



The Food Crisis and the Deregulation of Agriculture

BILL WINDERS
Associate Professor
Georgia Institute of Technology

FOOD PRICES BEGAN TO CLIMB throughout the world in 2007. World wheat prices climbed from an average of \$127 per ton in 2004–2005 to \$397 per ton in the spring of 2008—an increase of more than 200 percent—and rice prices rose by more than 250 percent to \$962 per ton in 2008.¹ Prices for corn, meat, oils, and dairy products saw similar though less dramatic increases at this time as well.² Not surprisingly, world hunger and malnutrition rose along with food prices. The Food and Agriculture Organization (FAO) estimates that more than one billion people were undernourished in 2009, representing a dramatic increase from 15 years before when fewer than 800 million people were hungry.³

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As food prices rose and the threat of hunger spread in 2007 and 2008, protests struck dozens of countries, including Argentina, Mexico, India, Italy, Bangladesh, Egypt, Somalia, and Morocco. These protests contributed to political instability in a number of countries. In Haiti, for example, the prime minister was removed after a week of food riots in April 2008.⁴ Although rising food prices did not lead to disruptive protests in every nation, reduced access to food was undoubtedly a destabilizing political force in many.

Though food prices declined in 2009 and protests faded, prices began to increase again in 2010 and continued rising in early 2011. In fact, the FAO's food price index (a composite look at real food prices) was higher in February, March, and April of 2011 than at any other point in the previous 20 years. Wheat prices, for example, rose to \$336 per ton in April.⁵ Also, of course, protests rocked the Middle East in the first three months of 2011. This "Arab

BILL WINDERS is an associate professor of sociology in the School of History, Technology, and Society at the Georgia Institute of Technology. His publications include *The Politics of Food Supply: U.S. Agricultural Policy in the World Economy*. He would like to thank Rick Rubinson for his comments and encouragement on this article.

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Spring” began in January with food riots in Tunisia, which were soon followed by protests in Algeria, in which rising food prices also played a role.

The food crisis, then, has entailed not only rising food prices and increasing world hunger, but also greater political instability and change. Food crises hold the potential to destabilize existing political alliances, mobilize masses against regimes, and prompt some people to begin questioning economic systems. Given the possibility of such significant scenarios, how can we explain this food crisis in the world economy? Why did it come about? We might start by putting the factors behind this crisis into two categories: immediate (or proximate) causes and secular (or systemic) causes.⁶ The immediate or proximate factors are those current elements and conditions surrounding the rise in food prices, while the secular or systemic causes are more long-term trends and changes that are not as immediately visible.

While most public attention is paid to the immediate context of the food crisis—issues such as weather conditions and ethanol production—I argue that deregulation in agriculture in both national policies and the level of the world economy set the stage for the crisis. Over the past 40 years, regulations that had helped stabilize agricultural prices and production were eroded or eliminated altogether. Recognizing the role of long-term deregulation also reveals an important insight about the recent food crisis: the instability and volatility of prices is as important as the existence of high prices. Before we explore this point, however, I will first turn briefly to the factors commonly cited as contributing to the food crisis.

IMMEDIATE CAUSES OF RISING FOOD PRICES

Observers tend to point to several factors in explaining recent increases in food prices: inhospitable weather and climate, the proliferation of agrofuels, rising oil prices, commodity speculation, greater meat consumption, and population growth. There should be little doubt that most of these factors played a role in rising food prices in the past four years, and certainly these factors receive the most public attention. While this immediate context is not my central focus, acknowledging the part that these factors played in the food crisis is important nonetheless.

