

LONDON SCHOOL OF ECONOMICS AND POLITICAL  
SCIENCE

Food Commodity Speculation, Hunger,  
and the Global Food Crisis:

# **Whither Regulation**

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# Declaration

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# Abstract

This thesis takes as its starting point claims that practices of financial speculation in commodity derivative markets were instrumental in the causation of the global food crisis in 2007-08. Adopting an approach informed by critical legal studies, I seek to challenge dominant conceptions about the role that law has played in this context. Campaigners concerned about these practices place great faith in financial regulation as means of restraining ‘excessive’ speculation. Equally, those concerned with the vulnerability of poor communities to its effects — their condition of ‘food insecurity’, as it is designated in the prevailing discourse — turn to human rights, in particular, the right to adequate food, as a means of response. In both instances, law is positioned as the solution to fix malfunctioning markets. Examining the significance of law in the creation of the two global markets in question — one for a trade in financial instruments linked to food commodities, the other for tangible food commodities — I will consider whether this way of positioning law is accurate. I will explore the possibility that a preoccupation with regulatory solutions obscures other roles that law might play in global commodity markets. Focusing on the role law plays in enabling market behaviours, such as speculation, and in entrenching market entitlements that prevent equitable access to food, I will suggest that a body of law that is constituting and entrenching the market might stand in the way of regulatory ambition. The call for financial regulation to tackle food price volatility and for the strengthening of domestic legal regimes to protect against vulnerability is a call on the state to use law to constrain the excesses of the market in the interests of society. Is this a promising strategy, however, when the constitutive role of law and the state in facilitating the operations of the market is taken into account?

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## Table of Acronyms

ADM	Archer Daniels Midland
AoA	Agreement on Agriculture
BIS	Bank for International Settlements
BIT	Bilateral Investment Treaty
BWIs	Bretton Woods Institutions
CBOT	Chicago Board of Trade
CCO	Collateralized Commodity Obligations
CDO	Collateralized Debt Obligations
CEA	Commodity Exchange Act
CFMA	Commodity Futures Modernization Act
CFS	Committee on World Food Security
CFTC	Commodity Futures Trading Commission
CME	Chicago Mercantile Exchange
EMIR	European Market Infrastructure Regulation
ETF	Exchange Traded Funds
ESMA	European Securities and Markets Authority
ETNs	Exchange Traded Notes
FAO	Food and Agriculture Organization of the United Nations
FDI	Foreign Direct Investment
FSA	UK Financial Services Authority
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs in Trade

HFT	High Frequency Trading
HLTF	UN High-Level Task Force on the Global Food Security Crisis
IATP	Institute for Agriculture and Trade Policy
ICA	International Commodity Agreement
IFST	International Food Security Treaty
IMF	International Monetary Fund
ISDA	International Swaps and Derivatives Association
IWA	International Wheat Agreement
MDGs	Millennium Development Goals
MiFID II	Markets in Financial Instruments Directive II
NAFTA	North American Free Trade Agreement
NECSI	New England Complex Systems Institute
NGO	Non-Governmental Organisation
OECD	Organization for Economic Development
OTC	Over The Counter
PSNR	Permanent Sovereignty over Natural Resources
RTS	Regulatory Technical Standards
SEC	Securities and Exchange Commission
SOFI	State of Food Insecurity in the World
TWAIL	Third World Approaches to International Law
UNCTAD	United Nations Conference on Trade and Development
VaR	Value at Risk
WDM	World Development Movement
WFP	World Food Programme
WTO	World Trade Organization





## Introduction

In March 2008, the price of rice on international commodity markets increased by 31 per cent in a single day.<sup>1</sup> This statistic is but one of a litany of facts and figures that seeks to convey the magnitude of the volatility that swept commodity markets between 2007 and 2008. Although the prices of many commodities were affected,<sup>2</sup> the most prodigious inflation occurred in markets for grain.<sup>3</sup> Between 2006 and the second quarter of 2008, the prices of maize, rice, and wheat had more than doubled, in some cases in a matter of months.<sup>4</sup> ‘We have never seen anything like this before’, Jeff Voge, Chairman of the Kansas City Board of Trade reported in April that year.<sup>5</sup> These events were a catalyst for what unfurled into a global food crisis. Approximately half of the calories consumed by the world’s poor are accounted for by these three staple grains,<sup>6</sup> and food price inflation was typically far greater in poorer countries in the Global South than in many richer ones in Europe, or in the US.<sup>7</sup> The rising cost of food triggered food riots in more than 25 countries worldwide.<sup>8</sup> Widespread panic ensued, with journalists proclaiming ‘the end of cheap food’<sup>9</sup> and the World Food Programme struggling to maintain emergency provision for the

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<sup>1</sup> Blas, Javier and Daniel Ten Kate, “Jump in rice price fuels fears of unrest,” *The Financial Times*, 28<sup>th</sup> March 2008.

<sup>2</sup> Dairy products, meat, palm oil and cassava all underwent significant inflation. See Von Braun, Joachim, “Food and Financial Crises: Implications for Agriculture and the Poor,” International Food Policy Research Institute, Washington DC, 2008, p. 3.

<sup>3</sup> Mitchell, Donald, “A Note on Rising Food Prices,” World Bank, Working Paper WPS 4682, 2008, p. 3.

<sup>4</sup> *Ibid.*

<sup>5</sup> Faiola, Anthony, “The New Economics of Hunger,” *The Washington Post*, 27<sup>th</sup> April 2008, <http://www.washingtonpost.com/wp0151dyn/content/story/2008/04/26/ST2008042602333.html> Last accessed 5<sup>th</sup> May 2015.

<sup>6</sup> Lobell, David et al, “Prioritizing climate change adaption needs for food security in 2030,” *Science*, 319 no. 5863 (2008): 607-610, p. 608.

<sup>7</sup> Ivanic, Maros and Will Martin, “Implications of higher global food prices for poverty in low-income countries,” World Bank, Working Paper WPS 4594, 2008.

<sup>8</sup> Bush, Ray, “Food riots: Poverty, Power and Protest,” *Journal of Agrarian Change* 10, no. 1 (2010), p. 121.

<sup>9</sup> “Food Prices: The End of Cheap Food,” *The Economist*, 6<sup>th</sup> December 2007.

communities it had pledged to assist.<sup>10</sup> Then, as suddenly as they rose, food prices plummeted again towards the end of 2008, generating another kind of havoc for farmers and labourers worldwide who depend on agricultural revenue for their livelihoods.

Like many people living in wealthier parts of the world, I didn't experience the global food crisis first-hand. As a consumer living in the UK, I typically eat grain that is processed and further removed from raw commodities than it is for many people living in rural Africa, Asia, or South America where domestic prices rose dramatically. Wheat is a fairly small component in the cost of a loaf of bread purchased in a supermarket.<sup>11</sup> Much of the food I buy is produced, manufactured, and traded by large agribusiness companies, which were able to absorb much of the impact of rising prices and still make a profit.<sup>12</sup> In contrast to many of the world's poor, I have the luxury of a varied diet and can easily switch to other nutritious alternatives. My awareness of these events came from reading newspapers and watching reports on television. Images of grasping hands, rural poverty, and aid workers handing out bags of rice reminded me of some of the first televised images I recall seeing as a child: dying mothers still holding dead babies, too weak to bat away the flies; images of children with painfully distended stomachs protruding from their tiny bodies of skin and bone. This was footage of the famine in Ethiopia and Eritrea, at its peak between 1983 and 1985.<sup>13</sup> The questions I had for my parents then, 'why do they look like that?', 'why can't we feed them? Isn't there enough food?', 'but why are they poor?', and the unsatisfying answers they gave me have bothered me since. They cropped up again when I attended an event in London called 'Gambling on Food: The bankers'

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<sup>10</sup> Popham, Peter, "Threat to Millions as Food Aid Scheme Runs Out of Money," *The Independent*, 25<sup>th</sup> March 2008.

<sup>11</sup> Anderson, Richard, "The global food crisis: what crisis?" BBC News, 16<sup>th</sup> October 2012. <http://www.bbc.co.uk/news/business015119715504> Last accessed 5<sup>th</sup> May 2015.

<sup>12</sup> Neate, Richard, "How £50m in UN food aid for starving went to buy wheat from Glencore," *The Guardian*, 6<sup>th</sup> February 2012, <http://www.theguardian.com/business/2012/feb/06/un-food-aid-glencore-xstrata> Last accessed 6<sup>th</sup> May 2015.

<sup>13</sup> De Waal, Alex, *Evil Days: Thirty Years of War and Famine in Ethiopia*, New York & London: Human Rights Watch, 1991.

addiction that's starving the world's poorest people',<sup>14</sup> in October 2010. The previous week I had met with one of my current doctoral supervisors, Susan Marks, to discuss a topic for a thesis. I said that I wanted to write about 'economic injustice', as I termed it, and she suggested I might be interested in joining her at an event she was planning to attend.

i. Thesis topic

The event was organised by the World Development Movement.<sup>15</sup> Over the course of the evening, I listened to a number of speakers, including economist Jayati Ghosh, explaining how a surge of financial investment in commodity futures markets was largely responsible for the extreme price volatility that had led to the global food crisis.<sup>16</sup> I learned that due to the development of financial instruments linked to the price of agricultural commodities — commodity derivatives — financial speculators seeking to profit from changes in underlying commodity prices had been able to enter the market. Over the past decade, speculation in derivatives instruments had developed into a monumental global market which, due to pressure from the financial services industry, had been deregulated by governments in the UK and in the US in the late 1990s. Ghosh and the other panellists were calling for new regulations to be implemented to tackle 'food commodity speculation', to prevent greedy speculators from gambling with the lives of the poor.

Two things quickly became apparent when — PhD proposal accepted — I began to research the topic further. The first, obvious to anyone taking an interest in the subject, was that the causal claim articulated by the speakers at the event was the subject of a fraught debate amongst economists. While some claimed that speculation

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<sup>14</sup> "Gambling on Food: The bankers' addiction that's starving the world's poorest people," Event hosted by the World Development Movement, Conway Hall, Red Lion Square, London, 26<sup>th</sup> October 2010.

<sup>15</sup> The World Development Movement changed its name to Global Justice Now in January 2015. Owing to the fact that most of the reports I cite are published under 'World Development Movement', I will use this designation throughout the thesis.

<sup>16</sup> Ghosh, Jayati, "The unnatural coupling: Food and global finance," *Journal of Agrarian Change* 10, no. 1 (2010): 72-86.

was a principal cause of the price volatility in 2007-08,<sup>17</sup> others refuted this, arguing that practices of speculation in financial markets could have no impact whatsoever on the price of tangible food commodities.<sup>18</sup> The second, apparent to me, at least, was that the call for regulation as the solution to these practices was problematic. The literature on food commodity speculation, much of it written by campaigning groups, such as the World Development Movement,<sup>19</sup> SOMO,<sup>20</sup> and Oxfam,<sup>21</sup> continually referred to the activities of speculators as ‘unregulated’,<sup>22</sup> described derivatives as ‘invisible’,<sup>23</sup> and the markets they were sold in as ‘dark’.<sup>24</sup> Financial speculators were operating, or so it was argued, in a ‘regulatory black hole’.<sup>25</sup> These characterisations seemed to jar with the lists of prestigious banks that traded commodity derivatives, advertising them in investment brochures as a sound investment choice.<sup>26</sup> What those descriptions did evoke for me was an article I had read during my LLM about something else described as a ‘legal black hole’ — Guantánamo Bay, Cuba.<sup>27</sup> Drawing on critical literatures to challenge the common characterisation of this military prison as a legal vacuum, Fleur Johns had demonstrated in this article that

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<sup>17</sup> Wahl, Peter, “Food Speculation: The Main Factor of the Price Bubble in 2008,” Briefing Paper, World Economy, Ecology and Development, Berlin, 2009.

<sup>18</sup> Krugman, Paul, “Speculative nonsense once again,” *New York Times*, 23<sup>rd</sup> June 2008. [http://krugman.blogs.nytimes.com/2008/06/23/speculative-nonsense-once-again/?\\_r=0](http://krugman.blogs.nytimes.com/2008/06/23/speculative-nonsense-once-again/?_r=0) Last accessed 9<sup>th</sup> July 2015.

<sup>19</sup> Jones, Tim, *The great hunger lottery: How banking speculation causes food crises*, World Development Movement, 2010; Worthy, Murray, *Broken markets: how financial market regulation can help prevent another global food crisis*, World Development Movement, 2011, p. 16.

<sup>20</sup> SOMO, “Financing Food: Financialisation and Financial Actors in Agriculture Commodity Markets,” SOMO Paper, April 2010.

<sup>21</sup> Herman, Marc-Olivier, Ruth Kelly, and Robert Nash. “Not a Game, Speculation vs Food Security: Regulating financial markets to grow a better future,” Oxfam Policy and Practice: Agriculture, Food and Land 11, no. 7 (2011).

<sup>22</sup> Worthy, Murray, *Broken markets: how financial market regulation can help prevent another global food crisis*, World Development Movement, 2011, p. 16.

<sup>23</sup> Baker, Colleen M., “Regulating the Invisible: The Case of Over-the-Counter Derivatives,” *Notre Dame Law Review* 85 (2009): 1287.

<sup>24</sup> D’Souza, Frank, Nan S. Ellis, and Lisa M. Fairchild, “Illuminating The Need For Regulation In Dark Markets: Proposed Regulation of the OTC Derivatives Market,” *University of Pennsylvania Journal of Business Law* 12 (2009): 473.

<sup>25</sup> Greenberger, Michael, “Overwhelming a Financial Regulatory Black Hole with Legislative Sunlight: Dodd-Frank’s Attack on Systemic Economic Destabilization Caused by an Unregulated Multi-Trillion Dollar Derivatives Market,” *Journal of Business & Technology Law* 6, no. 1 (2011).

<sup>26</sup> “Understanding Commodities: Products & Solutions – Alternative Investments,” ABN AMRO Private Banking, Brochure, [https://www.abnamroprivatebanking.com/en/images/000\\_PBI\\_Global/Brochure/Commodities/Commodities.pdf](https://www.abnamroprivatebanking.com/en/images/000_PBI_Global/Brochure/Commodities/Commodities.pdf) Last accessed 6<sup>th</sup> May 2015.

<sup>27</sup> Johns, Fleur, “Guantanamo Bay and the Annihilation of the Exception,” *European Journal of International Law* 16, no. 4 (2005): 613-635.

Guantánamo Bay was, in fact, a space ‘filled to the brim with expertise, procedure, scrutiny and analysis’ — a work of legal representation and classification.<sup>28</sup> The legal black hole, it turned out, was full of law.

## ii. Research question

In this thesis, I explore claims that the activities of financial traders investing in grain via derivative instruments contributed to the causation of the global food crisis. I also explore the role that law is playing, or might be understood to be playing, in this context. Campaigners concerned about food commodity speculation place great faith in financial regulation as a means of restraining ‘excessive’ speculation and preventing future price volatility. Equally, those concerned with the vulnerability of poor communities to the effects of the price volatility — their condition of ‘food insecurity’, as it is designated in prevailing discourses — turn to human rights law and place emphasis on strengthening of the rule of law domestically. In both instances, law is positioned as the solution to fix malfunctioning markets. Examining the significance of law in the creation of the two global markets in question — the market in financial instruments linked to food commodities, and the market in food commodities themselves — I will consider whether this way of positioning law is accurate. Specifically, I will ask to what extent it captures the important *constitutive* role which law has played in enabling market behaviours, such as speculation, and in entrenching entitlements that underpin market structures, preventing equitable access to food. The call for financial regulation to tackle food price volatility and for the strengthening of domestic legal regimes to protect against vulnerability is a call on the state to use law to constrain the excesses of the market in the interests of society. Is this a promising strategy, however, when the constitutive role of law and the state in facilitating the operations of the market is taken into account? This is the overall research question that I will try to answer in this thesis.

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<sup>28</sup> *Ibid*, p. 618.

### iii. Argument overview

My approach in answering this question involves putting practices of food commodity speculation and efforts to respond to vulnerability in historical and political context. It involves identifying underlying systemic tendencies, explaining trends in economic theory, and linking these to law. The law that I am linking them to cannot be conceptualised as one thing; rather, it is a collection of ideas, principles, practices, and institutions. It is iterated in texts ranging from treaties to contracts; it is legislated, regulated, negotiated, and challenged; it is performed by people — sometimes consciously, other times not. I will be talking about many kinds of law throughout a number of different historical periods and in a diverse range of countries. Some of this law is international law, and some of it is domestic; some of it is both. Increasingly, much of it is described as ‘global’ or ‘transnational’. Operating on all of these disparate levels and throughout these diverse terrains, however, almost all of this law can be found to be regulating just one thing — the relationship between the market and society.

The law in the ‘regulatory black hole’ of the over-the-counter derivative market comes, mainly, in the form of contracts. However, there are also legal devices, such as collateral, and a body of soft law — guiding principle and standards. The market it creates is, like Guantánamo Bay, largely a work of legal representation and classification. It does not exist as a place; the financial instruments sold within it may never take physical form. Through law, however, it is real. Through law, this ‘virtual’ trading space conditions real-world effects, both in terms of producing prices and in terms of structuring behaviours, which, in turn, structure society. While it is understood as a global market, it remains tethered to domestic legal institutions. Domestic law is constitutive of this market. This is a stark contrast with the law as it is conceptualised in the context of vulnerability to commodity price volatility. Law is absent here too, or so it is suggested. What is needed to improve the rightlessness and to counter poverty and hunger within ‘developing’ country populations is law to

strengthen their access to markets;<sup>29</sup> domestic legal systems have failed them. With the guidance of international institutions towards an enabling environment in which international human rights law is respected, protected, and fulfilled, this can be remedied. Yet the coming of international law to these contexts forgets a history in which it is deeply implicated. International law, its institutions, practices of knowledge, principles, promises, and conditions, had very real effects in terms of contributing to the conditions it now seeks to remedy in developing countries. This law too, structured behaviours and structured society.

