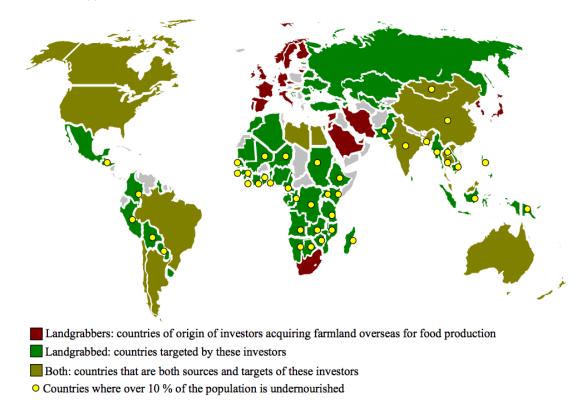


Figure 3: The geography of land grabs (2012). Source: La Via Campesina (2012). Stop Land Grabbing! Notebook No. 3.

The map from La Via Campesina illustrates global land grabbing patterns. While there is a strong North-South character to these exploitative land deals, with Northern investors basically stealing the land of Southern farmers, this is not a complete picture. There are North-North cases, such as the example of Swiss financial giant UBS that recently bought up large farm parcels in the US. There are also South-South cases, as illustrated by Middle Eastern and Southeast Asian companies involved in land grabbing in Africa.

Energy, mining and extraction

Beyond the food issue, rising commodity prices also put pressure on industrial firms that use metal and energy in their production processes. Depending on the given market, consumers may end up footing most of the bill (e.g. high copper prices in 2007-2008 resulted in high costs for new plumbing).

Higher prices for mined and extracted commodities also encourage more mining and extraction, and generate large environmental costs. In the case of the upsurge in fracking, for example, high oil prices in 2007-2008 motivated extensive exploration and extraction of oil resources that were previously too expensive and difficult to bother with (extracting these hard-to-reach resources also raises environmental costs). Similarly, between 2002 and 2011 in Australia, South Africa, Canada, China, India and the US, a period over which commodity speculation and commodity prices rose precipitously, mining investments as a percentage of GDP roughly doubled.

Of course, more drilling and mining results in more social and environmental problems. The ongoing oil and gas boom is reducing global energy prices and may be encouraging unsustainable consumption levels, thereby accelerating global climate change. *The Guardian* recently reported on new research that suggests that "a gas boom would cut energy prices, squeezing out renewable energy, and is likely to actually increase overall carbon emissions".¹⁰

And, as with land grabbing, drilling and mining also often contribute to the marginalisation of local communities that live in areas where mining and extraction occur, as well as to degradation of local land and water resources.

The political legitimacy of finance

The fact that the financial system aggravates global social and environmental problems should create a potentially serious political problem for financial actors and institutions, as well as for the broader neoliberal project. After all, instability, poverty, crisis and catastrophe have historically spawned protests, riots, policy reforms and, sometimes, revolutionary change. As such, one of the most fascinating and nefarious characteristics of the contemporary global financial system is its ability to preserve its political legitimacy, even as financial sector growth wreak havoc on people and the Earth. There are four main channels through which the financial system retains political legitimacy: direct political influence, cultural influence, technical complexity and financial innovation.

Direct political influence

Financial firms around the world benefit from direct influence in government at all levels. This influence prevents governments from calling attention to problems generated by the financial system and undermines attempts to better publicise, regulate and monitor financial behaviour.

The influence of financial firms on the US Government has been fairly well documented to date, especially when it comes to electoral campaign finance, lobbying, and the "revolving door" between industry and government. For example, in the 2008 and 2012 presidential elections, the FIRE sector – finance, insurance and real estate – was among the largest sources of campaign funds for candidates from both major parties. Further, a good number of officials and staff at the US Federal Reserve and Treasury Department are former employees of major banks, such as Goldman Sachs. It is also important to note that there is evidence of real corruption in the relationship between the US Government and the big banks that it purports to regulate, as evidenced by the recent testimony of whistleblower Alayne Fleichmann in regards to collusion between JP Morgan Chase and the US Department of Justice.

Less frequently discussed is the influence of global financial firms in the governments of countries in the South. But some reports point to similar practices; *Fortune* recently revealed that a former Morgan Stanley executive was charged under the US Foreign Corrupt Practices Act with bribing a Chinese official to gain business for the firm.¹³ In 2012, the Securities and Exchange Commission charged Allianz SE, the global insurance giant, with bribing Indonesian officials.¹⁴ In February 2014, the *Wall Street Journal* reported on a broad ongoing investigation into corruption between officials in Libya and a group of prominent multinational banks, including Goldman Sachs, JP Morgan Chase and Credit Suisse.¹⁵ As many analysts have also noted – for example, debt scholars Susan George and Noreena Hertz – the biggest global banks also wield enormous influence in the World Bank and International Monetary Fund (IMF) in the context of debt negotiations with governments in the global South.