First, harsh or inhospitable weather clearly affects crop harvests and result in higher prices due to unexpected decreases in the supply of food. Leading up to the 2007–2008 food crisis, Australia suffered from a drought, which affected wheat and rice production, and a cyclone hurt rice production in Thailand



—the world’s leading rice exporter.⁷ Then in the summer of 2010, Russia and parts of Europe experienced a severe drought that reduced wheat harvests and pushed the Russian government to ban wheat exports. A *New York Times* article on the drought noted, “Wheat prices have soared by about 90 percent since June because of the drought in Russia and parts of the European Union, as well as floods in Canada, and the ban pushed prices even higher.”⁸ Food prices are likely to rise if weather patterns depress agricultural production.

Second, the shift from food grains to agrofuels undermined food supply and drove prices up. In particular, observers have highlighted the increased use of corn for ethanol production in 2006–2008, especially in the United States and European Union. As Fred Magdoff and Brian Tokar note, “Close to one-third of the entire 2008 United States corn crop was used to produce ethanol to blend with gasoline to fuel cars.”⁹ In 2007, Congress tried to encourage the use of corn for ethanol production by passing the Energy Independence and Security Act, which “mandates the increase of agro-fuels production [...] from 4.7 billion gallons in 2007 to at least 36 billion gallons in 2022.”¹⁰ To encourage agrofuel production, the United States has also created a number of subsidies.¹¹ This push to increase agrofuel production reduced the supply of food in the world economy.

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Third, rising oil prices can contribute to higher food prices. Agricultural production, especially grain production, in developed countries relies heavily on oil as industrial agriculture employs heavy machinery as well as petroleum-based chemical fertilizers. The food crisis of 1973, for example, was exacerbated by the historic rise in oil prices. Oil prices began to rise in 2007 and peaked in 2008 (when gasoline in the United States rose above \$4 per gallon).¹²

Fourth, the financial crisis of 2008–2009 contributed to rising food prices. As real estate markets began to falter, investors sought alternative outlets such as commodities futures markets. Farmers and others use futures markets to lock in a price for a commodity, allowing them “some protection from price fluctuations and allow[ing] them to plan their business effectively.”¹³ The financial crisis, however, increased the level of speculation, which is basically a “bet on the probability that the price of a commodity will rise or fall in order to profit from changes in prices.”¹⁴ This influx of money into the futures market drove up commodity prices, increasing the price of food.¹⁵

Fifth, rising meat consumption in the world contributed to higher food prices. Though meat consumption has increased in the past 20 years in the



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United States and Europe, it has risen much more in countries such as China and India. In the latter, growth in the middle class and rising per capita income have helped to fuel increased per capita meat consumption. And as meat consumption increases, more land is used for pasture or to grow feed grains, such as corn and soybeans. This reduces the land devoted to food crops to be consumed directly by people. In addition, meat production is a less efficient way to feed people since it “takes seven to eight kilos of grain to produce one kilo of beef.”¹⁶

Though it was cited as an important factor in the 1970s, population growth has rarely been singled out as a significant contributor to the recent food crisis. Nonetheless, *The Economist* recently published a special report titled, “The 9 billion-people question,” which focused on the implications of population growth. The world’s population is projected to reach 9 billion by 2050. This report asked: Will there be enough food?¹⁷

This immediate context undoubtedly contributed in varying degrees to recent increases in food prices. Yet focusing on these factors really remains at the surface and leaves fundamental trends and processes unexplored. The broader political-economic context was such that these trends could come together. Understanding how this context came about is central to understanding the fundamental processes leading to this crisis.

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SECULAR CAUSES OF RISING FOOD PRICES

The commonly cited factors are not the only forces contributing to rising food prices, nor are high food prices the only concern. Greater instability in agricultural prices and production is also an important problem. In the past five years, food prices have fluctuated dramatically. For example, wheat prices rose by about 200 percent, then fell by 55 percent, then rose again by almost 100 percent—all within the span of a few years. This volatility is linked to policies of deregulation in the United States and elsewhere over the past 40 years. This instability in prices and production was central to rising food prices and the food crisis.