In both instances, I will suggest, law — originating, mostly in Europe, and projected through the international, creating the global — has been instrumental in erecting global markets and creating a market society. Moving away from a focus on regulation as the fix for failing markets to the role of law as a market enabler brings to light a critical challenge for current regulatory ambitions. Law constitutes the market facilitating economic interactions based on a mode of exchange that is, as Karl Polanyi has argued, intrinsically dependent on the commodification of social life: land, labour, and money.<sup>30</sup> Facilitating this mode of exchange operates to replicate it, requiring further commodification. Increasingly, it anticipates and produces a particular kind of legal and economic actor: *homo economicus*.<sup>31</sup> Assigning him rights and regulating his relationships with others, law empowers a subjectivity that thinks individually, in the pursuit of self-interest and profit, but acts in society. Thus, in constituting the market and empowering *homo economicus*, law is creating a market society. As Polanyi demonstrated in *The Great Transformation*, this had insidious effects historically on many people trying to live and thrive in that society, prompting

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<sup>29</sup> I agree with the criticism directed at the use of the label ‘developing’ to refer to low-income countries in the Global South. I use it throughout the thesis in order to refer to those countries subject to practices of international development.

<sup>30</sup> Polanyi, Karl, *The Great Transformation: The Political and Economic Origins of Our Time*, Boston: Beacon Press, 2002, Chapter 6: “The Self-Regulating Market and Fictitious Commodities: Labor, Land, and Money”.

<sup>31</sup> Homo economicus, or ‘economic man’, is the Latin term denoting the core set of assumptions ascribed to market actors under neoclassical economic theory, namely, that individuals are rational self-utility maximisers who, in possession of complete information, will process and evaluate that information according to a set of preferences, which are assumed to be largely stable and formed exogenously. See Persky, Joseph, “Retrospectives: The Ethology of Homo Economicus,” *The Journal of Economic Perspectives* 9, no. 2 (1995): 221-231.

them to rebel, and to seek law's protection, demanding social regulation that would shield them from the excesses of the market. This oscillation between market entrenchment and market mitigation is designated by Polanyi as the 'double movement'.<sup>32</sup> What I will seek to show in this thesis, via an exploration of the role of law in the context of food commodity speculation, price volatility, and vulnerability, is that this pendulous swinging — this hinge of the relationship between market and society — is seizing up. Its direction is ever more singular. A political stance taken to the market is crystallised into constitutive law that hinders the ability of the state to regulate the market in the interests of society. The proliferations of laws that 'economize the social',<sup>33</sup> to borrow from Wendy Brown; or that 'regulate society by the market',<sup>34</sup> prevents, or at any rate inhibits, a shift towards another kind of politics. This occurs because the law isn't just structuring a market, it is structuring mindsets. It is conditioning agencies predisposed to act as *homo economicus*: to calculate, speculate, and, in pursuit of the maximisation of their own utility, to circumvent or otherwise resist regulation. As I will seek to demonstrate, this sets critical limits to the ambitions of those seeking to use regulation to tackle hunger.

#### iv. Research parameters

To arrive at this argument I had to navigate through a range of literatures a long way from my starting point as a student of public international law with an interest in human rights. The question of the impact of speculative practice on food prices required engagement with traditional economic theories of value formation, and the dominant school of thought on that subject, neoclassical economics. The stalemate between economists attempting to assess the causal impact of speculation through this framework necessitated a sideways move towards behavioural economics, the psychology of investment, and sociological literature on institutions. The attempt to

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<sup>32</sup> Polanyi, Karl, *The Great Transformation*, pp. 79-80.

<sup>33</sup> Brown, Wendy, *Undoing the Demos: Neoliberalism's Stealth Revolution*, Cambridge Mass and London: MIT Press, 2015, p. 62.

<sup>34</sup> Foucault, Michel, *The Birth of Biopolitics: Lectures at the Collège de France 1978-1979*, Senellart Michel (Ed) trans. Graham Burchell, New York: Picador, 2004, p. 145.



position economic explanations in their political context led to literature on ‘neoliberalism’ — the unwieldy term typically invoked in critical work to characterise the political climate since the 1970s. Understanding the evolution of commodity derivatives demanded exploration of the history of commodity futures trading. Examining efforts to regulate derivatives markets called for consideration of the global financial crisis, literature on regulatory reforms pursued in the US and Europe, along with broader scholarship on financial regulation. Consideration of the constitutive role of law in the creation of derivative markets entailed a leap back in time, to the origins of capitalism, then forward again, to trace the trajectory of financial markets, ending up in modern scholarship on specific concepts such as ‘collateral’,<sup>35</sup> and, more broadly, the ‘legal theory of finance’.<sup>36</sup> Moving on from the contemplation of the volatility dimension of the global food crisis to the question of vulnerability opened up another library of histories, theories, and critiques: texts on the political economy of hunger, scholarship on food security, critical literature on international development and international economic law. Exploring these avenues, I eventually ended up on more familiar territory once again — that relating to public international law, the legacy of colonialism, and the international protection of human rights.

I don’t claim to have the same degree of intimacy with all of these different literatures. Some of them I have engaged with in depth and can claim to know well. Others I have been introduced to, gotten a sense of, and hope to get to know better. There have been times when I have felt myself over-stretched by the effort to get to grips with this vast body of work — conscious of deeper undercurrents and islands of intrigue that I have been unable to fully explore. There are aspects of my work that I think would benefit from a more in-depth, circumspect, and precise study. Three such aspects are a study on the dynamics of the trade in financialised commodity derivatives as a discrete category; an investigation into the legal and policy structures that influence levels of price transmission from international commodity markets into

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<sup>35</sup> Riles, Annelise, *Collateral knowledge: Legal reasoning in the global financial markets*, University of Chicago Press, 2011.

<sup>36</sup> Pistor, Katharina, “A legal theory of finance,” *Journal of Comparative Economics* 41, no. 2 (2013): 315-330.

domestic food prices; and a comparative study on the position of two different economies with respect to grain price volatility on international markets, one having followed prescriptions on international development geared towards market openness, and the other having pursued a more insular stance. I hope that in the future I or others will have the opportunity to explore these aspects in further detail.

In this thesis, my intention is to convey a sense of the big picture. I do, however, confine my ambitions to a project of explaining existing dynamics significant in practices of speculation, commodity derivative markets, the production of food price volatility and food insecurity, and the limits of existing approaches to their re-conditioning. I am not, at present, suggesting alternatives. Although much of my analysis concerns regulation, I do not engage in depth with broader debates in financial regulation as to how financial markets might be fixed, speculative practices curbed, or product innovation tackled.<sup>37</sup> Another vital caveat to foreground relates to what I am claiming for the causal significance of food commodity speculation. I am not an economist and I do not claim to be able to ‘prove’ a role of speculation in the causation of the price spikes, or to quantify it. However, as I will go on to argue, dominant tools of economic analysis are unable to explain the causal connection between food commodity speculation and price volatility. I will elaborate on this in Chapter Two. What I will say is that there seems to be an overwhelming body of evidence that corroborates claims that the trade in commodity derivatives has impacted on pricing dynamics within underlying commodity markets. On the question of what measure of the volatility in 2007-08 is attributable to activity in commodity derivative markets, I offer no answer. Asked if activity in commodity derivative markets was significant to the causation of these events, I would answer definitely

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<sup>37</sup> Prominent scholars who are engaging with these debates are Julia Black, Dan Awrey, Eric Posner, and Glen Weyl. See further: Black, Julia, “Learning from Regulatory Disasters,” Law, Society and Economy Working Paper WPS 24/2014, 2014; Black, Julia, “Paradoxes and Failures: New Governance Techniques and the Financial Crisis,” *Modern Law Review* 75, no. 6 (2012):1037-1063; Awrey, D., W. Blair and D. Kershaw, “Between Law and Markets: Is there a Role for Culture and Ethics in Financial Regulation?” *Delaware Journal of Corporate Law* 38 (2013): 191; Awrey, D., “Complexity, Innovation and the Regulation of Modern Financial Markets,” *Harvard Business Law Review* 2 (2012): 235; Posner, Eric A., and E. Glen Weyl, “Benefit-cost analysis for financial regulation,” *American Economic Review* 103, no. 3 (2013).

yes. I would further suggest that there is an urgent need for economists to address a different question. Dominant tools of economic analysis are unable to account for the full measure of volatility in food prices, or to explain the significance of speculation. Why does that operate, predominantly, to produce doubt about the role of speculation and not doubt about the tools used to analyse it?

v. Thesis structure

I begin my analysis by looking at the broader background of hunger and deprivation against which the events of the global food crisis took place. Chapter One will provide an overview of the phenomenon of world hunger, as it is known and understood. After relating key theories and core responses, I offer some thoughts on the limitations of dominant approaches to addressing hunger. Drawing on critical literature on the global food system, I suggest that a sense of this system as a producer of hunger and poverty is the absent diagnosis preventing solutions to world hunger from taking their desired effect. I then seek to characterise the contemporary global food system, and discuss its relevance in the context of the global food crisis.

Chapter Two engages in analysis of the significance of food commodity speculation to the causation of the global food crisis. Seeking to develop an understanding of what practices of speculation consist of, and how they could have been causally relevant, I challenge prevailing characterisations common to both those claiming these practices caused the crisis and those denying this possibility. Agreeing with campaigners that dominant modes of causal economic analysis are inadequate, I nonetheless suggest that campaigners err in attributing responsibility for volatility-inducing speculation to a class of risk-taking, greed-driven financial speculators. The problem is both more structural and more societal. Speculators are but an extreme case of a broader social inclination towards this manner of market behaviour — a market logic oriented towards speculation that is not a natural human characteristic, but is the

result of a broader political context and enabling institutional environment that has legitimated speculation as an economic practice.

In Chapter Three, I focus on the drive to regulate ‘excessive’ levels of speculation in commodity derivatives markets. I evaluate the likely efficacy of new regulations introduced in the US and in Europe in the wake of the global financial crisis in 2007, some of which are designed to tackle speculative activity. Demonstrating a number of key limitations to these regulatory ambitions, I proceed with a critical analysis of the reforms arguing that their regulations fail to address the underlying market logic of speculation that I identified in Chapter Two. Instead, I suggest, the regulations predominantly serve to displace this logic, driving further product innovation and financial market complexity that is counterproductive to the aims of the regulatory endeavour.

The work I begin in Chapter Four and continue in Chapter Five seeks to expose key assumptions about law animating much of the literature on practices of food commodity speculation and the vulnerability to which they are alleged to have contributed. Overwhelmingly, law is the solution in these scenarios. Financial regulation is the fix for global financial markets; human rights are required to improve access and to make markets in developing countries operate more equitably. I aim to shift the focus on law as remedy to one on law as market enabler. In doing so, I move to engage directly with my central research question: to what extent is regulation the best strategy when the role of law and the state in constituting markets for food commodities is taken into account?

In Chapter Four, I examine the portrayal of the market in over-the-counter derivatives as a ‘regulatory black hole’. Taking issue with the presentation of this market as ‘self-regulating’, or ‘unregulated’ — the product of processes of deregulation — I trace the origins of the market to a legal device known as ‘offshore’ finance. I explore the possibility that the label ‘over-the-counter’ functions in a similar vein — as a legal fiction that blinds people to the true mode of this market’s operation

and, critically, the role of the state and domestic legal institutions in supporting it. I then move on to critically examine designations of derivatives as ‘financial’ technologies, countering that they might more accurately be understood as legal ones. Contrary to the presentation of speculative behaviours and their impact on food prices as being ‘natural’ or ‘exceptional’ economic behaviours, I seek to demonstrate that they are structurally produced. Law helps to condition the speculative market logic I identified in Chapter Two, the logic that demands regulatory evasion, as suggested in Chapter Three.

In Chapter Five, I move on to consider the disparate impact of the ‘global’ food crisis. I begin by challenging narratives that present the particular vulnerability of poor people living in Southern economies as natural, or attribute it to failures of governance — domestic or international. My next move is to recall the (widely made) argument that international law has been a pivotal part of a power-complex that has, since the period of European colonialism, enabled wealthier nations in the Global North to maintain ongoing influence over the economic affairs of those in the South. I examine something of the shifting guises of development discourse, its relationship with economic theory, and its relationship with law. I demonstrate that both food insecurity and food price volatility are produced and sustained, in part, by an international legal order that systematically disadvantages populations in the Global South in their ability to command access to food. Moving on to contemplate international legal solutions to the ‘challenges’ of food insecurity and food price volatility, and in particular, the promotion of the rule of law and human rights, my analysis brings into focus significant limitations to these projects as a means of tackling hunger.

Drawing together some of the central insights of my research, in a final concluding chapter I argue that regulatory strategies aimed at tackling food commodity speculation and responding to food insecurity are fundamentally insensitive to the ramifications of another body of law that is actively contributing to the production of these very phenomena. For over two decades, law has been a means

by which a political agenda that assumes that the needs of human beings are best met by allowing markets to operate ‘unhindered’ by government interference has been put into practice. The events of the global food crisis in 2007-8, and those of the global financial crisis (just) preceding it, present a radical challenge to the veracity of this assumption. Yet, the responses to these social catastrophic events have been far from radical. Regulatory measures purporting to broker a ‘New Deal’<sup>38</sup> for populations still suffering in their aftermath have left many of the foundational structures, market logics, financial instruments, and economic assumptions of the pre-crisis socio-economic order in place. As regulations purporting to tackle ‘excessive’ volumes of financial speculation in food commodity markets would testify, it is assumed that it is possible to retain the benefits of a profitable market in commodity derivatives while adjusting them to better meet the needs of the food insecure. The possibility that food prices may not be able to serve as both a tradable asset for financial traders and as a mechanism of distribution for human beings to access sufficient food to eat is not entertained.

As Robin Yates has argued, ‘food is not just fuel for human machines but a “condensed symbol of society” binding us together in spirit’.<sup>39</sup> Increasingly, the value of food and the ability of human beings to access it is also determined by a single condensed symbol of its worth — its price. What then happens to society when that price becomes a tradable financial asset, bought and sold by those who have no interest, or even awareness, that what they are trading is food at all?

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<sup>38</sup> Skeel, David, *The New Financial Deal: Understanding The Dodd-Frank Act and its (Unintended) Consequences*, Hoboken NJ, John Wiley & Sons, 2011.

<sup>39</sup> Yates, Robin D. S., “War, Food Shortages, and Relief Measures in Early China,” in Newman, Lucile F., and William C. Crossgrove (Eds), *Hunger in history: food shortage, poverty, and deprivation*. Cambridge Mass: Blackwell, 1990, p. 149.

## Chapter One

# World Hunger and the Global Food Crisis

Hunger is a problem which long pre-dates the extraordinary volatility that swept global commodity markets in 2007-08. According to estimates by the United Nations Food and Agriculture Organisation (FAO), there were 852 million undernourished people worldwide in 2000-02, 815 million of them living in developing countries.<sup>1</sup> That figure rose to 1.02 billion after the first price spike which, according to one data set published by the FAO, pushed an additional 100 million people into chronic hunger and poverty.<sup>2</sup> A revised methodology<sup>3</sup> has recently put the number of chronically undernourished people down to 805 million people for 2012-14.<sup>4</sup> It is now thought that Millennium Development Goal (MDG) 1C — which aims to halve, between 1990 and 2015, the proportion of people in developing countries

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<sup>1</sup> FAO, *The State of Food and Agriculture 2005: Agriculture, Trade and Poverty. Can trade work for the poor?* Rome: FAO, 2005, p. 117.

<sup>2</sup> FAO, "1.02 billion people hungry," News article, 19<sup>th</sup> June 2009, <http://www.fao.org/news/story/en/item/20568/icode/> Last accessed 27<sup>th</sup> April 2015.

<sup>3</sup> The FAO revised its methodology for estimating the prevalence of hunger for the 2012 publication of its annual report *The State of Food Insecurity in the World*. While it claims its revision has made its data more accurate, the FAO has admitted it is not able to capture the impact of short-term price spikes (see: "The State of Food Insecurity in the World 2012 - Frequently asked questions", [http://www.fao.org/fileadmin/user\\_upload/newsroom/docs/SOFI\\_2012\\_FAQs.pdf](http://www.fao.org/fileadmin/user_upload/newsroom/docs/SOFI_2012_FAQs.pdf) Last accessed 27<sup>th</sup> April 2015). The revised methodology has been subject to some criticism. A coalition of U.S. and Canadian scholars have submitted a critical response to the FAO's initiative, raising concerns which include the decision to base estimates for calorific intake on amounts required for a sedentary lifestyle when many of those vulnerable to hunger are engaged in strenuous manual labour (see Lappé, F. M., J. Clapp, M. Anderson, R. Lockwood, T. Forster, D. Nierenberg, H. Friedmann et al. "Framing Hunger: A Response to 'The State of Food Insecurity in the World 2012'", 2013, IATP website, <http://www.iatp.org/files/Framing%20Hunger.pdf> Last accessed 27<sup>th</sup> April 2015).

<sup>4</sup> FAO, IFAD and WFP, *The State of Food Insecurity in the World 2014: Strengthening the enabling environment for food security and nutrition*, Rome: FAO, 2014, Key Messages.

who suffer from hunger — will be achieved.<sup>5</sup> While this represents some measure of progress, the fact remains that approximately one person every four seconds dies of starvation.<sup>6</sup> Under-nutrition continues to be the cause of almost half of the deaths of those children who die under the age of 5 — 3.1 million children every year.<sup>7</sup>

Before focusing on the global food crisis, I want to critically engage with debates on this broader background of hunger and deprivation. In the 21<sup>st</sup> century, it is recognised that people do not go hungry because the world doesn't produce enough food. Food of a sufficient quantity to feed the entire world population an adequate diet has been produced for some decades.<sup>8</sup> Hunger is now understood to result from an inability of certain people to command access to food. Consequently the dominant discourse adopted today to describe the situation of the hungry is that of 'food insecurity', defined by the FAO as '[a] situation that exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life'.<sup>9</sup> A great deal of work is being carried out to address world hunger via what many consider to be three interrelated goals: working in accordance with MDG 1C and the 'Zero Hunger Challenge'<sup>10</sup> to reduce the numbers of people suffering from hunger worldwide; helping populations to achieve food security in the longer term; and strengthening legal entitlements via the human right to adequate food. Hunger reduction, as the FAO has recently underlined, requires an integrated approach.<sup>11</sup>

Many of the recommendations put forward on how to achieve food security are highly persuasive. Nonetheless, I align myself with those scholars who have suggested

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<sup>5</sup> United Nations, "Millennium Development Goals," <http://www.un.org/millenniumgoals/poverty.shtml> Last accessed 27<sup>th</sup> April 2015.