Cultural influence

In the most financially advanced countries such as the US and the UK, but also increasingly in other parts of the world, financial actors wield cultural power that helps to insulate the financial system from criticism and protest. This cultural power is far-reaching and can be seen in a variety of contexts. For example, scholar Adam Harmes notes the extensive financial indoctrination that ordinary folks have undergone over the past few decades, with newspapers printing financial charts for regular perusal by middle-class investors and financial firms even offering investment education to children. He argues that these routine interactions with finance work to reduce popular opposition to financial actors and markets.¹⁶

Referring to the manner in which the cultural power of finance played into the US housing and global financial crises, former IMF Director Simon Johnson similarly notes:

"As more and more of the rich made their money in finance, the cult of finance seeped into the culture at large. Works like *Barbarians at the Gate, Wall Street*, and *Bonfire of the Vanities* – all intended as cautionary tales – served only to increase Wall Street's mystique (...) Even Wall Street's criminals, like Michael Milken and Ivan Boesky, became larger than life. In a society that celebrates the idea of making money, it was easy to infer that the interests of the financial sector were the

same as the interests of the country – and that the winners in the financial sector knew better what was good for America than did the career civil servants in Washington. Faith in free financial markets grew into conventional wisdom – trumpeted on the editorial pages of *The Wall Street Journal* and on the floor of Congress."¹⁷

Indeed, a variety of scholars have pointed to the broad global propagation of "free market myths" through education, political discourse and entertainment about how economies and markets work best. These myths often reinforce the power, allure and thus popular acceptance of finance. As such, they can be very dangerous, particularly in contexts where better regulation and monitoring are urgently needed.

Technical complexity

Financial institutions, products and dynamics are often bewilderingly complex, or at least it seems this way. Jargon from economics and mathematics, erudite references and technical discussions are all too common in academic discussions of finance, but also in general public discourse. The use of complex and technical language excludes and disempowers non-experts.

The political consequences of the complex language used to discuss financial products and dynamics are potentially very far-reaching, with this complexity generally serving the political interests of speculators and other financial actors who profit from lax financial regulation. Take, for example, the role of commodity index speculation in raising world food prices discussed above. If this process is not understood, even if only in its most basic form, how are individuals supposed to advocate for the regulatory changes required to limit financial speculation on food? Democratic deliberations about financial policy and regulation require both transparency and a well-informed electorate. The technical complexity of financial discussion and debate is an obstacle on both of these counts.

Financial innovation

Last, in a rather dark paradox, the financial system benefits politically from precisely those financial innovations that cause global social and environmental harms. The financial system is quite adept at innovating financialised 'solutions' to the problems it creates. While these tools often do very little of substance to solve global social problems, they do yield political dividends for the powerful institutions and actors that recommend their use, as well as financial gains for the financiers who develop, offer and invest in such instruments.

For example, in a variety of documents and reports from the late 1990s and 2000s, international organisations such as the UN Conference on Trade and Development and the World Bank hold up commodity derivatives instruments – the same instruments that have enabled massive financial speculation in food markets – as mechanisms that can help small farmers better navigate the neoliberal agricultural system. It is argued that these instruments can help farmers get better prices for their crop, secure better access to credit, stabilise incomes and promote investment in future production. In fact, in a 2011 joint report, these organisations simultaneously recognise the role of commodity derivatives in enabling dangerous speculation and then go on to recommend precisely these tools to farmers so they can manage the resulting price volatility. This tendency to try to solve global problems using the very tools that caused them is a testament to the myopia and market fundamentalism that characterises neoliberal policy-making of late.

My recent research on agricultural derivatives (i.e. futures and options markets for agricultural commodities such as coffee) in rural development shows that such instruments are inadequate for small farmers and do not work as advertised by the institutions that promote them. In fact, the major benefits of financial innovations in this context accrue to the financial institutions that develop and sell them. The financial system makes a profit, displays its 'problem-solving' capacity and can claim genuine efforts to make things better for the global poor. This strategy is also a winner for international development organisations because recommending such instruments makes them appear responsive to the needs of the global poor without engaging in substantial reform of the neoliberal agricultural agenda and without antagonising finance. With public criticism of the World Bank and like-minded organisations mounting since the 1980s debt crisis in the global South, perceptions of legitimacy and apparent willingness to accommodate critics are important political and public relations tools.