Importantly, food prices have historically been a function of international food regimes—the institutions, rules, and norms that shape food and agricultural production, trade, and consumption in the world economy. Therefore, the ebb and flow of food prices and the degree to which prices are volatile are functions of the changes in food regimes, which are shaped by national policies and agrarian politics.¹⁸

To put this process into proper context, we need to begin with the mid-



twentieth century, when the United States created global institutions to support its position as the dominant economic and political power in the world economy. At that time, the U.S. food regime came to stress regulation in agriculture with the aim of stabilizing prices and production.

REGULATING FOOD AND AGRICULTURE, 1945–1970

Following the Great Depression and World War II, the United States set out to liberalize the world economy. In particular, the United States sought to tear down many of the trade barriers and regulations created during the Depression. The General Agreement on Tariffs and Trade (GATT) was the primary vehicle for trade liberalization. Coming into effect in 1948, GATT set forth rules for trade and aimed to reduce trade barriers in the world economy through multilateral trade agreements. It was effective at reducing trade barriers, as the average tariff rate on dutiable imports fell from about 40 percent when GATT was formed to 5 percent by 1990. GATT had one important caveat, however: it exempted agriculture from liberalization. As a result, nations could still regulate agricultural production, prices, and trade.

The exemption of agriculture from GATT was, of course, due to the United States' desire to protect its policy of supply management, which rested on three programs: price supports, production controls, and export subsidies. Price supports provided a minimum price for agricultural goods, thereby protecting farmers from severe downturns in the market. Production controls restricted the amount of acreage that farmers could devote to particular commodities (e.g., corn, wheat, cotton), but also regulated production in a manner that helped to guarantee a steady production of these commodities.¹⁹ Export subsidies, including international food aid, were created to help lower the price of agricultural exports, which had been artificially inflated because of price supports. Together, these programs aimed to stabilize the market for agriculture.

In part because agricultural regulations were exempt from GATT, many other nations adopted similar agricultural policies including France, Canada, Mexico, Germany, Australia, and Japan. These nations adopted supply management not simply because GATT allowed it, but also because they faced competition from U.S. agriculture concerns, which were subsidized and extensively regulated. This competition prompted many farmers around the world to push their respective governments for protections from U.S. agriculture. U.S. agricultural policy, then, encouraged other nations to extensively regulate agriculture. Thus, supply management was a widespread national policy in the



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world economy.²⁰

Just as importantly, the regulation of agriculture existed at the level of the world economy beyond GATT. Indeed, while GATT merely allowed—and encouraged—the national regulation of agriculture, a variety of international organizations and agreements were created to oversee extensive regulations of agriculture, in effect instituting supply management policy at the international economic level.

For example, the International Wheat Agreement (IWA) brought wheat-exporting and wheat-importing nations together to coordinate the market to ensure supply and prices. The first IWA went into effect in 1949 and was “a long-term, multilateral commodity contract, which specifies the basic maximum and minimum prices at which ‘guaranteed quantities’ of wheat will be offered by designated exporting countries or purchased by designated importing countries.”²¹ IWA-exporting countries included the United States, Canada, and Australia, which combined accounted for more than 75 percent of world wheat exports at the time. The International Wheat Council oversaw the terms of the IWA, which was renegotiated seven times over the next two decades. While not all world wheat exports went through the IWA, the agreement nonetheless offered significant stability in terms of world wheat prices and production between 1949 and 1970.²²

Other commodities had similar institutions and agreements. The International Coffee Agreement (ICA) set export quotas and prices, overseen by the International Coffee Organization. Created in 1962, the ICA governed the international coffee market until 1989, when the agreement broke down. Like the IWA, the ICA had a significant stabilizing effect on world coffee prices, which fluctuated between \$1.00 and \$1.50 per pound during this period.²³ Sugar, cocoa, wool, cotton, and rubber also had international agreements and organizations that helped to stabilize prices, production, and trade.