<sup>6</sup> World Food Programme, "Hunger Statistics," WFP website, <http://www.wfp.org/hunger/stats> Last accessed 27<sup>th</sup> April 2015.

<sup>7</sup> *Ibid.*

<sup>8</sup> World Food Programme, "Hunger: Frequently Asked Questions," WFP website, <http://www.wfp.org/hunger/faqs> Last accessed 29<sup>th</sup> January 2015.

<sup>9</sup> FAO, "Basic definitions," FAO website, <http://www.fao.org/hunger/en/> Last accessed 31<sup>st</sup> January 2015.

<sup>10</sup> The 'Zero Hunger Challenge' is a global call to action, issued by UN Secretary General Ban Ki Moon in 2012, that sets a challenge to eliminate hunger 'in our lifetimes'. See UN website, <http://www.un.org/en/zerohunger/challenge.shtml> Last accessed 30<sup>th</sup> April 2015.

<sup>11</sup> FAO, IFAD and WFP, *The State of Food Insecurity in the World 2014*, p. 1.



that this dominant framework and the responses generated through it are inadequate. Drawing on the work of scholars including Susan George,<sup>12</sup> Raj Patel,<sup>13</sup> Fred Magdoff and Brian Tokar,<sup>14</sup> and Jennifer Clapp,<sup>15</sup> I will argue that the lens of food security and many of the measures designed to achieve it, including the strengthening of the human right to adequate food, comprise a sophisticated tool kit to analyse and respond to the symptoms of what is largely an absent diagnosis. Often, the factors compromising populations understood to be ‘food insecure’ — lack of access to land and resources, insufficient investment in agriculture, natural disasters conditioned by climate change, poor transport links — are linked only by what they conspire to produce: poverty and hunger. The possibility that they might share more than a common consequence — that they are, in fact, *consequences of* a broader systemic phenomenon — is rarely considered. I will end this chapter by beginning the work that I will continue throughout the thesis: exploring the possibility that one of the main causes of hunger in the 21<sup>st</sup> century is the contemporary global food system itself.

The chapter will be structured as follows: Part I will present a portrait of modern hunger drawing on the investigations carried out into its contemporary manifestation. Part II will consider the evolution of explanations on the persistence of hunger, explaining the contributions of two famous scholars who have written theories on the subject: Thomas Malthus and Amartya Sen. In Part III I will move on to elaborate the current foundations of the anti-hunger response architecture: food security, MDG 1C, and the right to adequate food, before offering a critique of these initiatives. In Part IV I will explore the possibility that what is missing in these dominant conceptions of hunger is recognition of the role of the global food system as a producer of hunger and poverty, particularly in the Global South. Finally, in Part V, I will relate in more detail the events of the global food crisis and its implications for contemporary efforts to understand and respond to hunger as a problem in the world.

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<sup>12</sup> George, Susan, *How the other half dies*. Washington DC: Rowman & Littlefield Publishers, 1989.

<sup>13</sup> Patel, Raj, *Stuffed and Starved: From Farm to Fork, the Hidden Battle for the World Food System*. London: Portobello Books, 2013.

<sup>14</sup> Magdoff Fred and Brian Tokar, *Agriculture and food in crisis: Conflict, resistance, and renewal*, New York: NYU Press, 2010.

<sup>15</sup> Clapp, Jennifer, *Food*, Cambridge: Polity Press, 2012.

## I. INVESTIGATION

In recent decades the work of the principal international institutions tasked with responding to hunger, the FAO and the World Food Programme (WFP), has been supplemented by a range of other international and regional bodies, including International Fund for Agricultural Development (IFAD), third sector NGOs, and charities such as Oxfam and Action Aid. Over time, the activities of these organisations have evolved into a highly sophisticated system dedicated to the study and resolution of hunger. Focused investigation, monitoring, and reporting are carried out culminating in annual publications, like the FAO's *State of Food Insecurity in the World* (SOFI), and more specialised reports on thematic issues. Tools such as the Global Hunger Index (GHI) have been developed to 'comprehensively measure and track hunger globally and by country and region'.<sup>16</sup> A growing body of experts has emerged, encompassing development specialists, agriculturalists, agronomists, fisheries and livestock specialists, and nutritionists.<sup>17</sup> Their findings are published in a growing literature on topics ranging from hunger in history<sup>18</sup> to texts on the political economy of hunger<sup>19</sup> and theories of famine.<sup>20</sup> The study of hunger has given rise to centres of research,<sup>21</sup> and new specialisms and journals on subjects such as agricultural economics<sup>22</sup> and peasant studies.<sup>23</sup>

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<sup>16</sup> IFPRI, "Global Hunger Index", IFPRI website <http://www.ifpri.org/book-8018/ourwork/researcharea/global-hunger-index> Last accessed 2<sup>nd</sup> February 2015.

<sup>17</sup> Edkins, Jenny, *Whose Hunger? Concepts of famine and practices of aid*, Minnesota: University of Minnesota Press, 2000, p. 26.

<sup>18</sup> Vernon, James, *Hunger: A modern history*, Cambridge Mass: Harvard University Press, 2007.

<sup>19</sup> Dreze, Jean, Amartya Sen and Athar Hussain, *The political economy of hunger: selected essays*, Oxford: Oxford University Press, 1995.

<sup>20</sup> Devereux, Stephen, *Theories of famine*, London and New York: Harvester Wheatsheaf, 1993.

<sup>21</sup> See "Food Studies Centre at the School of Oriental and African Studies (SOAS)," London, <https://www.soas.ac.uk/foodstudies/> Last accessed 30<sup>th</sup> January 2015.

<sup>22</sup> See "Journal of Agricultural Economics," [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1477-9552](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1477-9552) Last accessed 30<sup>th</sup> January 2015.

<sup>23</sup> See *The Journal of Peasant Studies*, <http://www.tandfonline.com/loi/fjps20#.VMt9GvNFDGg> Last accessed 30<sup>th</sup> January 2015.

A new vocabulary has been developed in order to facilitate a more nuanced understanding of hunger. Hunger is ‘acute’ when it comprises a sudden or drastic reduction in the nutritional intake of a population,<sup>24</sup> often resulting in a situation of famine or food crisis. This is differentiated from ‘chronic’ hunger, connoting the longer term sufferance of hunger likely to result in undernourishment and malnutrition. While poverty is typically the proximate cause in cases of chronic hunger, episodes of acute hunger are more likely to have been generated from events — such as the outbreak of war or a natural disaster.<sup>25</sup> They are often accompanied by significant increases in mortality, and social disturbances such as food riots, displacement, and a turn to illegal or immoral activities to procure food.<sup>26</sup> Although the victims of acute hunger may exhibit more visible symptoms, such as wasting or oedema, and in turn be more visible as victims of hunger, the vast majority of hunger-related deaths are mediated through a period of disease conditioned by chronic hunger.<sup>27</sup> Those who are undernourished, in the sense of having an inadequate daily intake of calories,<sup>28</sup> are likely to suffer from lethargy, frailty, impaired concentration, and a susceptibility to disease.<sup>29</sup> Similar symptoms result from malnourishment, which indicates an absence or deficiency of particular nutritional requirements.<sup>30</sup> A lack of critical vitamins or minerals such as vitamin A, iron, thymine, or zinc can result in specific conditions: anaemia, beriberi, and pellagra.<sup>31</sup>

As a result of ongoing investigation, more is known about who goes hungry than ever before. The vast majority of the world's hungry people live in developing

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<sup>24</sup> Action Against Hunger, “Hunger Glossary,” Action Against Hunger website, <http://www.actionagainsthunger.org/glossary> Last accessed 19<sup>th</sup> June 2013.

<sup>25</sup> Vanhaute, Eric, “From famine to food crisis: what history can teach us about local and global subsistence crises,” *Journal of Peasant Studies* 38, no. 1 (2011): 47-65, p. 49.

<sup>26</sup> Devereux, Stephen, “Sen’s entitlement approach: Critiques and counter-critiques”, in Stephen Devereux (Ed), *The new famines. Why famines persist in an era of globalization*, London: Routledge, 2006, pp. 66-89.

<sup>27</sup> Newman, Lucile F. and William C. Crossgrove (Eds), *Hunger in history: food shortage, poverty, and deprivation*. Cambridge Mass: Blackwell, 1990, p. 15.

<sup>28</sup> The average adult is said to require approximately 1800 kcal per day as a minimum energy intake. See: FAO, “Frequently Asked Questions,” FAO website, <http://www.fao.org/hunger/en/> Last accessed 2<sup>nd</sup> February 2015.

<sup>29</sup> Newman, Lucile F. and William C. Crossgrove (Eds), *Hunger in History*, p. 15.

<sup>30</sup> WFP, “Hunger Glossary,” WFP website, <http://www.wfp.org/hunger/glossary> Last accessed 2<sup>nd</sup> February 2015.

<sup>31</sup> Newman, Lucile F. and William C. Crossgrove (Eds), *Hunger in History*, p. 15.

countries, where 13.5 per cent of the population is classified as undernourished.<sup>32</sup> Sub-Saharan Africa has the highest prevalence of people suffering from hunger, with around one in four people undernourished. Asia, the most populous region in the world, has the highest number of undernourished.<sup>33</sup> Within these regions, it has been discovered that persons living in rural areas, often those directly involved in the production of food, are most vulnerable to hunger.<sup>34</sup> The FAO calculates that around half of the world's hungry people are from smallholder farming communities, surviving off marginal lands.<sup>35</sup> However, the numbers of poor and hungry city dwellers are rising rapidly, along with the world's total urban population. A further 20 per cent of the world's hungry are classified as 'urban poor', living in shanty towns on the periphery of the biggest cities in developing countries.<sup>36</sup>

Although natural disasters and conflict continue to be regarded as two important proximate causes of hunger,<sup>37</sup> poverty is now recognised to be the preeminent factor conditioning hunger globally. The nature of this causal relationship has been subject to considerable research. No longer seen as merely the result of poverty, hunger is now recognised to be its cause. Often too weak from lack of food to be able to work, hungry people are condemned to further poverty, a fact which conditions further hunger. The hungry are caught in a trap — a hunger-poverty trap, as this vicious cycle is often termed.<sup>38</sup> Climate change is another major contributor, with experts in agreement that changes in temperature, precipitation, and rising sea levels will increase both the frequency and severity of weather disasters such as floods and droughts worldwide.<sup>39</sup> Taken together, these factors are understood to place poorer nations in the Global South in an especially precarious position. Many of these

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<sup>32</sup> WFP, "Hunger statistics," WFP website, <http://www.wfp.org/hunger/stats> Last accessed 30<sup>th</sup> January 2015.

<sup>33</sup> FAO, IFAD and WFP, *The State of Food Insecurity in the World 2014*, Key Messages.

<sup>34</sup> WFP, "Who are the hungry?" WFP website, <http://www.wfp.org/hunger/who—are> Last accessed 30<sup>th</sup> January 2015.

<sup>35</sup> *Ibid.*

<sup>36</sup> *Ibid.*

<sup>37</sup> WFP, "Causes of hunger," WFP website, <https://www.wfp.org/hunger/causes> Last accessed 27<sup>th</sup> April 2015.

<sup>38</sup> *Ibid.*

<sup>39</sup> OECD, "Poverty and Climate Change: Reducing the vulnerability of the poor through adaption," OECD, June 2003, <http://www.oecd.org/env/cc/2502872.pdf> Last accessed 27<sup>th</sup> April 2015, p. iv.

countries are geographically ‘on the frontline’<sup>40</sup> and will be impacted most severely by shifting weather patterns. Lacking in revenue and infrastructure, they are also more economically vulnerable.<sup>41</sup> Sub-Saharan Africa is likely to be the region worst affected. It is estimated that in some countries in the region, yields from rain-fed agriculture could fall by 50 per cent by 2020.<sup>42</sup> Other countries that will be severely impacted are small island developing states, particularly those in the Pacific, such as Kiribati and Nauru, likely to become uninhabitable in the near future as sea levels continue to rise.<sup>43</sup>

In spite of an ongoing rhetorical tendency to express a desire to ‘win the war’ against hunger,<sup>44</sup> or to ‘eliminate it’,<sup>45</sup> there is a growing recognition that its cause can no longer be convincingly explained as hostile or extraneous to human society. Extant social, economic, and political arrangements are implicated. This is evident in the call for a ‘sustained political commitment’ to end hunger, issued again recently by the Secretary General of the United Nations, Ban Ki Moon.<sup>46</sup> It is also apparent in the immense and increasing inequality between the rich and the poor, and the food that they are able to command access to. Whilst some starve, others are stuffed,<sup>47</sup> over-feeding their bodies and developing infirmities induced by too much food, or too many unhealthy calories. Vast quantities of food are wasted in wealthier parts of the world.<sup>48</sup> Some are surviving on barely a bowl of rice a day; yet many people living in

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<sup>40</sup> Vidal, John, “Climate change will hit poor countries hardest, study shows,” *The Guardian*, 27<sup>th</sup> September 2013, <http://www.theguardian.com/global—development/2013/sep/27/climate-change-poor-countries-ipcc> Last accessed 27<sup>th</sup> April 2015.

<sup>41</sup> WFP, “Hunger and Climate Change,” Rome: WFP, 2009, <http://documents.wfp.org/stellent/groups/public/documents/communications/wfp227909.pdf> Last accessed 29<sup>th</sup> April 2015, p. 2.

<sup>42</sup> *Ibid.*

<sup>43</sup> See Barnett, Jon and John Campbell, *Climate Change and Small Island States: Power, Knowledge, and the South Pacific*, Routledge: London, 2010; Klein, Naomi, *This changes everything: Capitalism vs. The Climate*, New York: Simon and Schuster, 2014.

<sup>44</sup> FAO, IFAD and WFP, Foreword to *The State of Food Insecurity in the World 2014*, p. 4.

<sup>45</sup> <http://www.un.org/en/zero hunger/challenge.shtml> Last accessed 30<sup>th</sup> April 2015.

<sup>46</sup> Ki-Moon, Ban, “Secretary-General’s message to Delivering Zero Hunger — Demonstrating Impact High Level UNGA Side Event,” New York: United Nations, 25<sup>th</sup> September 2014, <http://www.un.org/sg/statements/index.asp?nid=8053#> Last accessed 30<sup>th</sup> April 2015.

<sup>47</sup> Patel, Raj, *Stuffed and Starved*.

<sup>48</sup> UK consumers threw away 6.7 million tonnes of food in 2007 — approximately one third of food purchased — when only a fifth of that waste was unavoidable: peelings, cores, and bones. See “The Food We Waste,”

cosmopolitan cities dine out on infinite varieties: risotto, sushi and paella. Expressing what would seem to be a common feeling on the matter, as Amartya Sen has observed, '[h]unger in the modern world is more intolerable than past hunger not because it is typically more intense, but because it is now so unnecessary'.<sup>49</sup>

## II. EXPLANATION

Broadly speaking, theories on the causation of hunger have evolved through three distinct phases. The initial focus was on the relationship between food supply and population growth, the second between hunger and development, and the third on access to food as determined by social entitlements.

### i. Population

The first theory that attempted to explain the dynamics of hunger as a phenomenon was developed in 1798 by Thomas Robert Malthus. In *An Essay on the Principle of Population*,<sup>50</sup> Malthus argued that population growth was an inherent impediment to the realisation of the society envisaged by the proponents of Enlightenment thinking. In his view, rising productivity rates would inevitably lead to further hunger and deprivation as they would not be able to sustain the rate of population expansion encouraged by the march towards progress. Demand would always outstrip supply. Identifying what he called 'positive' checks on population growth, which raised the death rate; and 'preventive' ones, which lowered the birth rate, hunger, for Malthus, was a necessary evil.<sup>51</sup> In his words, '[t]he power of

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Waste & Resources Action Programme, <http://www.wrap.org.uk/content/new-estimates-household-food-and-drink-waste-uk> Last accessed 8<sup>th</sup> October 2012.

<sup>49</sup> Sen, Amartya, *Hunger and entitlements*, Helsinki: World Institute for Development Economics Research (WIDER), 1987, p. 5.

<sup>50</sup> Malthus, Thomas, *An Essay on the Principle of Population*, London: J. Johnson, 1798.

<sup>51</sup> The positive checks include hunger, disease, and war; the preventive checks, birth control, postponement of marriage and celibacy. See Gilbert, Geoffrey, "Introduction", in T.R. Malthus, *An Essay on the Principle of Population*, Oxford: Oxford World's Classics, 2008, p. viii.

population is so superior to the power of the earth to produce subsistence for man, that premature death must in some shape or other visit the human race'.<sup>52</sup>

Now known as the population-subsistence dynamic, Malthus's theory still exerts considerable influence today. Paul Ehrlich, who has written several books including *The Population Bomb*,<sup>53</sup> draws on Malthus to predict famine as a result of population increase. Malthusian questions — Can the world continue to support a steady increase in population? Are there enough food-lands available to feed the world a Western diet?<sup>54</sup> — continue to feature frequently in both scholarly and journalistic texts. The dominant focus on supply-side solutions to hunger that endured for the entirety of the 19<sup>th</sup> century and much of the 20<sup>th</sup> could also be regarded as Malthus's legacy. However, a growing body of research has sought to challenge some of the founding assumptions of his theory. Contrary to Malthus's predictions, population growth has yet to exceed food supply.<sup>55</sup> In contravention of the thesis that population growth conditions hunger, it has been argued that hunger and deprivation, in fact, condition population growth. As Abhijit Banerjee and Esther Duflo demonstrate in their work, *Poor Economics*, the poor have an economic incentive to have children because, although they are another mouth to feed, children make a vast contribution to the lot of the family and can look after their parents in old age.<sup>56</sup> Challenging the assumption that poor families have large numbers of children out of ignorance, such studies demonstrate that these decisions can be economically enlightened.