While hotly debated, it would appear that similar dynamics are at work in the environmental context. Financial innovations such as carbon trading allow political authorities to act on pressing environmental problems without actually compromising the global economic status quo or making any real headway in addressing climate change.²¹ And, as with the farming context analysed above, the financial system not only gains financially from brokering and trading such instruments, but also does politically as it appears to be genuinely engaged in the fight against climate change.

Directions for resistance and activism

The foregoing discussion contains several key insights that may be turned around to support resistance to financial abuse. First, *most people today have a very intimate relationship with the financial system*, even if it does not appear this way. It affects us when we eat food that costs too much, when we drink contaminated water, when we breathe polluted air. Strategies that help people to connect the dots between finance and their day-to-day lives, strategies that illuminate the finance in their pantries and parks, can help to shine a critical light on the impact of the financial system.

Second, the financial system cannot continue to operate as it does today without political legitimacy. Efforts to highlight the social and environmental problems that the financial system causes could be usefully complemented by related efforts to erode general political support for financial actors and markets, for example:

- Strategies that erode the direct influence that financial firms enjoy over governments around the world. For example, the Securities and Exchange Commission and the Department of Justice in the US regularly report publicly those firms and individuals that are being charged with violations of the Foreign Corrupt Practices Act (the same goes for violations of anti-corruption laws in many other countries). Let us call attention to these attempts by financial actors to bribe officials and circumvent the law.
- Strategies oriented around financial "myth busting" may also be useful. An interesting and inspiring recent example is the large and growing group of folks calling attention to the fact that global

inequality is much worse than we thought. Pervasive economic and financial myths that could be targeted include:

- The idea that financial "experts" and regulators have all the necessary information and can be trusted to do a good job. In the context of food price speculation, for example, regulators were very much "asleep at the wheel" and even now, with the benefit of research and hindsight, have refrained from enacting necessary limits on speculation.
- The idea that markets work best when government keeps out. In the food and environmental context, it is largely a lack of financial regulation that has aggravated so many social and environmental problems.
- The idea that financial success reflects talent and hard work. Financial elites get rich not only because they are smart and work hard, but also because they exploit people and the environment.

On the matter of technical complexity, while financial issues should certainly be made more accessible, it is also necessary to unveil how financial matters are sometimes *deliberately made more complex* than need be. I think we need to be asking political questions about things we are told should be "left to the experts" – namely, *who benefits from the fact that we don't understand this?* I think this question should be asked over and over again, in as public a way as possible.

The deployment of financial innovation as a political shield for the financial actors and politicians that tout them as solutions to global problems suggests that activists may want to be very careful in supporting financialised 'solutions'. Better to err on the side of caution in thinking about the usefulness of derivatives for small farmers or about the importance of carbon trading for mitigating climate change. Financial innovations suggested in the context of peasant distress or environmental collapse can be very seductive; yet in many cases they further politically empower financial actors, forestall necessary reform, and distract us from other kinds of policies that may work better to address global social problems, all the while generating large profits for the very companies that helped cause these problems in the first place.

Third, better and stronger financial regulations are urgently required. In the case of commodity index swaps, the US Dodd-Frank Wall Street Reform and Consumer Protection Act passed in 2010 in the wake of the Great Recession stipulates new position limits for traders in commodity derivatives markets. These changes would in theory reduce the impact of speculative trading on the prices of basic necessities. However, the new rules have yet to be implemented, and regulators continue to wrangle with industry over their language. The Financial Stability Board – which helps to strengthen and coordinate national financial regulations at the international level – has also tried to move commodities market regulations forward, recommending better reporting and oversight in derivatives markets and securing governmental support for such policies. Thus far, governments have made little headway. Activism that calls attention to these regulatory efforts and helps build popular pressure on governments to adopt them would be useful and important.

Last, strategies to help marginalised communities protect themselves from predatory and dangerous financial actors and markets are crucial. While it is a simple inference, it should be stated outright that, were poor communities not so dependent on global markets for food, they would have been better insu-

lated from the high prices caused by financial speculation in food markets. Along these lines, activism in support of farm diversification, local food production and local food sovereignty are important bulwarks against financial speculation. Some scholars and activists have further suggested a return to the national commodity policies and international commodity agreements of the post-WWII era, when governments actively managed world food prices by manipulating commodity supplies.

Sasha Breger Bush is an Assistant Professor in the Political Science Department at the University of Colorado, Denver. She teaches and researches in the fields of international political economy, finance, development, and food and agriculture. Her first book, Derivatives and Development: A Political Economy of Global Finance, Farming and Poverty, was published in 2012 by Palgrave-Macmillan.



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