Of course, not all agricultural commodities had international agreements regulating trade, production, and prices. The world corn market, for instance, did not have such regulation. This was in part because market stability existed without regulation since the United States dominated world corn exports and regulated corn prices and production domestically. Between 1957 and 1970, for example, the United States accounted for roughly 57 percent of world corn exports.²⁴ This dominance helped to stabilize the market for corn.

Did these national policies and international agreements regulating prices and production help to stabilize agriculture? Yes and no. We should first recognize that because agricultural production is so dependent on the weather, some



fluctuations in production and, hence, prices are bound to occur. Some years bring good weather and large harvests, while other years see bad weather and crop shortfalls. Also, of course, prices and farm income do not necessarily vary with production; when good harvests abound, prices and income may drop. When crops fall short of expectations, prices may rise but farmers may not have the crop to take advantage of high prices. Such fluctuations in fortunes occur in agriculture with or without state intervention.

Nonetheless, national agricultural policies that rested on supply management policies used price supports to help prevent market collapses by instituting a minimum price. Furthermore, price supports generally involved buying excess commodities with the aim of eliminating oversupply and low prices. The government-held stocks could then be released during periods of unexpected crop shortfalls. Such price support programs helped to stabilize production, as well as prices, by removing excess commodities during times of surplus and adding previously purchased and stored commodities during shortages. Thus, national policies of supply management helped to smooth out the vagaries of the market on prices and of nature on production, thereby creating greater stability in agriculture.

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In addition, international commodity agreements had similar effects: they helped to reduce market instability by setting a minimum price, or at least a range in which prices could vary. These agreements also worked to regulate production, trade, or both. This kind of coordination helped to prevent some of the steep fluctuations in prices that we have seen recently.

During the mid-twentieth century, agriculture was regulated at both the level of national policy and world economy. These policies helped to stabilize agriculture prices and production. In the 1970s, however, deregulation began and marked a significant shift in agriculture.

DEREGULATING AGRICULTURE, 1970s–PRESENT

The U.S. food regime, with its extensive economic regulation, was gradually dismantled during the last quarter of the twentieth century. This process of deregulation was apparent at three levels: the breakdown of international commodity agreements, the incorporation of agriculture into GATT, and the retrenchment of national agricultural policies emphasizing supply management.

First, international agreements such as the IWA and ICA began to weaken



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during this period, resulting in greater instability in commodity markets. The last wheat agreement was approved in 1967 and lasted only three years. Though there were two subsequent attempts to establish another agreement in 1970 and 1971, no deals regulating prices or exports were approved.²⁵ The ICA lasted until 1989, when the United States withdrew from the International Coffee Organization. Disagreements between producing and consuming nations about quotas and prices were generally at the core of these collapses. After the failure of these international agreements, the markets for these commodities demonstrated much more price volatility.

Second, the Uruguay Round of GATT talks began in 1986 and included agriculture for the first time, thus starting the process of incorporating that sector in GATT's general push toward liberalization. This same round of GATT talks led to the creation of the World Trade Organization (WTO) in 1995. The WTO replaced GATT as the locus of trade rule negotiations, implementation, and dispute settlement, including agriculture. Consequently, international pressure increased on nations to reduce regulations in agriculture. This pressure was central enough to the WTO's trade policies that it led several ministerial meetings to collapse as many nations resisted liberalizing agriculture.²⁶

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Other international organizations, including the International Monetary Fund (IMF) and World Bank also pushed nations to liberalize their agricultural policies. The IMF and World Bank often made agricultural liberalization a condition of loans.

Third, individual nations—most notably the United States—began to weaken their policies of agriculture supply management. This tended to happen after the elements of supply management at the level of the world economy had been washed away. For example, although the IWA effectively ended in 1970, the national regulation of wheat prices and production remained (at least in the United States) until the 1990s. In this way, the end of the international commodity agreements was the first phase of liberalization in agriculture, followed later by the retrenchment of national policies of supply management.