Combined with other factors, particularly climate change, however, a number of analysts have suggested that the population-subsistence dynamic could result in the catastrophic scenario conjured by Malthus in 1798. The population of the least developed countries of the Sahel region in Africa is estimated to more than triple from

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<sup>52</sup> *Ibid*, p. 53.

<sup>53</sup> Ehrlich, Paul R., *The population bomb*, New York: Ballantine Books, 1971.

<sup>54</sup> Warnock, John W., *The Politics of Hunger*, London: Methuen&Co, 1987, p. 29.

<sup>55</sup> Crossgrove, William C., et al, "Colonialism, International Trade, and the Nation-state," in Lucile F. Newman, and William C. Crossgrove (Eds), *Hunger in History*, p. 219.

<sup>56</sup> Banerjee, Abhijit, and Esther Duflo, *Poor economics: a radical rethinking of the way to fight global poverty*, New York: Public Affairs, 2011.

100 million to 340 million by 2050.<sup>57</sup> With extreme temperatures impacting on food production likely to become the norm by 2050, the Sahel could become the first part of planet earth that suffers large-scale starvation and escalating conflict as a growing human population outruns diminishing natural resources.<sup>58</sup>

## ii. Development

Although Malthusianism has, in the last decade, been making a come-back, conceptions of hunger underwent a discernible shift in the 20<sup>th</sup> century away from Malthusian pessimism. Inextricably linked with decolonisation and the birth of a new international order — points that will be explored later in Chapter Five — in the decades after World War Two, a largely optimistic view that hunger and poverty could be resolved by process of economic development became mainstream.

In the post-war era, the United States occupied a new position of power and proposed to use its expertise to improve the position of peoples in the newly liberated ‘Third World’. Initially, in the 1950s, the solution was seen to lie in the establishment of mechanisms for making use of surpluses of grain produced in the US available for the benefit of food-deficient people in other countries.<sup>59</sup> The Agricultural Trade Development and Assistance Act (Public Law 480) 1954 established a program of food assistance to poor countries. Vast amounts of grain were shipped overseas, particularly to Africa. The provision of food aid was widely perceived as being mutually beneficial. Farmers in the US were struggling on account of chronic surpluses amassed as a consequence of government subsidies, and many ‘Third World’ states welcomed the initiatives.<sup>60</sup> During the 1960s, however, critics began to argue that the aid cultivated a dependency that was counterproductive to the needs of

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<sup>57</sup> Potts, Malcolm, Courtney Henderson, Martha Campbell, “The Sahel: A Malthusian Challenge?” *Environmental and Resource Economics* 55, no. 4 (2013): 501-512, p. 501.

<sup>58</sup> *Ibid.*

<sup>59</sup> *Ibid.*

<sup>60</sup> Friedmann, Harriet, “The Political Economy of Food: The Rise and Fall of the Postwar International Food Order,” *American Journal of Sociology* 88 (1982), p. 267.



hungry communities.<sup>61</sup> A new solution was promulgated: fostering technological development and the transfer of expertise that would enable hungry peoples to feed themselves. An initiative known as the ‘Green Revolution’ formed a critical part of this endeavour. International agencies, notably the FAO, began an active programme of technical assistance comprised of projects designed to improve the agricultural productivity in many countries in the Global South.<sup>62</sup> A key feature was the development of new varieties of cereal grains manipulated to give a higher yield. One such example was the IR8 rice strain — a semi-dwarf rice variety developed by the International Rice Research Institute (IRRI) — that could produce almost ten times the yield of traditional rice.<sup>63</sup> During the 1950s and the 1960s the world food production increased by more than 50 per cent and the production per capita increased by more than 20 per cent.<sup>64</sup>

Though many still regard these developments as progress, studies have emerged that suggest that the Green Revolution actually produced as many hungry people as it fed.<sup>65</sup> As Annie Shattuck and Eric Holt-Giménez have argued, the spread of these ‘green’ technologies led to the monopolisation of seed and chemical inputs by Northern companies, resulted in the loss of 90 per cent of the South’s agricultural biodiversity, and exacerbated social inequalities.<sup>66</sup> While these insidious effects were not widely appreciated at the time, events in the early 1980s, notably the famine in Ethiopia in 1983-85, provided a stark counter-weight to the progress narrative of the Green Revolution. Documented by the BBC, the reports of Michael Buerk and his colleagues brought graphic images of starving people into the living rooms of people across the planet. The reaction culminated in the Live Aid concert held in July 1985,

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<sup>61</sup> Hopkins, Raymond and Donald Puchala (Eds), *The Global Political Economy of Food*, Madison: University of Wisconsin Press, 1978, p. 601-2.

<sup>62</sup> *Ibid.*

<sup>63</sup> De Datta, S. K., A. C. Tauro, S. N. Balaoing, “Effect of plant type and nitrogen level on growth characteristics and grain yield of indica rice in the tropics,” *Agronomy Journal* 60 (1968): 643-647.

<sup>64</sup> FAO, “History of Food Security,” FAO website, [www.fao.org/fileadmin/templates/ERP/uni/F4D.pdf](http://www.fao.org/fileadmin/templates/ERP/uni/F4D.pdf) Last accessed 1<sup>st</sup> July 2013, at 4.3.

<sup>65</sup> Moore Lappe, Frances, et al, “World Hunger: 12 Myths” *Institute for Food and Development Policy* 61 (1998).

<sup>66</sup> Shattuck, Annie and Eric Holt-Giménez, “Comment: Moving from Food Crisis to Food Sovereignty,” *Yale Human Rights and Development Law Journal* 13 (2010), p. 426.

watched by some 1,500 million people, and resulted in the tripling of aid.<sup>67</sup> However, in the years following this burst of activism, it became clear that the collective desire to ‘feed the world’<sup>68</sup> had fallen short. In spite of record levels of food production and concerted international aid for hunger victims, widespread hunger and deprivation persisted. It was in this climate of a renewed search for answers that a new theory on the causes of hunger came to the attention of the international community, the work of development economist, Amartya Sen.

### iii. Entitlement

In 1981 Amartya Sen published a book which had a profound impact upon perceptions of how famine occurs, and chronic hunger persists, in conditions of plenty. The central argument in *Poverty and Famines: An Essay on Entitlement and Deprivation* is that famine is the result not solely of a lack of food, but of an inability to command access to adequate food. As Sen emphasises: ‘[S]tarvation is the characteristic of some people not *having* enough to eat. It is not the characteristic of there not *being* enough food to eat’.<sup>69</sup> Using the Bengal Famine of 1943 as his principal case study, Sen demonstrated that Bengal was in fact producing more than enough food to feed its people when the famine struck. The 3 million people that perished, he argued, did so due to a failure of what he termed ‘entitlements’.

Entitlements can be defined as the socially determined rights and opportunities which enable people to legally command access to food. According to Sen’s analysis, each individual is endowed with certain assets and resources, including labour power, which can, through ‘exchange entitlement mappings’ be converted into their entitlement set.<sup>70</sup> These entitlements can be reduced to four principal categories:

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<sup>67</sup> De Waal, Alex, *Evil Days: Thirty Years of War and Famine in Ethiopia*, New York & London: Human Rights Watch, 1991, p. 178.

<sup>68</sup> Geldof, Bob and Midge Ure, “Do they know it’s Christmas?” Band Aid, © 1984, by Phonogram.

<sup>69</sup> Sen, Amartya, *Poverty and Famines: An Essay on Entitlement and Deprivation*, Oxford: Oxford University Press, 1981, p. 1.

<sup>70</sup> *Ibid*, Chapter 1, 1:2, “Exchange entitlement”.

‘production-based entitlements’ (growing food); ‘trade-based entitlements’ (buying food); ‘own-labour entitlements’ (working for food); and ‘inheritance-and-transfer entitlements’ (being given food by others).<sup>71</sup> A person will be vulnerable to hunger if there is some change either in his endowment (e.g. alienation of land, or loss of labour power due to ill health), or in his exchange entitlement mapping (e.g. fall in wages, rise in food prices, loss of employment, drop in the price of the good he produces and sells).<sup>72</sup> Under this lens of analysis, famines are the result of entitlement failures of large groups, often belonging to a specific occupation, who as a result of changing conditions often suffer a simultaneous drop in their exchange entitlements.<sup>73</sup>

It is important to note that the entitlement theory was developed as a framework for analysis of famines and not as a broader theory on the causation of hunger.<sup>74</sup> However, many scholars, Sen included, have used the entitlement theory to this effect. While famine and episodes of acute hunger are related to disastrous declines of entitlements, he writes, chronic hunger and regular undernourishment are associated with inadequate entitlements on a sustained basis.<sup>75</sup> Sen’s key intervention was to break down the mass of the ‘hungry-poor’, often lumped together in prior studies, and to demonstrate why some groups suffered famine whilst others did not. In doing so, he exposed the socially determined nature of food deprivation, illustrating that the problem of hunger needs to be understood in terms of an increasingly complex and specialist division of labour, and in the context of chain relationships between producers and markets, markets and purchasers, and purchasers and consumers.<sup>76</sup> As Stephen Devereux and others have acknowledged, perhaps his most valuable contribution has been to shift analytical focus away from a fixation on food supplies.<sup>77</sup>

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<sup>71</sup> Devereux, Stephen, “Sen’s Entitlement Approach: Critiques and Counter-critiques”, p. 246.

<sup>72</sup> Sen, Amartya, *Hunger and entitlements*, p. 8.

<sup>73</sup> *Ibid*, p. 7.

<sup>74</sup> Sen, Amartya, *Poverty and Famines*, p. 162.

<sup>75</sup> Sen, Amartya, *Hunger and entitlements*, p. 20.

<sup>76</sup> Sen, Amartya, “Food Entitlements and Economic Chains” in Lucile F. Newman and William C. Crossgrove (Eds), *Hunger in History*, p. 374.

<sup>77</sup> *Ibid*.

Much of the response to Sen's theory has been favourable.<sup>78</sup> However, some critics have argued that the entitlement approach is 'defective',<sup>79</sup> and others consider it to be a failure.<sup>80</sup> Many of those criticising Sen are responding to his arguments strictly within a literature concerned with the causation of famine. Nevertheless, their critiques also speak to the broader context of how the entitlement thesis has shifted perceptions of the causation of hunger. With a degree of generalisation, it is possible to characterise much of the critical concern advanced about Sen's thesis as falling into three categories: those who argue that his analysis privileges an economic understanding of the causes of hunger to the neglect of other potentially more relevant ones; those who argue that his analysis is inapplicable outside of societies in which commodity exchange is the primary means of accessing food; and those concerned with the naturalising effect of his empiricist ambitions.

In the first category, some have pointed out that many of the most recent famines and food crises, particularly in the Horn of Africa, have been triggered either by political instability or civil war,<sup>81</sup> are perpetuated intentionally for political reasons,<sup>82</sup> and produce beneficiaries as well as victims.<sup>83</sup> The entitlement approach which, in De Waal's estimation has 'no place for violence',<sup>84</sup> ignores the fact that food deprivation can occur in 'conditions which are deliberately and socially engineered to undermine entitlement'.<sup>85</sup> Falling into the second camp, a number of scholars have

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<sup>78</sup> Osmani, S., "The entitlement approach to famine: an assessment," in K. Basu, P. Pattanaik and K. Suzumura (Eds), *Choice, Welfare and Development*, Oxford: Oxford University Press, 1995.

<sup>79</sup> Edkins, J., "Legality with a vengeance: famines and humanitarian relief in 'complex emergencies,'" *Journal of International Studies* 25 (1996): 547-575.

<sup>80</sup> Fine, B., "Entitlement failure?" *Development and Change* 28 (1995): 617-647.

<sup>81</sup> Devereux, Stephen, "Sen's Entitlement Approach: Critiques and Counter-critiques", p. 256.

<sup>82</sup> To give one example, raids on Dinka agro-pastoralists in the 1980s and 1990s were either tacitly condoned or actively sponsored by the government in Khartoum, Sudan. See Deng, L., "The 1998 famine in the Sudan: causes, preparedness and response," *IDS Discussion Paper* 369, Brighton: Institute of Development Studies, 1999. Furthermore, as Susan George has argued, food has been used as a weapon by other governments. Former Agriculture Secretary Earl Butz described the role of food in the 'negotiating kit' of the US when they were battling the OPEC states who were using oil as a weapon. See George, Susan, *How The Other Half Dies*, p. 209.

<sup>83</sup> Ranganami, A., "Failure of exchange entitlements' theory of famine: A response," *Economic and Political Weekly* 20 (1985): 1797-1801.

<sup>84</sup> De Waal, A., "A re-assessment of entitlement theory in the light of the recent famines in Africa," *Development and Change* 21 (1990), p. 473.

<sup>85</sup> Fine, B., "Entitlement failure?" p. 627.

demonstrated that access to resources in many parts of rural Africa<sup>86</sup> and India<sup>87</sup> — two places in which food crises frequently occur — are not enforceable by formal legal systems, but instead are validated by community-level institutions on the basis of social membership, rather than private ownership.<sup>88</sup> As Devereux argues, ‘[r]ights or claims over resources that are held collectively (by groups of people, or institutions) are incompatible with the entitlement approach’,<sup>89</sup> making it effectively inapplicable in contexts where the relationship between individuals and resources is mediated by non-market institutions.<sup>90</sup> In the third category are those concerned not so much with the inadequacy of the entitlement approach as an explanatory tool, but with its effects. Both Edkins<sup>91</sup> and Fine<sup>92</sup> have intimated that the failure to interrogate the concept of entitlement operates to naturalise and depoliticise what they consider to be a politically contingent set of arrangements governing how people command access to food. Sen does acknowledge that ‘the exchange entitlements faced by a person depend, naturally, on his position in the economic class structures as well as the modes of production in the country’.<sup>93</sup> However, as Fine argues, this broader macro context is not an analytical priority. There is, he contends, a ‘yawning analytical gap’ between the elaborate treatment of immediate reasons for lack of entitlement and the deeper explanations for that lack.<sup>94</sup> Sen makes it very clear that his ambitions are descriptive and empirical, not normative. Nonetheless his focus on the individual and his failure to address the broader context in which entitlements are determined makes that context appear natural, even inevitable.

This speaks to what is, perhaps, the unifying trend in scholarship that is critical of Sen’s framework, which is that it is ‘too apolitical and ahistorical’ to tell us much

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<sup>86</sup> Bromley, D., “Property relations and economic development: the other land reform”, *World Development* 17 (1989): 867-877.

<sup>87</sup> Swift, Jeremy, “Understanding and preventing famine and famine mortality,” *24 IDS Bulletin* (1993): 1-16.

<sup>88</sup> Leach, M. R., Mearns and I. Scoones, “Environmental entitlements: a framework for understanding the institutional dynamics of environmental change,” *Discussion Paper 359*, Brighton: Institute of Development Studies, 1997.

<sup>89</sup> Devereux, Stephen, “Sen’s Entitlement Approach: Critiques and Counter-critiques,” p. 258.

<sup>90</sup> *Ibid.*

<sup>91</sup> Edkins, J., *Whose Hunger? Concepts of Famine and Practices of Aid*, 2000.

<sup>92</sup> Fine, B., “Entitlement Failure?”

<sup>93</sup> Sen, A., *Poverty and Famines: An Essay on Entitlement and Deprivation*, p. 4.

<sup>94</sup> Fine, B., “Entitlement failure?” pp. 626 and 631.

about the structural causes of hunger.<sup>95</sup> This has been a central concern for Edkins, who has been highly critical of Sen, arguing that his use of the word ‘entitlement’ ‘does not reflect in any sense a concept of the right to food or a concept of what people might be entitled to as a human right or as a question of justice’.<sup>96</sup> While this may be the case in terms of what is explicit in Sen’s analysis, his work can also be read as a very subtle but nonetheless powerful critique of a society in which famine ‘reflects legality with a vengeance’<sup>97</sup> — the final sentence of his book. What his work demonstrates is that hunger and famine are, more often than not, products of the legal system. It is not just *Sen’s use* of the word ‘entitlement’ that is insensitive to the human right to food or questions of justice — *it is the legal system itself that is unresponsive*. At least, this would appear to be the case in the type of legal system that typically underpins a market society — a legal system in which food is a commodity to be bought and sold for profit by those able to claim ownership of it. Illustrating this, Sen describes how, in the Bengal famine of 1943, guarding ownership rights against the demands of the hungry, the legal forces upheld entitlements leaving people to die in front of ‘well-stocked food shops protected by the state’.<sup>98</sup> I would venture to suggest that these passages evidence Sen’s implicit critique of the legal arrangements governing access to food — a subtlety that Edkins appears to have overlooked.

### III. RESPONSE

Strategies for tackling hunger in the 21<sup>st</sup> century are directed at the achievement of three main goals: helping populations to achieving food security; reducing the numbers of the hungry by tackling poverty; and protecting the human right to adequate food.

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<sup>95</sup> Devereux, Stephen, “Sen’s Entitlement Approach: Critiques and Counter-critiques,” p. 248.

<sup>96</sup> Edkins, J., *Whose Hunger? Concepts of Famine and Practices of Aid*, 2000, p. 59.

<sup>97</sup> Sen, A., *Poverty and Famines: An Essay on Entitlement and Deprivation*, p. 166.

<sup>98</sup> Sen, A., “Ingredients of famine analysis: availability and entitlements,” *Quarterly Journal of Economics* 95 (1981): 433-464, p. 438.

### i. Food security

The concept of food security first emerged in the 1970s, and was focused on international and national initiatives which would ensure that countries in need would have access to adequate flows of staple foods. Since the 1980s, under the influence of entitlement theory, greater attention has been focused on ‘the needs of people rather than countries’.<sup>99</sup> Considerable emphasis is now placed on the ability of individuals and marginalised groups to access food that is culturally appropriate. The concept of food security is now typically defined as including both physical and economic access to food that meets people's dietary needs as well as their food preferences.<sup>100</sup> At the World Summit of Food Security in 2009, this concept was extended and specified by adding four pillars of food security: availability, access, utilisation, and stability.<sup>101</sup> The complex interplay of entitlements influencing access to food is now reflected in the disaggregated study of hunger carried out under the lens of food security. This has resulted in the specification of a diverse range of ‘food security indicators’ ranging from levels of political stability to the percentage of arable land equipped for irrigation.<sup>102</sup> Measuring food security across its different dimensions, the FAO maintains, provides a more comprehensive picture, and can also help in the design and delivery of targeted food security and nutrition policies.<sup>103</sup>

In the 2014 edition of *The State of Food Insecurity in the World*, the FAO emphasised that food insecurity is a complex problem that required coordinated action by all stakeholders, necessitating action at the national and local levels as well as

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<sup>99</sup> The World Bank has defined food security as: "[a]ccess by all people at all times to enough food for an active and healthy life". See World Bank, "Poverty and Hunger: Issues and Options for Food Security In Developing Countries," World Bank policy study, Washington DC: World Bank, 1986, p. v. <http://documents.worldbank.org/curated/en/1986/07/440681/poverty-hunger-issues-options-food-security-developing-countries> Last accessed 10<sup>th</sup> July 2015.