In 1996, the United States passed the Federal Agriculture Improvement and Reform (FAIR) Act, which eliminated production controls and decoupled farm subsidies from market prices. By removing production controls, in particular, it essentially ended supply management policy after almost 60 years. While the United States eliminated production controls, it reinstituted income supports for farmers in response to the decline in prices precipitated by the passage of the FAIR Act.²⁷

Not all nations, however, were in a position to continue subsidizing farm-



ers. Some simply did not have the national budget resources to do so, while others were limited by IMF or World Bank restructuring agreements. With the creation of NAFTA, for example, Mexico agreed to end its long-standing policy protections of corn and open its market to corn from the United States. Consequently, Mexican imports of corn increased substantially, depressing prices and flooding the Mexican market.

The elimination of stabilizing policies signaled fundamental shifts in agricultural and food production, trade, and prices. The safeguards against market volatility were weakened or eliminated beginning in the 1970s. What were the effects of this deregulation? How exactly did this contribute to the food crisis?

THE CONSEQUENCES OF LIBERALIZATION

The elimination of price supports and production controls made agriculture more vulnerable to market vagaries. First, this deregulation destabilized production and prices. Consequently, the supplies of grains and other foods that poorer countries had come to depend on between 1945 and 1975 were no longer reliable. Following the passage of the FAIR Act, between 1996 and 2005, U.S. corn production increased by about 20 percent. By contrast, wheat production fell slightly by about 5 percent. Without regulations on production, farmers could more easily shift between crops, resulting in less stable supply of various commodities.

The collapse of international agreements had similar effects on agricultural production in the Global South. When the ICA broke down in 1989, for example, coffee production shifted dramatically. Vietnam went from being a small producer of Robusta coffee (about 400,000 60-kilogram bags annually) in the mid-1980s to being the dominant producer (almost 11 million bags) by 2000. Consequently, Vietnam alone increased total world production of Robusta coffee by about 50 percent in less than ten years.²⁸ This dramatic shift in production would not have been possible under the stricter arrangements of the mid-twentieth-century ICA. With the collapse of the coffee agreement, however, a nation could emerge as a top coffee producer and add enough coffee to flood the market.

Second, this deregulation made markets for commodities originating from the Global South less stable. Fluctuating commodity prices, especially price collapses, can endanger the incomes of producers and raise the poverty level in developing countries. Falling incomes inevitably reduce access to food and food insecurity rises.



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Returning to the example of coffee, a crisis plagued the world coffee market for about two decades. When the ICA broke down in 1989, coffee production and prices became much less stable. The ICO's composite price fell from \$1.15 per pound in 1988 to \$0.63 in 1993. After rising again between 1994 and 1998, the composite price fell further to \$0.47 per pound in 2002. While coffee prices rose between 2003 and 2008, the peak in this was still below the average price

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of \$1.31 for 1982–1988.²⁹ As the gourmet coffee market (e.g., Starbucks) took off and American consumers paid more for their daily cup of coffee, world production increased and prices to producers fell. As Daniel Jaffee notes, “The share of the purchase price kept by coffee-producing nations, then, plunged from between 30 and 33 percent to less than 8 percent in a little more than a decade.”³⁰ Higher prices paid by American coffee drinkers have not necessarily meant higher incomes for coffee farmers around the world.

Instability in the price of a central commodity produced in the Global South, such as coffee, has important implications for income and poverty in that part of the world.³¹ These commodities are important sources of income for nations and individuals, and the prices of the commodities do not necessarily vary with prices for commodities that are imported, such as rice, wheat, or other grains. Therefore, the collapse in the price of coffee had the effect of increasing poverty in coffee-producing nations such as Brazil, Kenya, Ethiopia, India, and Vietnam. Increasing poverty contributes to the likelihood of a food crisis because food is a commodity that must be purchased. When incomes fall while the prices for basic foodstuffs rise, people lose adequate access to food. The deregulation in agriculture over the past 40 years contributed to the food crisis by undermining incomes around the world and contributing to spikes in food prices. The food crisis, then, is merely exacerbated poverty and hunger.