<sup>100</sup> *Ibid.*

<sup>101</sup> FAO, "Declaration of the World Summit on Food Security," Report WSFS 2009/2, Rome: FAO, 2009.

<sup>102</sup> FAO, "Food security indicators," FAO website, <http://www.fao.org/economic/ess/ess-fs/ess-fadata/en/#.VT-7SfNwbGg> Last accessed 28<sup>th</sup> April 2015.

<sup>103</sup> FAO, IFAD and WFP, *The State of Food Insecurity in the World 2014*, p. 13.

between regions and on a global level.<sup>104</sup> There is no single prescription, however, depending on the context and the specific situation, actions may be required in agricultural production and productivity, rural development, fisheries, forestry, social protection, public works, trade and markets, resilience to shocks, education and health, and other areas.<sup>105</sup> Overall, the FAO recommends a twin-track approach, comprising immediate hunger relief interventions combined with long-term actions to foster sustainable growth, particularly in agriculture and the rural economy.<sup>106</sup> Long term actions should include measures to boost investments that raise agricultural productivity; measures that facilitate better access to inputs, land, technologies and markets; social protection for the most vulnerable, including strengthening their resilience to conflicts and natural disasters; and specific nutrition programmes, particularly to address micronutrient deficiencies in mothers and children under five.<sup>107</sup> While there is widespread consensus on the measures needed to improve food security, there is considerable disagreement on the best means to do so.<sup>108</sup> While some consider investment in public institutions to be vital, other actors such as the Gates Foundation have sought to introduce new approaches involving the private sector, promoting methods such as social entrepreneurship and impact investing.<sup>109</sup> The long-term ambitions of the FAO and other agencies involved in promoting food security have recently been supplemented by what could be considered a fast-track approach in the form of the Millennium Development Goals (MDGs).

## ii. Millennium Development Goal 1C

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<sup>104</sup> *Ibid.*

<sup>105</sup> *Ibid* p. 18.

<sup>106</sup> *Ibid.*

<sup>107</sup> *Ibid*, p. 1.

<sup>108</sup> Fukuda-Parr, Sakiko, and Amy Orr, "The MDG Hunger Target and the Contested Visions of Food Security," Harvard School of Public Health Working Paper Series, 2013, [http://fxb.harvard.edu/wp-content/uploads/sites/5/2013/09/Goal-1\\_Hunger\\_FukudaParr\\_Orr\\_WorkingPaper.pdf](http://fxb.harvard.edu/wp-content/uploads/sites/5/2013/09/Goal-1_Hunger_FukudaParr_Orr_WorkingPaper.pdf) Last accessed 28<sup>th</sup> April 2015, p. 29.

<sup>109</sup> *Ibid*, p. 30.



The MDGs derive from the Millennium Declaration, a statement adopted by the UN General Assembly in 2000 at a special meeting attended by 147 heads of state or government.<sup>110</sup> Target 1C is to halve, between 1990 and 2015, the proportion of people who suffer from hunger. This is explicitly linked to the goal of halving the numbers of people suffering from poverty — Target 1A. Many have welcomed the priority assigned to tackling hunger and poverty and the time-bound goal that the MDGs have set, suggesting that this has both stimulated engagement and provided a basis for accountability.<sup>111</sup> Some analysts regard the goals as highly complementary with the broader ambition of achieving food security, particularly as the goals are aimed at correcting previous trends in development which exhibited a single-minded focus on economic growth as the solution to problems such as poverty and hunger.<sup>112</sup> The new focus advanced under the goals is on achieving ‘sustained and equitable growth’ based on dynamic structural economic change.<sup>113</sup>

In spite of this, others have argued that the hunger target represents a step backwards in terms of how hunger and its causes are conceptualised. Thomas Pogge posits that the MDG 1C does not go ‘nearly far enough’<sup>114</sup> and actually constitutes a lowering of goals previously endorsed in United Nations fora, such as the 1996 Rome Declaration on World Food Security.<sup>115</sup> The target announced in 1996 was to halve the *number* of people undernourished, revised by MDG 1C to one aiming to halve the *proportion* of people in that predicament.<sup>116</sup> While MDG 1C is now thought to be within reach, it is agreed that the more ambitious goal of the World Food Summit is

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<sup>110</sup> “United Nations Millennium Declaration 55/2,” <http://www.un.org/millennium/declaration/ares552e.htm> Last accessed 10<sup>th</sup> July 2015.

<sup>111</sup> “Millennium Campaign: Voices Against Poverty,”

[www.millenniumcampaign.org/site/pp.asp?c=grKVL2NLE&b=138312](http://www.millenniumcampaign.org/site/pp.asp?c=grKVL2NLE&b=138312) Last accessed 28<sup>th</sup> April 2015.

<sup>112</sup> The UN Human Development Report in 1990 noted an excessive preoccupation with GNP growth and identified a need to focus more concretely on how growth does or does not translate into human development. See UNDP, “Human Development Report 1990: Concept and Measurement of Human Development,” New York and Oxford: Oxford University Press, 1990, p. iii.

<sup>113</sup> UN, “Keeping the promise: a forward-looking review to promote an agreed action agenda to achieve the Millennium Development Goals by 2015,” Report of the Secretary-General A/64/665, New York: United Nations, 2010.

<sup>114</sup> Pogge, Thomas, “Global Justice and the First UN Millennium Development Goal,” Evening Address at the University of Oslo Global Justice Symposium, 2003.

<sup>115</sup> *Ibid.*

<sup>116</sup> Fukuda-Parr, Sakiko, and Amy Orr, “The MDG Hunger Target and the Contested Visions of Food Security,” p. 25.

not likely to be met. Other critics, Sakiko Fukuda-Parr and Amy Orr, have argued that defining outcomes based on caloric consumption and underweight children has marginalised the need for long-term solutions requiring social and political change.<sup>117</sup> They consider the MDG framework to be a step back from emphasis on qualitative outcomes, such as the realisation of the right to food, and qualitative processes, such as participation, encouraging policies that rely on short-term solutions and a focus on measurable results.<sup>118</sup>

While sympathetic to these concerns, others, notably Philip Alston, have argued that effective complementarity between human rights and the MDGs is possible and should be pursued.<sup>119</sup> Since 2012 this is now the case, as the ‘Zero Hunger Challenge’ launched by Ban Ki-moon has explicitly linked the goal of ending hunger in our lifetimes with comprehensive efforts to ensure that every man, woman and child enjoy their right to adequate food.<sup>120</sup>

### iii. The Right to Adequate Food

A major development in efforts to tackle hunger in recent decades has been the elaboration of a human right to adequate food. First recognised in article 25 of the Universal Declaration of Human Rights as part of the right to an adequate standard of living, the ‘right to adequate food’ was made legally binding in signatories to the International Covenant on Economic, Social and Cultural Rights (ICESCR) in 1966. Articulated as a universal and inalienable right belonging to all human beings, this act of codification was the first step in attempting to advance efforts to combat hunger as being beyond a moral duty, or a policy choice, and to make it a legally binding human rights obligation. The right was reaffirmed and refined in General Comment 12 by the

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<sup>117</sup> *Ibid* p. 34.

<sup>118</sup> *Ibid* p. 28.

<sup>119</sup> Alston, Philip, “Ships passing in the night: the current state of the human rights and development debate seen through the lens of the Millennium Development Goals,” *Human Rights Quarterly* 27, no. 3 (2005): 755-829.

<sup>120</sup> “Zero Hunger Challenge”, <http://www.un.org/en/zerohunger/challenge.shtml> Last accessed 30<sup>th</sup> April 2015.

United Nations Committee on Economic, Social and Cultural Rights (CESCR).<sup>121</sup> General Comment 12 mandated that the right to adequate food should not be interpreted in a ‘narrow or restrictive sense’ — equated with a minimum package of calories — but must be ‘realized progressively’ with states taking steps to ‘respect, protect, and fulfil’ the right.<sup>122</sup> Explicit reference was made to the link between the requirement of ‘adequacy’ and the longer term availability and sustainability of food supplies connoting food security.<sup>123</sup> A Special Rapporteur was appointed in 2000, tasked with examining means of overcoming obstacles to the realisation of the right, monitoring states’ progress via country visits, producing annual reports for the Human Rights Committee, and responding to individual complaints.<sup>124</sup> An additional set of voluntary guidelines on the ‘progressive realisation of the right to food in the context of national food security’ was negotiated by member States of the FAO in 2004.<sup>125</sup> Seeking to provide ‘practical guidance’ to states in their implementation of the right, these guidelines also linked the realisation of the right to adequate food with the achievement of MDG 1C.<sup>126</sup>

The elaboration of a legally enforceable human right to adequate food is positioned as a step beyond moral duty or policy. Nonetheless, many would consider its strength to lie in a move beyond technical prescription of how to achieve food security towards a normative vision of what a rights-respecting food system should look like. As well as bringing in the ethical dimension, another strength of a rights-based approach is the emphasis on the duty of identifiable actors — states — to provide the right equally, without discrimination, for the benefit of every individual. Articulating the need for food as a legally-binding human right makes an already

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<sup>121</sup> UN Committee on Economic, Social and Cultural Rights (CESCR), “General Comment No. 12: The Right to Adequate Food (Art. 11 of the Covenant),” 12 May 1999, <http://www.refworld.org/docid/4538838c11.html> Last accessed 2<sup>nd</sup> February 2015.

<sup>122</sup> *Ibid* at 6.

<sup>123</sup> *Ibid* at 7.

<sup>124</sup> For more information on the role of the Special Rapporteur see <http://www.ohchr.org/EN/Issues/Food/Pages/FoodIndex.aspx> Last accessed 2<sup>nd</sup> February 2015.

<sup>125</sup> FAO, *Voluntary Guidelines to support the progressive realization of the right to adequate food in the context of national food security*, Rome: FAO, 2005, <http://www.fao.org/docrep/009/y7937e/y7937e00.htm> Last accessed 29<sup>th</sup> April 2015.

<sup>126</sup> *Ibid*.

powerful moral claim into a key with the potential to open the doors to the legal system, enrolling new actors with considerable experience, expertise, and instruments in the delivery of justice in the project of tackling hunger. As well as placing duties on politicians, some nations have recognised the justiciability of the right to food, or certain aspects of it, through legislative efforts ranging from social security guarantees, through food safety regulations, to land tenure legislation.<sup>127</sup>

In spite of ongoing efforts to make the right to food justiciable, numerous critics have contended that the provisions, as with many social, economic and cultural rights, are bereft of hard law.<sup>128</sup> It has been argued that inviting states to ‘consider’, or ‘urging’ them to address potential violations, is insufficient. There is growing support for an International Food Security Treaty (IFST) which would require states to adopt national legislation granting individuals access to state structures, such as administrative tribunals and courts, to enforce the rights arising out of the right to adequate food.<sup>129</sup> Some states have already advanced in this direction. Countries including Belarus, Colombia, South Africa, India, Fiji, and Kenya have incorporated provisions in their constitutions which explicitly recognise the right to adequate food.<sup>130</sup> A large number of countries do this implicitly, via provisions that protect the right to an adequate standard of living as per the ICESCR.<sup>131</sup> The constitutional protection of the right to food has produced some interesting jurisprudence. After a lengthy court case, *PUCL vs Union of India & Ors*,<sup>132</sup> the Indian parliament adopted the National Food Security Act 2013. The legislation creates entitlements to food-related assistance and also establishes grievance mechanisms.<sup>133</sup> Other countries such as Brazil have adopted school feeding legislation founded on a human rights-based

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<sup>127</sup> For an overview of the question of justiciability, see “Justiciability of the Right to Food,” FAO website <ftp://ftp.fao.org/docrep/fao/010/a0511e/a0511e03.pdf> Last accessed 29<sup>th</sup> April 2015.

<sup>128</sup> Wiles, Ellen, “Aspirational Principles or Enforceable Rights – The Future for Socio-Economic Rights in National Law,” *American University Law Review* 22 (2006), p. 35.

<sup>129</sup> “International Food Security Treaty”, [www.treaty.org](http://www.treaty.org) Last accessed 10<sup>th</sup> July 2015.

<sup>130</sup> Vidar, Margret, Yoon Jee Kim and Luisa Cruz, “Legal Developments in the Progressive Realization of the Right to Adequate Food,” *FAO Development Law Branch: Thematic Study 3*, Rome: FAO, 2014, p. 2-3.

<sup>131</sup> *Ibid.*

<sup>132</sup> People’s Union for Civil Liberties (PUCL) vs Union of India & Ors. Writ Petition (Civil) no. 196 of 2001 and Interim Order of 2<sup>nd</sup> May 2003.

<sup>133</sup> *Ibid.*

approach.<sup>134</sup> A considerable literature has emerged that questions the merits of ‘judicialising’ such rights.<sup>135</sup> In the main however, the work of the Special Rapporteur has focused on how food systems might be reformed to ensure a fuller realisation of the right to adequate food.<sup>136</sup> His recommendations largely correspond with those of bodies such as the FAO and their determinations on the need to provide an ‘enabling environment’ for the achievement of food security.<sup>137</sup>

Institutional responses to hunger continue to be dominated by approaches focused on achieving food security and securing the right to adequate food in accordance with targeted goals. However, in spite of considerable progress in developing institutions that promote food security and in securing the right to adequate food on a formal level, overwhelmingly, the realisation of the right has not sufficiently been reflected in practice.<sup>138</sup> Some critics, including Edkins<sup>139</sup> and De Waal,<sup>140</sup> have gone so far as to suggest that the elaboration of technical regimes of assistance may have done more to benefit the anti-hunger community — the ‘humanitarian international’,<sup>141</sup> to use De Waal’s terminology — than those communities suffering from hunger.

I will now move on to clarify the critical limitations of these dominant approaches to tackling hunger and to consider what I would argue is the ‘absent

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<sup>134</sup> Law 11.947 of 2009 establishes the School Feeding Programme in all primary schools in the Federative Republic of Brazil (PNAE) See [http://www.fao.org.pk/news/12/Events/pak-brazil-seminar/PNAE\\_%20Dez\\_2012\\_%20Paquist%C3%A3o\\_FINAL.pdf](http://www.fao.org.pk/news/12/Events/pak-brazil-seminar/PNAE_%20Dez_2012_%20Paquist%C3%A3o_FINAL.pdf) Last accessed 10<sup>th</sup> July 2015.

<sup>135</sup> Gearty, Conor, and Virginia Mantouvalou, *Debating social rights*, London: Bloomsbury Publishing, 2010; Gauri, Varun, and Daniel M. Brinks (Eds), *Courting social justice: judicial enforcement of social and economic rights in the developing world*, Cambridge: Cambridge University Press, 2008.

<sup>136</sup> De Schutter, Olivier, “Final report: The transformative potential of the right to food,” Report of the Special Rapporteur on the right to food A/HRC/25/57, 2014, p. 3.

<sup>137</sup> FAO, IFAD and WFP, *The State of Food Insecurity in the World 2014*, p. 5.

<sup>138</sup> Vidar, Margret, Yoon Jee Kim and Luisa Cruz, “Legal Developments in the Progressive Realization of the Right to Adequate Food”.

<sup>139</sup> Edkins, J., *Whose Hunger? Concepts of Famine and Practices of Aid*, 2000.

<sup>140</sup> De Waal, Alexander, *Famine crimes: politics & the disaster relief industry in Africa*, Indiana: Indiana University Press, 1997.

<sup>141</sup> As De Waal argues, ‘[t]he humanitarian international is an international elite of professionals who staff aid agencies and who work as academics, journalists, consultants, conflict resolution specialists, and human rights workers. They share a common culture, can easily move between different institutions, and ‘with each big relief operation, [become] more powerful and privileged’. *Ibid*, p. 106.

diagnosis’ undermining contemporary ambitions to cure world hunger: the role of the global food system.

#### iv. Limitations

As the FAO argues in its 2014 edition of *The State of Food Insecurity in the World*, a major task of food security governance is to foster an ‘enabling environment’.<sup>142</sup> Nowhere in the pages of empirical analysis that follow is there a cohesive explanation of how it came to be that the ‘food insecure’ ended up in a disabling environment in the first place. It is acknowledged that food security results from ‘multiple causes’<sup>143</sup> and that many countries have made little or no progress in improving food security, often because of ‘a combination of adverse factors’, such as ‘natural disasters’,<sup>144</sup> a ‘limited and fragile natural resource base’,<sup>145</sup> and ‘conflicts, price hikes, weak institutions and poor governance’.<sup>146</sup> Yet there is no attempt to link these free-floating variables. For all of the apparent progress beyond attributing hunger to the ‘vagaries of nature’,<sup>147</sup> a tendency identified by Susan George in the 1980s, this is the assumption upon which much of the modern analysis of hunger still comes to rest. While not as simple as droughts, floods and earthquakes, food insecurity is largely attributed to domestic environments in which the food insecure are blighted by a lack of resources (natural and financial), inundated with diseases, uprooted by conflict, racked by economic crises, and destabilised by volatile food prices. In much of the literature, described without being explained, these read as natural characteristics of their surroundings. Equally, while policy and the strengthening of legal entitlements are repeatedly prescribed as the solution to the problem of food insecurity, there is little mention, much less characterisation, of the policy context or legal environment in which people became food insecure in the first

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<sup>142</sup> FAO, *The State of Food Security in the World 2014*, Key Messages.

<sup>143</sup> *Ibid*, p. 13.