CONCLUSION

The immediate context certainly helped to create the recent food crisis. Bad weather, the diversion of crops to biofuel and livestock feed, oil prices, and financial speculation all played a role in increasing prices. But to focus on these short-term trends at the expense of understanding the secular effects of liberalization over the past 40 years is a mistake. The shift toward deregulated agriculture between 1970 and the 1990s played a fundamental role in creating the context



that allowed for the recent extreme volatility seen in food prices.

From the 1940s to the 1970s, agricultural production, prices, and trade were regulated at the level of national policy and the world economy. These regulations attempted to manage the supply of various commodities, and in doing so they also worked to stabilize prices. This food system was by no means perfect, but it nonetheless helped to eliminate some of the worst excesses of the market economy, smoothing out the sharp fluctuations in prices and shifts in production. The push for deregulation beginning in the 1970s removes these stabilizing policies.

The current food crisis has revealed how precarious the underlying system has become. The food regime is increasingly susceptible to sharp changes in prices as the buffers that had been in place for decades are now either severely weakened or eliminated. This change has left many people and nations throughout the world more vulnerable to extreme market swings in prices and production. The food crisis occurred at least in part because of that vulnerability.

What does such a food crisis mean? What are the implications of being more susceptible to sharp fluctuations in prices? First, such crises affect individuals, and those most vulnerable are the poor in developing countries. A high proportion of their budget is devoted to food, and they generally have few resources to absorb sudden and sharp increases in food prices.³² This is, at its root, a very personal side of food crises as food is a basic need that every one of us has. When food is a commodity that becomes swept up in a wave of economic crisis, it often means even tougher times for those who are already struggling.

Second, food crises bring the possibility of political and economic instability. Food riots, political shifts, economic downturns, increased debt and financial problems, and other potential troubles can accompany food crises—particularly for food-importing and developing countries. As with individuals, food crises can exacerbate the financial, economic, or political difficulties that countries may face, especially in a global context in which buffers against extreme volatility have been significantly weakened.

Nonetheless, we should remember that political decisions construct the market and build the parameters of international regimes. The long-term movement between regulation and deregulation in food regimes is an ongoing process that can be traced back to the mid-1800s, when Britain established a food regime based primarily on free trade. The ebb and flow of regulations will continue. The question now is: How can we move toward a food regime that offers more food security to people around the world? 