<sup>144</sup> *Ibid*, p. 14.

<sup>145</sup> *Ibid*, p. 17.

<sup>146</sup> *Ibid*, p. 14.

<sup>147</sup> George, Susan, *How the other half dies. The real reasons for world hunger*, p. 46.

place. Where the political apparatus is acknowledged, that acknowledgement often takes the form of judgement. Institutions are characterised as being ‘weak’ and governance ‘poor’<sup>148</sup> without an explication of the criteria that have warranted such an assessment.

Taken together, this conspires to mean that people suffering from hunger appear in the literature on hunger as ready-made victims, defined by lack. Their poverty, vulnerability, insecurity and rightlessness — ever more precisely located, profiled, and defined — is calculated as the sum of the possessions, claims, and social entitlements that they don’t have, rather than the lot assigned to them under current social, political, and economic structures. The cure — prescribed in the absence of a clear diagnosis on how they ended up in their predicament — is a combination of ‘more’ and ‘better’. What is needed is *more* political commitment, *more* participation, *more* economic growth, *more* harmonisation, and *more* information.<sup>149</sup> This is to be supplemented with *better* access to inputs, land, services, technologies and markets,<sup>150</sup> and *better* coordination and governance mechanisms.<sup>151</sup> Where suggestions become more concrete, overwhelmingly, solutions are focused on stimulating economic growth, fostering market access for local communities and small farmers, and making markets more inclusive.<sup>152</sup> This is to be supplemented by the work of a human rights community that ‘does its part’ and ‘updates instruments, documents the abuses of powerful economic actors as multinational companies and demands governments to regulate their global and national activities’.<sup>153</sup>

Having skated over the ‘why’ of food insecurity, spent an enormous amount of resources specifying the ‘who’ and the ‘what’, and stressing the significance of the ‘when’ — now, urgently, and preferably by the end of the year — ‘integrated’

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<sup>148</sup> FAO, *The State of Food Security in the World 2014*, p. 14.

<sup>149</sup> *Ibid*, p. 39.

<sup>150</sup> *Ibid*.

<sup>151</sup> *Ibid*.

<sup>152</sup> See for example Wiggins, Steve and Sharada Keats, “Leaping and Learning: Linking Small-holders to Markets in Africa,” London: Imperial College and Overseas Development Institute, 2013.

<sup>153</sup> Flavio, Luiz Schieck Valente, “Towards the Full Realization of the Human Right to Adequate Food and Nutrition,” *Development* 57, no. 2 (2014): 155-170, p. 167.

approaches to achieving food security have come full circle, announcing a ‘how’ that is as analytically impoverished as the ‘why’ with which they started. What are missing are not only the deeper connections but also the deeper contradictions underlying the recommendations advanced. The dominant solution prescribes access to resources — inputs, land, technologies — that are already owned, often exclusively via private property rights — by others. It argues for stronger access to markets for the food insecure, when access to markets largely depends on the prior ownership of resources, which the food insecure don’t have. It suggests the need for more economic growth, when this tends to strengthen the position of the already economically strong,<sup>154</sup> leading to the strengthening of their entitlements and private property rights over the same resources that the food insecure need better access to. It positions states as the primary actors responsible for implementing this agenda, when, as a growing body of scholarship has noted,<sup>155</sup> states appear to be increasingly powerless to control flows of commodities — physical, monetary, and intangible — that determine the amount of food within their borders, its quality, or its price.

In spite of recognition that dependence on international commodity markets has been prejudicial for many poorer countries and their populations, particularly in terms of dependency on imports, the overall recommendation is in strengthening access to markets. Although greater emphasis is now placed on the importance of local markets and domestic production, there is little recognition of the fact that these markets and methods have, over recent decades, become embedded within a broader global food system and are inextricably influenced by this broader market mechanism.

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<sup>154</sup> Dunning, John H., and Sarianna M. Lundan, *Multinational enterprises and the global economy*, London: Edward Elgar Publishing, 2008.

<sup>155</sup> Swinnen, Johan F.M. (Ed), *Global supply chains, standards and the poor: how the globalization of food systems and standards affects rural development and poverty*, Wallingford: Cabi, 2007; Robert L. Paarlberg, *Governance and Food Security in an Age of Globalization*, IFPRI Policy Brief 36, 2002, <http://www.ifpri.org/publication/governance-and-food-security-age-globalization-0> Last accessed 10<sup>th</sup> July 2015.



#### IV. THE GLOBAL FOOD SYSTEM

An international trade in food and agriculture dates back centuries. It is difficult to pinpoint a precise moment in which this international trade morphed into a global market for food, or, equally, into something that can accurately be described as a global food *system*. Critical steps were made during the period of European colonialism, when enterprises such as the Dutch East India and Imperial British East Africa trading companies established plantations in soon-to-be colonies to meet burgeoning demand at home for exotic products grown in tropical climes.<sup>156</sup> However, it is generally agreed that the shift from trade in cash crops and tropical commodities conducted between nations to something more global began with the rise of the post-war ‘food regime’, as it is described by Harriet Friedmann and Philip McMichael.<sup>157</sup> The path to a global system was pioneered via the policies of one state in particular: the US. The leading economic and political power in the post-war era, the mercantilist policies pursued by US administrations were instrumental in exporting first physical grain — food aid, as described above — and subsequently the industrialised model of agriculture that had produced that surplus grain to countries around the world.<sup>158</sup> First through the technological transfer pursued under the Green Revolution and later through industrialisation policies promoted as instigators of economic growth, countries worldwide implemented the same industrial model of agricultural production as that originating in the US.<sup>159</sup>

Since that era, agricultural production worldwide has increasingly conformed to the same model characterised by export-oriented mechanised production, monocropping, reliance on fossil fuels, pesticides, and fertilisers, and a growing role for

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<sup>156</sup> Robbins, Peter, *Stolen Fruit: The Tropical Commodities Disaster*, London: Zed Books, 2003, p. 25.

<sup>157</sup> Friedmann, Harriet and Philip McMichael, “Agriculture and the state system: The rise and decline of national agricultures, 1870 to the present,” *Sociologia ruralis* 29, no. 2 (1989): 93-117; Friedmann, Harriet, “Distance and durability: Shaky foundations of the world food economy,” *Third World Quarterly* 13, no. 2 (1992): 371-383; McMichael, Philip, “A food regime genealogy,” *The Journal of Peasant Studies* 36, no. 1 (2009): 139-169.

<sup>158</sup> Clapp, Jennifer, *Food*, pp. 24-6.

<sup>159</sup> *Ibid* p. 33.

technological innovations, such as genetically modified crops and hybrid seeds.<sup>160</sup> Through the lowering of barriers to import and export and the promotion of specialisation in products in which countries have a ‘comparative advantage’, beyond symmetry in how food is produced, the international market has developed into an interdependent system for the production and consumption of food. Nations are reliant on raw materials, fuels, other inputs, finance, and, crucially, demand from other countries in order to both produce food domestically and to sell it, providing their populations with enough revenue to consume it. States have become specialist producers or manufacturers — cogs in a larger machine. The US has emerged as the dominant player in the global grain trade exporting 60 per cent of maize, 25 per cent of the world’s wheat, and is the third largest soybean exporter.<sup>161</sup> Many countries in the Global South are specialists in tropical products and agro-fuels. A new leader in the soybean market, Brazil is also a specialist sugar exporter, accounting for nearly 40 per cent of world sugar exports.<sup>162</sup> Ecuador specialises in bananas,<sup>163</sup> Ethiopia in tea, coffee, and spices.<sup>164</sup> Other countries, notably in Asia, including China and Japan, specialise in manufacturing electronic goods and cars.<sup>165</sup> Some economies are entirely reliant on the fossil fuels upon which the broader global economy, and food system, in turn relies: Saudi Arabia, the United Arab Emirates, and Kuwait supplying oil, Russia oil and natural gas, along with other leading exporters Qatar and Norway.<sup>166</sup>

Currently, the food of almost 1 billion people is produced outside their own countries.<sup>167</sup> A significant factor influencing this specialisation is natural endowment — particularly in those countries rich in particular resources or whose climates are

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<sup>160</sup> *Ibid.*

<sup>161</sup> Headey, Derek, and Shenggen Fan, *Reflections on the global food crisis: How did it happen? How has it hurt? And how can we prevent the next one?* Vol. 165, Intl Food Policy Res Inst, 2010, p. 7.

<sup>162</sup> “Sugar Exports by Country,” World’s Top Exports, <http://www.worldstopexports.com> Last accessed 30<sup>th</sup> April 2015.

<sup>163</sup> “Bananas Exports by Country,” *ibid.*

<sup>164</sup> “Ethiopia’s Top Exports,” *ibid.*

<sup>165</sup> “China’s Top 10 Exports,” *ibid.*; “Japan’s Top 10 Exports,” *ibid.*

<sup>166</sup> “Natural Gas Exports,” The World Factbook, Central Intelligence Agency, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2251rank.html> Last accessed 30<sup>th</sup> April 2015.

<sup>167</sup> Fader, Marianela, et al, “Spatial decoupling of agricultural production and consumption: quantifying dependences of countries on food imports due to domestic land and water constraints,” *Environmental Research Letters* 8, no. 1 (2013), at 2.3.

adept to the production of some crops and not others. However, as recent studies into national self-sufficiency have underlined, there are surprisingly few countries — a total of 66, most of them in Africa — that could not maintain the same diet that they have today and still be food self-sufficient.<sup>168</sup> Reliance on food imports is, at present, a policy choice for many countries which are pursuing the opportunities it affords, focusing on more profitable sectors, consuming 'exotic' or seasonal goods year-round, and profiting from lower production costs (and thus prices) in other countries.<sup>169</sup> The advantages of this system are, however, distributed highly unevenly. Many poorer countries in the Global South — countries whose elective participation in the system is highly debatable — suffer disproportionately from the effects of its disadvantages. These points will be elaborated further in Chapter Five, where I will also be considering the significance of international law in mediating the dynamics of the post-war food order. At present, it is sufficient to point out that the number of countries estimated to be food self-sufficient in future decades will change radically. Even without taking account of the effects of climate change, figures suggest that over half the world's population could depend on imported food by 2050 due to constraints of water and land impacting on agricultural production.<sup>170</sup> The consequence of countries attempting to maintain the same diet they do today, via industrial modes of agricultural production, is that a condition of elective dependency is morphing into one increasingly akin to requisite dependency.

i. Systematised vulnerability

According to those who have studied the dynamics of the global food system, exploring it in historical perspective,<sup>171</sup> and looking at relations of dependency within

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<sup>168</sup> *Ibid* at 4.1.

<sup>169</sup> *Ibid*, Introduction.

<sup>170</sup> Ravilious, Kate, "Over half the world's population could rely on food imports by 2050 – study," *The Guardian*, 7<sup>th</sup> May 2013.

<sup>171</sup> This analysis has been carried out by proponents of 'food regime theory' — a body of scholarship carrying out historical materialist analysis of the development of the global food system. Leading scholars in this field are Harriet Friedmann and Philip McMichael. See references at n157.

it,<sup>172</sup> it is precisely the linking of countries in the Global South to international markets that has exacerbated conditions of poverty and hunger. Being forced to compete with wealthier market actors operates to their profound disadvantage. Mike Davis has demonstrated that famines across parts of Asia, South America, and Africa in the late nineteenth century, which were commonly attributed to variations in temperature caused by the El Niño-Southern Oscillation, were, to a significant extent, produced by the incorporation of those countries into global market structures. In the case of India, the elaboration of railways and transport systems linking rural communities to a unitary global market had the perverse consequence of exporting famine, via price inflation, to the rural poor in grain-surplus districts.<sup>173</sup> ‘Londoners were in fact eating India’s bread’,<sup>174</sup> he concludes. Similar dynamics have been evidenced in the context of the Irish Potato famine in the 1840s, and Bengal famine in 1943.<sup>175</sup>

The expansion of the industrial agricultural model has only served to intensify this damaging competition. The promotion of mono-cropping has wiped out local crops in many countries, exacerbating homogenisation of diets whereby populations in the Global South are consuming foods characteristic of diets in the North. This has intensified their reliance on grains such as maize, rice, and wheat, subjecting them not only to competition from wealthier Northern consumers but also to competition in the form of fuel and feed grains.<sup>176</sup> People in rich, industrialised countries eat high protein, meat-based diets that depend on tonnes of grain per year in feed for livestock

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<sup>172</sup> ‘Dependency theory’, most famously advanced by Andre Gunder Frank, posits that resources flow from a ‘periphery’ of poor and underdeveloped states to a ‘core’ of wealthy states, enriching the latter at the expense of the former. See Frank, Andre Gunder, *The development of underdevelopment*, Boston Mass: New England Free Press, 1966. The insights of this literature will be explored further in Chapter Five.

<sup>173</sup> Davis, Mike, *Late Victorian holocausts: El Niño famines and the making of the third world*, New York: Verso, 2002, pp. 7, 26, and 299.

<sup>174</sup> *Ibid.*

<sup>175</sup> Donnelly, James S., *The Great Irish Potato Famine*, UK: The History Press, 2012; Sen, Amartya, “Starvation and exchange entitlements: a general approach and its application to the Great Bengal Famine,” *Cambridge Journal of Economics* (1977): 33-59.

<sup>176</sup> Magdoff, Fred and Brian Tokar, “Agriculture and Food in Crisis: An Overview,” Monthly Review Press, <http://monthlyreview.org/2009/07/01/an-overview-of-the-food-and-agriculture-crisis/> Last accessed 10<sup>th</sup> July 2015.

such as cattle.<sup>177</sup> During the world food crisis in the 1970s, in which prices for staple grains soared and people were starving from want of food, one billion people in the rich world were consuming meat that used as much cereal as the two billion people in the poor countries consumed directly in the form of grain.<sup>178</sup>

The shift towards an industrial mode of agricultural production — which requires substantial capital to instigate, necessitates access to significant stretches of land, and depends on fossil fuels and other expensive inputs to function — favours large, wealthy, commercially experienced actors over small farmers with few resources. This has resulted in the displacement of rural populations throughout the Global South who, unable to compete, have been driven into urban slums, or onto marginalised land that is less fertile and apt for growing food.<sup>179</sup> Many of them continue to work in agricultural production, only as landless labourers — often paid a small wage in return for many hours of work in poor conditions that goes towards producing food to export to the global market.<sup>180</sup> They are increasingly reliant on food imports for their own dietary needs and on revenue from agricultural exports produced via the industrialised mode of production in their own countries. As Harriet Friedmann has argued, peoples of the ‘Third World’ have been both incorporated and marginalised, often simultaneously, in a global food system that is largely insensitive to their needs, traditional diets, and economic situation.<sup>181</sup>

In spite of research that suggests that small farms are much more productive than large farms if total output, rather than yield from a single crop, is considered,<sup>182</sup> a drive towards mono-cropping and industrialised production has been pursued at the expense of local populations, ecologies and the global climate. In Paraguay, described

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<sup>177</sup> Clapp, Jennifer, *Food*, p. 45.

<sup>178</sup> *Ibid* p. 45.

<sup>179</sup> Bello, Walden and Mara Baviera, “Food Wars,” in Fred Magdoff and Brian Tokar (Eds), *Agriculture and food in crisis: Conflict, resistance, and renewal*, New York: NYU Press, 2010, pp. 43-6.

<sup>180</sup> Magdoff, Fred and Brian Tokar (Eds), *Agriculture and food in crisis: Conflict, resistance, and renewal*, p. 25.

<sup>181</sup> Friedmann, Harriet, “Distance and durability: Shaky foundations of the world food economy,” *Third World Quarterly* 13, no. 2 (1992).

<sup>182</sup> Altieri, Miguel A., and Clara I. Nicholls. “Scaling up agroecological approaches for food sovereignty in Latin America,” *Development* 51, no. 4 (2008): 472-480. p. 474.

by sociologist Javiera Rulli as a ‘soy republic’<sup>183</sup>, a diverse rainforest that once covered 85 per cent of the Eastern region of the country has been transformed into a ‘green desert’ devoted to the production of soy to be exported for animal feed worldwide.<sup>184</sup> Over the past decade, almost 100,000 small farmers have been evicted from their homes and fields<sup>185</sup> to make way for an industry that dumps 24 million litres of agri-chemicals classified as hazardous to human health in Paraguay ever year.<sup>186</sup> A recent investigation in areas of high soy production found that 78 per cent of families in several of the communities examined had health problems as a result of the pesticides used in crop spraying.<sup>187</sup> Similar statistics proliferate in countries dedicated to the production of agrofuels, such as palm oil for biodiesel in Indonesia and Malaysia, jatropha in India, and sugar cane for ethanol in Brazil.<sup>188</sup>

Touted as an alternative to environmentally damaging fossil fuels, research has demonstrated that many biofuels require more fossil fuel energy to produce than they are able to displace.<sup>189</sup> What is more, industrialised agricultural production remains highly dependent on fossil fuels. Between processing, distribution, and preparation, ten calories of energy are required to create just one calorie of food energy.<sup>190</sup> The effects of this in terms of contributing to climate change are well documented. The production of fertilizers, herbicides and pesticides, the tillage, irrigation and fertilisation, and the transport, packaging and conservation of food require considerable amounts of energy, resulting in an additional 15 to 17 per cent of total man-made greenhouse gas emissions attributable to food systems.<sup>191</sup> Industrial agriculture also results in the broader pollution of the air, the soil, the water supply,

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<sup>183</sup> Howard, April, “The Battle for Sustainable Agriculture in Paraguay,” in Fred Magdoff and Brian Tokar (Eds), *Agriculture and food in crisis: Conflict, resistance, and renewal*, p. 174.

<sup>184</sup> *Ibid*, p. 176.

<sup>185</sup> *Ibid*, p. 177.

<sup>186</sup> *Ibid*, p. 177-8.

<sup>187</sup> *Ibid*, p. 178.

<sup>188</sup> Tokar, Brian, “Biofuels and the Global Food Crisis,” in Fred Magdoff and Brian Tokar (Eds), *Agriculture and food in crisis: Conflict, resistance, and renewal*, p. 127.

<sup>189</sup> *Ibid*, p. 124.

<sup>190</sup> Imhoff, Daniel, “Community-Supported Agriculture,” in Jerry Mander and Edward Goldsmith, *The Case Against the Global Economy*, San Francisco: Sierra Club, 1996, p. 426.

<sup>191</sup> Vermeulen, S., B. Campbell and J. Ingram, “Climate change and food systems,” *Annual Review of Environment and Resources* 37 (2012): 195-222.

resulting in ecological degradation that intensified competition for arable farmland. The model of agricultural production promoted under the global food system is, therefore, a major contributor to the natural disasters and conflicts typically foregrounded as proximate causes of hunger. It also plays a significant role in climate change, an immanent and critical threat to future food supplies in the Global South.

As well as being industrialised, interdependent, and increasingly specialised, the global food system is also one that is monopolised by the power of transnational companies. Now occupying the centre of the global food system is what critics denote ‘the industrial agrifoods complex’. Global companies dominate local markets and increasingly control the world’s food-producing resources: land, labour, water, inputs, genes, and investments.<sup>192</sup> Two companies, Archer Daniels Midland (ADM) and Cargill capture three-quarters of the world grain trade.<sup>193</sup> This means that they have a huge influence over the methods of food production and its price. These companies are able to take advantage of what are designated ‘global value chains’ — referring to the disintegration and re-integration of production through inter-firm, inter-country trade in order to take advantage of the lowest possible price for a given input.<sup>194</sup> Small farmers and agribusiness firms are unable to compete, and are driven out of the market, resulting in further monopolisation by large firms.<sup>195</sup> Many of these companies are also buying up farmland — described by financier George Soros in 2009 as ‘one of the best investments of our time’.<sup>196</sup> The phenomenon commonly termed the ‘global land grab’ has resulted in private companies contracting for vast areas of land, estimated in 2012 to total an area eight times the size of the UK.<sup>197</sup>

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<sup>192</sup> Imhoff, Daniel, “Community supported agriculture,” p. 428.

<sup>193</sup> Wiggins, Steve and Stephanie Levy, “Rising Food Prices: A Global Crisis,” Overseas Development Institute Report, London, 2010.

<sup>194</sup> Gibbon, Peter, Jennifer Bair, and Stefano Ponte, “Governing global value chains: an introduction,” *Economy and Society* 37, no. 3 (2008).

<sup>195</sup> Vargas, Mónica and Olivier Chantry, “Ploughing through the meanders in food speculation,” GRAIN Report, 2011, p. 19.

<sup>196</sup> Soros, George, quoted in GRAIN, “The New Farm Owners: Corporate Investors and the Control of Overseas Farmland,” in Fred Magdoff and Brian Tokar (Eds), *Agriculture and food in crisis: Conflict, resistance, and renewal*, p. 137.

<sup>197</sup> “Our Land, Our Lives: Time out on the global land rush,” Oxfam Briefing Note, 2012, p. 1.

[http://www.oxfam.org/sites/www.oxfam.org/files/bn-land-lives-freeze-041012-en\\_1.pdf](http://www.oxfam.org/sites/www.oxfam.org/files/bn-land-lives-freeze-041012-en_1.pdf) Last accessed 3<sup>rd</sup> February 2015.

Another facet of their monopolisation of the global food system related to intellectual resources. Multinational companies have been commodifying intellectual resources required for food production. Indian environmentalist Vandana Shiva has been at the forefront of a campaign that exposes the role of companies such as Monsanto in transforming the very seeds to grow crops into ‘costly packets of intellectual property’ that are unaffordable to local farmers.<sup>198</sup>

A final, but definitive, feature of the global food system relates to the status of food within it. What is being produced by the methods of industrialised agricultural production is not strictly food, but food commodities. As something to be bought and sold for profit the overriding factor determining access to food for populations around the world is the ability to pay for it. Other ways in which food is of value to human beings — as a necessity for survival, as a source of enjoyment, as part of cultural heritage — are only reflected in the global food system to the extent that those doing the valuing can express their need, or desire, in monetary terms. The vast networks and complexities of the modern global food system, the fortunes and fates of billions of people, and of billion dollar companies are reduced, determined, and put into relation by a single numerical measure of the value of food: its price. The consequence, as illustrated by the events of the global food crisis of the 1970s,<sup>199</sup> widespread food insecurity, and recurrent food crises and famines, is that large swathes of the global population have become vulnerable to the machinations of global commodity markets.<sup>200</sup>

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<sup>198</sup> Shiva, Vandana, *Protect or plunder: understanding intellectual property rights*, London: Zed Books, 2001.

<sup>199</sup> The annual prices of wheat and rice increased by more than 100 per cent between 1972 and 1973, triggering a world food crisis. This is typically linked to the increase in crude oil prices, which extended from the 1973 oil crisis. For a comparison of the two crises see Chand, Ramesh, “The Global Food Crisis: Causes, Severity and Outlook,” *Economic and Political Weekly* 43 (2008), pp. 115-122.

<sup>200</sup> While this has predominantly affected Southern populations more acutely, small farmers in the Global North have also suffered. As analysts at GRAIN have reinforced, the proportion of profit absorbed by agribusiness intermediaries is alarming. It is estimated that the difference between what the consumer pays and what a family livestock farm in the Spanish state receives for their produce is 324 per cent. See Vargas, Mónica, and Olivier Chantry, “Ploughing through the meanders in food speculation,” p. 24.



## ii. Demands for food sovereignty

In recent years, a new approach to tackling hunger that seeks to address these issues of power imbalance has emerged. The movement for ‘food sovereignty’ — connoting people's democratic control of the food system — asserts that nothing less than the fundamental restructuring of the global food system will address the persistence of hunger.<sup>201</sup> Originating with the peasant organisation La Via Campesina,<sup>202</sup> proponents advocate restructuring control over land and food in order to restructure market power. As Amy Trauger has underlined, in contrast with the depoliticised discourse of food insecurity, food sovereignty identifies neoliberal state policies and global capital as the source of that insecurity.<sup>203</sup> Tackling hunger, it is argued, requires ‘rethinking the neoliberal market as a mechanism for state-based food security initiatives’ and further implicates the state in the production of food insecurity for its policies that marginalise small producers in the interests of capital.<sup>204</sup> Advocates of food sovereignty make explicit what is implicit in Sen: modern notions of property rights and global capitalist markets are the source of the problems in the food system.<sup>205</sup>

The overall goal of the food sovereignty movement is, therefore, to ‘re-localise’ the production and consumption of food, de-linking, as far as possible, local producers from global markets. The ambition is to build a food system in which ‘food is for people, not for profit’.<sup>206</sup> The movement faces a great number of challenges in the realisation of its goals. There is still a lot of imprecision about what ‘as far as possible’<sup>207</sup> means with regard to de-linking from international markets. The extent to

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<sup>201</sup> Patel, Raj, “What Does Food Sovereignty Look Like?” *The Journal of Peasant Studies* 36 (2009).

<sup>202</sup> Shattuck, Annie and Eric Holt-Giménez, “Comment: Moving from Food Crisis to Food Sovereignty,” p. 422; “What is La Via Campesina?” <http://viacampesina.org/en/index.php> (follow ‘Organisation’ hyperlink). Last accessed 1<sup>st</sup> February 2015.

<sup>203</sup> Trauger, Amy, “Toward a political geography of food sovereignty: transforming territory, exchange and power in the liberal sovereign state,” *The Journal of Peasant Studies* 41, no. 6 (2014), p. 1131.

<sup>204</sup> *Ibid*, p. 1132.

<sup>205</sup> *Ibid*, p. 1132.

<sup>206</sup> Magdoff, Fred, and Brian Tokar, *Agriculture and food in crisis: Conflict, resistance, and renewal*, p. 30.

<sup>207</sup> Edelman, Marc, et al, “Introduction: critical perspectives on food sovereignty,” *The Journal of Peasant Studies* 41, no. 6 (2014) p. 915.

which this is a realisable vision for future food systems is questioned by those who point out that some food-deficit countries cannot produce enough food for current populations and appear to have no choice but to engage in long-distance trade.<sup>208</sup> These challenges aside, many within the food sovereignty movement were warning of the crisis-conditioning tendencies inherent in the global food system long before recent events in global markets unfolded — events which appear to have taken most economists and governments by surprise: the global food crisis of 2007-08.

## V. THE GLOBAL FOOD CRISIS 2007-08 AND BEYOND

Between 2007 and 2008, the prices of grain on international markets exhibited record levels of volatility. The FAO estimated in 2008 that the average world price for rice had risen by 217 per cent, wheat by 136 per cent, corn by 125 per cent and soybeans by 107 per cent since the onset of the inflation.<sup>209</sup> The executive director of the WFP at the time, Josette Sheeren, warned of a ‘silent tsunami’ of rising food prices threatening to push more than 100 million people worldwide into hunger.<sup>210</sup> Although prices dropped again in 2009, it wasn’t long before another such ‘spike’ was in evidence: Grain prices moved in a strikingly similar trajectory between the second half of 2010 and late 2011, with wheat, corn and soybeans all reaching record heights by the summer of 2010.<sup>211</sup>

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<sup>208</sup> *Ibid*, p. 917.

<sup>209</sup> FAO, *The State of Food Insecurity in the World 2008: High Food Prices and Food Insecurity – Threats and Opportunities*, Rome: FAO, 2008.

<sup>210</sup> “Global food crisis ‘silent tsunami’ threatening over 100 million people, warns UN,” UN News Centre, 22<sup>nd</sup> April 22 2008, <http://www.un.org/apps/news/story.asp?NewsID=26412#.VX7tufNwbGg> Last accessed 13<sup>th</sup> June 2015.

<sup>211</sup> FAO, “World food prices reach new historic peak,” FAO Media Centre, 3<sup>rd</sup> February 2011 <http://www.fao.org/news/story/en/item/50519/icode/> Last accessed 26<sup>th</sup> October 2012.

## i. Impact

Although the price volatility did have a global impact, the effects were particularly acute for poor communities in developing countries.<sup>212</sup> Afghanistan and Haiti were two countries where the price spikes had a particularly devastating impact. The average Afghan household in 2008 was spending about 45 per cent of its income on food, up from 11 per cent in 2006.<sup>213</sup> In Haiti — a country that was once self-sufficient in rice prior to being encouraged to specialise in the export of apparel, oil, cocoa, coffee and mangoes<sup>214</sup> — the price of imported rice increased by 50 per cent within a year in 2008.<sup>215</sup> Poor Haitians were reported to be eating biscuits made of mud, or else risking their lives crossing the sea in search of illegal work in the US.<sup>216</sup> The rising price of food was instrumental in triggering an unprecedented number of food riots between 2007 and the end of 2008 in more than 25 countries in Africa, Asia, the Middle East, the Americas and the Caribbean.<sup>217</sup> The Haitian Prime Minister, Jacques-Édouard Alexis, was forced to step down as a consequence of riots in his country,<sup>218</sup> and many analysts have suggested that the spark that ignited the Arab Spring was a spike in the price of bread.<sup>219</sup>

The impact of the price spikes within each country was complex. Seriously harming landless agricultural workers and the urban poor, high agricultural prices were anticipated to benefit poor farmers in some countries.<sup>220</sup> However, recent analysis suggests that these gains were counteracted by the fact that input prices —

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<sup>212</sup> Ivanic, Maros and Will Martin, "Implications of higher global food prices for poverty in low-income countries," World Bank Policy Research Working Paper WPS 4594, 2008.

<sup>213</sup> <http://www.washingtonpost.com/wp-dyn/content/article/2008/03/11/AR2008031102462.html> Last accessed 10<sup>th</sup> July 2015.

<sup>214</sup> "Haiti Trade, Exports and Imports," Economy Watch website, [http://www.economywatch.com/world\\_economy/haiti/export-import.html](http://www.economywatch.com/world_economy/haiti/export-import.html) Last accessed 6<sup>th</sup> May 2015.

<sup>215</sup> Leonard, Tom, "Haiti's Rising Food Prices Drive Poor to Eat Mud," *The Telegraph*, 30<sup>th</sup> January 2008.

<sup>216</sup> *Ibid.*

<sup>217</sup> Bush, Ray, "Food riots: Poverty, Power and Protest," *Journal of Agrarian Change* 10, no. 1 (2010), p. 21.

<sup>218</sup> Faiola, Anthony, "The New Economics of Hunger," *The Washington Post*, 27<sup>th</sup> April 2008, <http://www.washingtonpost.com/wp-dyn/content/story/2008/04/26/ST2008042602333.html> Last accessed 17<sup>th</sup> October 2011.

<sup>219</sup> Hanlon, Michael, "Can science prevent the great global food crisis?" *The Telegraph*, 4<sup>th</sup> September 2012.

<sup>220</sup> Kharas, Homi, "The Challenge of High and Rising Food Prices," *Brown Journal of Foreign Affairs* 18 (2011):

fertiliser and crude oil — increased more rapidly than food prices.<sup>221</sup> Other analysts have argued that most of the profits were captured by powerful ‘middlemen’, with multinationals including Glencore and Cargill making record profits at this time.<sup>222</sup> In any regard, the volatile nature of the price spikes meant that the relative situations of these different groups were soon reversed. While the rising cost of food is evidently problematic, equally damaging are the longer-term consequences. Unable to plan ahead and forced into selling vital resources and assets in order to survive, the poor are forced to gamble their future welfare to live today, making them even more vulnerable to future price shocks.<sup>223</sup>

Although the general impression is that the ‘global’ food crisis is over, several regions in Africa and Asia — notably the Sahel<sup>224</sup> — are still deemed to be in crisis.<sup>225</sup> What is more, the situation of high and rapidly fluctuating food prices is predicted to continue for years to come.<sup>226</sup> Despite the ‘apocalyptic’ language used to describe the events of 2007-08, critics have argued that the ‘crisis’ was ‘not a blip, but creeping normality’.<sup>227</sup> Philip McMichael, a food-regime theorist, argues that food crises are ‘endemic to the modern world’, pointing to the prior global food crisis of 1972-74.<sup>228</sup> Others contend that decades of artificially low prices, procured through the use of subsidies in the Global North, have resulted in recurrent crisis for millions of peasant farmers in the South who, unable to compete, are driven off their land.<sup>229</sup>

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<sup>221</sup> Committee on World Food Security, “Assessment of the world food security and nutrition situation,” Rome: Committee on World Food Security, 2008, [http://www.fao.org/unfao/bodies/cfs/cfs34/index\\_en.htm](http://www.fao.org/unfao/bodies/cfs/cfs34/index_en.htm) Last accessed 15<sup>th</sup> October 2012, p. 14.

<sup>222</sup> Von Braun, Joachim, “Food and Financial Crises: Implications for Agriculture and the Poor,” Report, Washington DC: IIFPRI, 2008, p. 7.

<sup>223</sup> Action Against Hunger, *Feeding Hunger and Insecurity: The Global Food Price Crisis*, London: Action Against Hunger, 2009, p. 9.

<sup>224</sup> Oxfam, “Food Crisis in the Sahel,” Oxfam Issue Briefing, 2012 <http://www.oxfam.org/en/sahel> Last accessed 12<sup>th</sup> May 2012.

<sup>225</sup> FAO, IFAD and WFP, *The State of Food Insecurity in the World 2011: How does international price volatility affect domestic economies and food security?* Rome: FAO, 2011.

<sup>226</sup> Horton, Amy, “We Are Teetering on the Brink of Another Global Food Crisis,” *The Guardian*, 2<sup>nd</sup> August 2012.

<sup>227</sup> Lang, Tim, “Crisis? What Crisis? The Normality of the Current Food Crisis,” *Journal of Agrarian Change* 10, no. 1 (2009): 87-97, p. 87.

<sup>228</sup> McMichael, Philip, “The World Food Crisis in Historical Perspective,” *Monthly Review* 61, no. 3 (2009).

<sup>229</sup> Rosset, Peter, “Food Sovereignty and the Contemporary Food Crisis,” *Development* 51, no. 4 (2008): 460.

## ii. Causation

The question of what was responsible for these extraordinary market movements has divided economists since the first spike emerged. The role of numerous supply and demand factors has been explored. One thing is agreed, which is that the price volatility was not caused by a critical shortage in the supply of the grains in question. As analysts at the UK Department for Environment Food and Rural Affairs (Defra) have emphasised, there was ‘comfortably enough food globally’ when prices skyrocketed in 2007-08.<sup>230</sup> On the supply side, it has been suggested that a combination of unfavourable weather conditions, including droughts in Australia and floods in India and Pakistan,<sup>231</sup> did contribute to shortfalls in the production of grain. Numerous analysts have countered this, however, pointing out that the world still produced more grain than ever before in the years leading up to the spike.<sup>232</sup> Nonetheless, the fact that existing global stock levels for these grains were also at historic lows at this time,<sup>233</sup> that oil prices were exceptionally high,<sup>234</sup> and that some countries imposed export-bans on key commodities such as rice, has led some economists to argue that markets were ‘tight’ in the months leading up to the food crisis.

Other economists favour a demand-side explanation. The depreciation of the US dollar in the years preceding the spikes is one factor widely considered to have played a part. The US is a major exporter of grain and a weak dollar automatically

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<sup>230</sup> UK Department for Agricultural Affairs (Defra), “The 2007/08 Agricultural Price Spikes: Causes and Policy Implications,” Defra Report, <http://archive.defra.gov.uk/foodfarm/food/pdf/ag—price100105.pdf> Last accessed 16<sup>th</sup> March 2015, p. 9.

<sup>231</sup> Hebling, Thomas, and Shaun Roache, “Rising Prices on the Menu: Higher food prices may be here to stay,” International Monetary Fund (IMF) Report, Washington DC: IMF, 2011, p. 24.

<sup>232</sup> Murphy, Sophia and Armin Paasch, “The Global Food Challenge: Introduction,” in Sophia Murphy and Armin Paasch (Eds), “The Global Food Challenge: Towards A Human Rights Approach to Trade and Investment Policies,” FoodFirst Information and Action Network (FIAN) Report, 2009, [http://in.boell.org/sites/default/files/the\\_global\\_food\\_challenge.pdf](http://in.boell.org/sites/default/files/the_global_food_challenge.pdf) Last accessed 10<sup>th</sup> July 2015.