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NOTES

1. Based on monthly world prices from FAOSTAT. See: Food and Agriculture Organization of the UN, *International Commodity Prices Database*, www.fao.org/es/esc/prices/PricesServlet.jsp?lang=en.
2. Food and Agriculture Organization of the UN, *FAO Food Price Index*, August 2011, www.fao.org/worldfoodsituation/wfs-home/foodpricesindex/en/.
3. Food and Agriculture Organization of the UN, *The State of Food Insecurity in the World: Addressing Food Insecurity in Protracted Crises*, 2009.
4. Joseph Guyler Delva and Jim Loney, "Haiti's Government Falls after Food Riots," *Reuters*, April 12, 2008.
5. While the food price index was higher in early 2011 than in 2008, the prices of rice and wheat were not. Wheat and rice prices in 2011 were still notably higher than the average for 2004–2005, but they did not reach the heights of 2008. This, of course, means that other food prices are higher than in 2008. See: FAO, *Food Price Index*.
6. Others use this or a similar distinction. For example, see: Eric Holt-Gimenez and Raj Patel, *Food Rebellions! Crisis and the Hunger for Justice* (Oakland, CA: Food First Books, 2008); Walden Bello, *The Food Wars* (London: Verso Books, 2009).
7. Keith Bradsher, "A Drought in Australia, a Global Shortage of Rice," *New York Times*, April 17, 2008; "Cyclone fuels rice price increase," *BBC News*, May 7, 2008.
8. Andrew E. Kramer, "Russia, Crippled by Drought, Bans Grain Exports," *New York Times*, August 5, 2010.
9. Fred Magdoff and Brian Tokar, "Agriculture and Food in Crisis: An Overview," in *Agriculture and Food in Crisis*, edited by Fred Magdoff and Brian Tokar (New York: Monthly Review Press, 2010), 9–30, 11.
10. Walden F. Bello, *The Food Wars* (New York: Verso Books, 2009), 107.
11. Saturnino M. Borras, Jr., Philip McMichael, and Ian Scoones, "The Politics of Biofuels, Land and Agrarian Change," *Journal of Peasant Studies* 37, no. 4 (2010): 575–92.
12. From June 9 to July 24, average retail gas prices were above \$4 per gallon. U.S. Energy Information Administration, *Weekly Retail Gasoline and Diesel Prices (Dollars per Gallon, Including Taxes)*, http://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_nus_w.htm.
13. Holt-Gimenez and Patel, *Food Rebellions*, 16.
14. Ibid.
15. Jayati Ghosh, "The Unnatural Coupling: Food and Global Finance," *Journal of Agrarian Change* 10, no. 1 (2010): 72–86.
16. Holt-Gimenez and Patel, *Food Rebellions*, 14.
17. "The 9 billion-people question," *The Economist*, February 26, 2011.
18. For food regimes, see: Harriet Friedmann, "The Political Economy of Food: A Global Crisis," *New Left Review* 197 (1993): 29–57.
19. In the United States, production controls and price supports rested on "base acreage," which restricted eligibility for subsidies and acreage allotments for particular commodities based on the farm's historical production patterns. To maintain a steady base acreage for wheat, for example, a farm generally had to continue growing wheat. This helped to ensure fairly stable production levels.
20. For a more extensive discussion of agriculture in GATT, see: Bill Winders, "The Vanishing Free Market: The Formation and Spread of the British and US Food Regimes," *Journal of Agrarian Change* 9, no. 3 (2009): 315–44.
21. Helen C. Farnsworth, "International Wheat Agreements and Problems, 1949–56," *The Quarterly Journal of Economics* 70, no. 2 (1956): 217–48.
22. C. D. Harbury, "An Experiment in Commodity Control—The International Wheat Agreement, 1949–1953," *Oxford Economic Papers* 6, no. 1 (1953): 82–97. See also: Ian McCreary, "Protecting the Food Insecure in Volatile International Markets: Food Reserves and Other Policy Options," *Canadian Foodgrains Bank Occasional Paper*, March 2009, Figure 4.
23. Daniel Jaffee, *Brewing Justice: Fair Trade Coffee, Sustainability, and Survival* (Berkeley, CA: University of California Press, 2007): 42.

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24. Bill Winders, *The Politics of Food Supply: U. S. Agricultural Policy in the World Economy* (New Haven: Yale University Press, 2009), Figure 6.4, 152.

25. There have since been several wheat agreements, but they have not entailed the kind of regulations seen before 1970.

26. This was most apparent in the ministerial meeting in Cancun, Mexico, in 2003. See: Gimenez and Patel, *Food Rebellions*, 50-52.

27. For an extensive discussion of the history and politics of US agricultural policy, including the FAIR Act, see: Winders, *Politics of Food Supply*.

28. United States Department of Agriculture: Foreign Agricultural Service, *Production, Supply and Distribution Online Database*, <http://www.fas.usda.gov/psdonline/>.

29. International Coffee Organization, ICO Indicator Prices, <http://www.ico.org/>.

30. Jaffee, *Brewing Justice*, 45.

31. For example, see: Jaffee, *Brewing Justice*.

32. Food and Agriculture Organization of the UN, *The State of Food Insecurity in the World* (Rome: FAO, 2011): 13-20.

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