<sup>233</sup> FAO, “Report on The State of Agricultural Commodity Markets: What happened to world food prices and why?” Rome: FAO, 2009, p. 17.

<sup>234</sup> It is widely recognised that a rise in oil prices automatically translates to an increase in the cost of agricultural production, and thereby, an increase in the price of food.

increases demand for US products abroad.<sup>235</sup> Another demand-side explanation is that changing diets in developing countries — particularly an increased demand for meat consumers in emerging economies such as India and China — has created an additional source of demand for grain. It takes between seven and eight kilos of grain to produce one kilogramme of beef and five to seven kilogrammes of grain to produce one kilogramme of pork.<sup>236</sup> While popular in the media,<sup>237</sup> this explanation of the data has been revealed to be inaccurate.<sup>238</sup> Perhaps the most convincing demand-side explanation for the spikes relates to the increased production of biofuels. Biofuel production has been heavily subsidised by governments in Europe and in the US in recent years.<sup>239</sup> As Fred Magdoff and Brian Tokar note, almost one third of the entire 2008 corn crop in the US was used to produce ethanol to fuel cars.<sup>240</sup> As both a novel and substantial source of demand for crops like maize and soya, biofuels are widely agreed to have played a key role in generating the price spikes.

This same handful of supply and demand factors is consistently mentioned throughout the literature on the causation of the food crisis. However, the causal significance attributed to each factor differs significantly from one study to another. Isolating the precise contribution made by any factor has proven exceptionally difficult. No holistic explanation is able to command widespread allegiance. This has led to the widespread adoption of an analogy offered by Josette Sheeran that the crisis was brought on by a ‘perfect storm’ of factors.<sup>241</sup> Others have challenged this, arguing that the suggestion of a confluence of seemingly uncontrollable forces disguises the reality that most of these factors are a product of policy decisions.<sup>242</sup> Biofuels do not

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<sup>235</sup> G20, “Price Volatility in Food and Agricultural Markets: Policy Responses,” *G20 Report*, (2011), p. 11.

<sup>236</sup> FAO, “Growing demand on agriculture and rising prices of commodities: An opportunity for smallholders in low-income, agricultural-based countries?” Paper prepared for the Round Table organised during the thirty-first session of International Fund for Agricultural Development’s Governing Council, (14<sup>th</sup> February 2008), p. 5.

<sup>237</sup> “The End of Cheap Food,” *The Economist*, 6<sup>th</sup> December 2007, <http://www.economist.com/node/10252015>

<sup>238</sup> Heady, Derek and Shenggen Fan, “Anatomy of a crisis: the causes and consequences of surging food prices,” *Agricultural Economics* 39, no. 1 (2008): 375-391, p. 377.

<sup>239</sup> Mittal, Anuradha, “The 2008 Food Price Crisis: Rethinking Food Security Policies,” UNCTAD, G24 Discussion Paper Series no. 56, 2009, p. 6.

<sup>240</sup> Magdoff, Fred and Brian Tokar, “Agriculture and Food in Crisis: An Overview,” p. 11.

<sup>241</sup> Sheeran, Josette, quoted in “WFP chief calls for support to combat ‘perfect storm’ over Africa’s rural poor,” WFP News article, 15<sup>th</sup> November 2007 <http://www.wfp.org/node/264> Last accessed 18<sup>th</sup> February 2012.

<sup>242</sup> McMichael, Philip, “The World Food Crisis in Historical Perspective,” *Monthly Review*, 15<sup>th</sup> July 2009.

produce themselves, nor do export bans impose themselves. Even ostensibly ‘natural’ causes, such as drought and flood, can be considered a consequence of failures to take adequate steps to tackle climate change and their damaging impact, or the result of a lack of investment in infrastructure and emergency services provision.

While struggling to reach consensus on the precise causal cocktail, economists agree that the full measure of recent food price inflation cannot be explained by changes in supply and demand fundamentals alone. Analysts at the FAO have estimated that as of April 2008 corn volatility was 30 per cent, and soybean volatility 40 per cent, *beyond* what could be accounted for by relevant supply and demand fundamentals during that period.<sup>243</sup> Analysts at the World Bank made a similar diagnosis in 2010, concluding that ‘the apparent “divergence” between commodity prices and fundamentals deserves further attention’.<sup>244</sup> As this divergence has come under further scrutiny, numerous analysts have pointed to a recent surge in speculative activity on global derivative commodity markets and suggested that this influx of financial investment could be responsible for conditioning the price spikes.

The significance of this claim requires emphasis. The structure of the global market in food commodities and the role of profit within it are clearly at the centre of the crisis. These events strongly endorse the argument that the global food system is unstable and operates to produce vulnerability for disadvantaged populations in the Global South, prioritising the needs of consumers in the North — a dynamic which I will expand on in Chapter Five. However, the claim that financial investors have been able to distort commodity prices beyond the fundamentals of supply and demand by investing in derivatives implicates modern market structures in the production of hunger in a manner previously thought to be impossible. The global market in food commodities is constructed around a single scheme for the measurement of the value of food — its price. If this central ordering mechanism can be distorted by financial

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<sup>243</sup> FAO, “Volatility in Agricultural Commodities: An Update,” *FAO Food Outlook*, Rome: FAO, 2008.

<sup>244</sup> Baffis, John and Tassos Haniotis, “Placing the 2008/09 commodity price boom into perspective,” World Bank Policy Research Working Paper no. 5371, Washington DC: World Bank, 2010, p. 5.

traders speculating in markets via instruments linked to this measure of value, what, then, for world order in years and decades to come?

## CONCLUSION

In this chapter I have sought to move towards a systemic explanation for the persistence of hunger in a world of apparent plenty. I have suggested that contemporary approaches to tackling hunger are of limited value owing to the absence of a deeper diagnosis of what is producing food insecurity for vulnerable groups. Seeking to remedy this, I have begun to explore the possibility that the contemporary global food system — one which is increasingly commoditised, industrialised, specialised, inter-dependent and monopolised by a contingent of large multinational companies — is a producer of hunger and poverty worldwide. Often seen to have ‘come out of nowhere’, taking the world by surprise, the global food crisis is the manifestation of longstanding warnings issued by those who have argued that the contemporary global food system is a threat to the lives of the most vulnerable members of global society.<sup>245</sup> The possibility that these events could have been generated by financial investors treating food as they would any other asset has provoked an intense debate. It is to these matters that I now turn.

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<sup>245</sup> Flavio, Luiz Schieck Valente, and Ana Maria Suárez Franco, “Human Rights and the Struggle Against Hunger: Laws, Institutions, and Instruments in the Fight to Realize the Right to Adequate Food,” *Yale Human Rights and Development Journal* 13, no. 2 (2010), p. 456.



## Chapter Two

### Food Commodity Speculation

Claims that practices of food commodity speculation were responsible for the extreme pattern of grain price volatility in 2007-08 are highly controversial. Bankers and financial actors involved in commodity derivatives trading have been condemned for ‘gambling on starvation’<sup>1</sup> and profiting from hunger.<sup>2</sup> A fierce debate has been ongoing since these claims were first tabled over the precise causal significance of speculative practices in the context of the recent food price volatility. A number of high profile economists and financial services insiders have rejected the possibility that food commodity speculation could have had anything to do with the price spikes in evidence in 2007-08 and 2010-11.<sup>3</sup> This is because the argument that the prices of underlying food commodities have been driven away from fundamentals by investment in derivative markets contravenes prevailing economic theory on market pricing dynamics.

According to mainstream economic theory, the prices at which food commodities are sold in the market bear a rational relationship to fundamentals of supply and demand. Financial markets are widely thought to facilitate the transmission of more accurate information about supply and demand fundamentals through what is known as their ‘price discovery’ function. This, in addition to raising

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<sup>1</sup> Hari, Johann, “How Goldman gambled on starvation,” *The Independent*, 2<sup>nd</sup> July, 2010.

<sup>2</sup> Kaufman, Frederick, “Want to stop banks gambling on food prices? Try closing the casino,” *The Guardian*, 10<sup>th</sup> May 2012.

<sup>3</sup> Barclays PLC rejected the argument that speculative investment had anything to do with inflated food prices in 2011. See “Commodity Cross Currents,” Barclays Capital Commodities Research, 24<sup>th</sup> February 2011. Moreover, influential economists continue to opine against the claims in both the academic and media arenas. See Krugman, Paul, “Speculative nonsense once again,” *New York Times*, 23<sup>rd</sup> June 2008.

and allocating capital and enabling risk management, is continually reiterated as being one of their central functions.<sup>4</sup> The pricing of assets, including commodity derivatives, on financial markets sends signals about value and price to the broader economy. It is estimated that between \$648 trillion<sup>5</sup> to \$1,200 trillion<sup>6</sup> dollars — more than 20 times the global GDP — is invested in derivatives, many of which derive their value from underlying commodities such as food and fuel. If the prices of underlying commodities can be distorted by speculative activity within this monumental global market, it occasions the possibility that financial markets are broken, and no longer fit for purpose. The implications are staggering.

The debate over the causal connection between practices of food commodity speculation and food price volatility is ongoing. This debate has been categorised by analysts at the New England Complex Systems Institute (NECSI) as ‘one of the central controversies of economics’.<sup>7</sup> Nevertheless, responding to public pressure, and catalysed by recognition of the role that derivatives played in the causation of the global financial crisis, G20 governments have moved to regulate the trade in these instruments. Some of the provisions are explicitly designed to target ‘excessive speculation’ in commodity derivative markets. This could, from the perspective of someone writing her PhD within a law department, be seen to speak to the balance of evidence on the matter of its causal significance. This is particularly so since a coalition of NGOs including World Development Movement (WDM), Oxfam, GRAIN, and SOMO, backed by economists, and supported by the Special Rapporteur on the right to food, has produced a substantial body of evidence in support of this

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<sup>4</sup> Lehmann, Bruce N., “Some desiderata for the measurement of price discovery across markets,” *Journal of Financial Markets* 5, no. 3 (2002): 259-276, p. 259.

<sup>5</sup> Keoun, Bradley, “Big Banks Hide Risk Transforming Collateral for Traders,” *Bloomberg News*, 11<sup>th</sup> September 2012 <http://www.bloomberg.com/news/2012-09-10/big-banks-hide-risk-transforming-collateral-for-traders.html> Last accessed 26<sup>th</sup> October 2012

<sup>6</sup> “Financial Implosion: Global Derivatives Market at \$1,200 Trillion Dollars ... 20 Times the World Economy,” Global Research, 20<sup>th</sup> May 2012, <http://www.globalresearch.ca/financial-implosion-global-derivatives-market-at-1-200-trillion-dollars-20-times-the-world-economy/30944> Last accessed 26<sup>th</sup> October 2012.

<sup>7</sup> Lagi, Marco, et al, “The Food Crises: A quantitative model of food prices including speculators and ethanol conversion,” Cambridge, MA: NECSI, 2011, p. 2.

account of the price volatility.<sup>8</sup> However, as I will discuss in Chapter Three, persistent objections and uncertainty over the precise causal contribution of speculation has impeded efforts to implement the new regulations. It is difficult to proceed with an analysis of the significance of law in this context without addressing the spectre of doubt that continues to haunt these debates, and stubbornly manifests each time another influential figure reissues a denial that such a connection exists. Beyond questions of causation, there is a great deal of ambiguity over what ‘food commodity speculation’ actually consists of. What are ‘derivatives’ and how do they allow financial actors to invest in food? Who are ‘financial speculators’ and what does it mean to ‘speculate’? If derivatives are so problematic, why not just ban them?

The aim of this chapter will be to develop a better understanding of the phenomenon of food commodity speculation, as well as to examine the competing claims over its role in the global food crisis. Against those who argue that there is an absence of sufficient proof of a causal connection, I will suggest that it is dominant economic conceptions of price formation that are to be found lacking. However, I will also take issue with the characterisations of those who are advancing the claim that speculation impacted on the price volatility, many of whom focus on the risky activities of class of greedy financial ‘speculators’. There is a tendency, common to both sides in this debate, to present practices of food commodity speculation as a departure from market normality. In the accounts of many campaigners, these practices are extraordinarily risky trading strategies that have provoked extraordinary price volatility. For many economists, speculative practice carried out in contravention of supply and demand fundamentals are a deviation from the norm — irrational traders distorting market rationality. What I will seek to demonstrate is that placing

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<sup>8</sup> Jones, Tim, *The great hunger lottery: How banking speculation causes food crises*, World Development Movement, 2010; Herman, M. O., R. Kelly, and R. Nash. “Not a game: speculation vs. food security” Oxfam Issues Briefing, October 2011; Vargas, Mónica, and Olivier Chantry, “Ploughing through the meanders in food commodity speculation,” GRAIN, Report, February 2011; Vander Stichele, M. et al, “Financing Food: Financialisation and Financial Actors in Agriculture Commodity Markets”, Report, SOMO, April 2010; Ghosh, Jayati, “The global food crisis,” *Third World Resurgence* 212 (2008): 4; Gilbert, Christopher L., “How to Understand High Food Prices,” *Journal of Agricultural Economics* 61, no. 2 (2010): 398-425; de Schutter, Olivier, “Food Commodities Speculation and Food Price Crises: Regulation to reduce the risks of price volatility – briefing note 02,” Rome: FAO, 2010.

speculative ‘bets’ on food prices, irrespective of whether those bets reflect fundamental values, ought not to be regarded as a departure from the norm — precisely the opposite. Under contemporary political arrangements and market structures, speculation is the norm. It is in its pervasive normality, rather than its exceptionality, I will suggest, that an explanation for how practices of commodity derivative speculation have impacted on underlying food prices might be located.

The chapter will be divided into five parts. Part I will lend specificity to what is meant by ‘food commodity speculation’. Part II will seek to clarify the competing claims over the nature of the relationship between speculative practices and volatile food prices. Seeking to break the impasse that has emerged with attempts to establish causation, in Part III I turn to historical analysis to engage with the central assertion of NGOs that commodity futures markets have been ‘financialised’ in recent decades. Part IV will then engage in a critique of the dominant economic theory of price formation relied upon to refute a link between speculation in commodity derivatives and volatile food prices. In Part V I will seek to approach the significance of food commodity speculation from a broader framework of explanation. I will begin work that I will continue throughout the thesis by exploring the origins and identifying the hallmarks of a market logic oriented towards speculation. The emergence of this logic forms an integral part of my thesis, as does the idea that the ability of the state to regulate the market in the interests of the food insecure may be impeded by the law working to the opposite effect — by laws constituting and entrenching the market, and regulating society in the interests of the market.<sup>9</sup>

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<sup>9</sup> Foucault, Michel, *The Birth of Biopolitics: Lectures at the Collège de France 1978-1979*, Michel Senellart (Ed.), trans. Graham Burchell, New York: Picador, 2004, p. 145.

## I. THE PHENOMENON OF FOOD COMMODITY SPECULATION

Food commodity speculation refers to a set of practices whose purpose is to obtain a profit based on price fluctuations in markets for the sale of food commodities. Although this can be done by hoarding physical food commodities, the practices of speculation implicated in the global food crisis are typically carried out through the trading of financial instruments linked to the price of food: commodity derivative contracts. Speculation through commodity derivatives is but one variant of a broader market practice of financial speculation. In broad terms, this connotes a strategy for making money not by producing a commodity, providing a service, or establishing a company, but by predicting how the market values assigned to existing ‘assets’ — commodities, companies, and currencies — are going to change over time.

### i. Commodity derivatives trading

Commodity derivative contracts form part of a broader class of financial instruments known collectively as ‘futures’ or ‘derivatives’, thus called as they derive their future value from an underlying asset. Some of these assets are tangible, like property and commodities; others are intangible, like stocks, currencies, and interest rates. These instruments have a reputation for being highly complex. This is exacerbated by the esoteric names under which they are traded, examples being ‘exchange traded funds’<sup>10</sup> and ‘collateralised debt obligations’.<sup>11</sup> The range of parties and the webs of obligation involved in the trading of these instruments, as well as the mathematical formulas used to calculate their value, would support this perception of

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<sup>10</sup> Exchange Traded Funds (ETFs) are securities that track an index, a commodity or a basket of assets like an index fund, but are traded like a stock on an exchange. (“Exchange Traded Funds,” Investopedia, [www.investopedia.com/terms/e/etf.asp](http://www.investopedia.com/terms/e/etf.asp) Last accessed 16<sup>th</sup> February 2015).

<sup>11</sup> Collateralised Debt Obligations (CDOs) are financial products that pool together debt obligations and repackage them into discrete tranches that can be sold to investors. (“Collateralized Debt Obligations,” Investopedia <http://www.investopedia.com/terms/c/cdo.asp> Last accessed 11<sup>th</sup> June 2015).

their complex nature. Nevertheless, they are all just variations on a more basic instrument known as a futures contract.

A futures contract is a standardised contract through which two parties agree to exchange a fixed amount of a given commodity at an agreed date in the future for a sum of money negotiated in the present. Used for centuries as a mechanism of agricultural insurance, in essence, these instruments enable contracting parties to lock in a price at which they can buy or sell a commodity helping them plan for their commercial future. Contrary to what the terms of these contracts would suggest, the vast majority of modern day futures transactions are not intended to result in the exchange of tangible physical commodities. The buyer, or seller, transacts as though they were dealing in the physical commodity despite not having the intention to ever handle it in person. In order to avoid having to take delivery of, say, 100 tonnes of wheat, the parties will have to ‘close out’ their agreement by settling the contract in cash, or, more typically, by entering into an equal but opposite market position to ‘offset’ their liabilities. Depending on how this value has changed throughout the contracting period, one of the parties will have made a profit and the other a loss.

Originally, futures contracts were only sold on regulated exchanges, known as ‘futures exchanges’. These institutions, prominent examples being the Chicago Board of Trade (CBOT) and the London Metal Exchange, remain important in the trading of commodity futures contracts. However, in recent decades a new market known as the ‘over-the-counter’ (OTC) market — also described as the ‘swaps’ market — has overtaken the trade in exchange traded futures.<sup>12</sup> OTC transactions are carried out bilaterally, between private parties, outside of regulated exchanges. It is within this market that a plethora of financially ‘engineered’ futures contracts — derivatives — has been developed. These instruments are principally traded by large banks and hedge funds — ‘swaps’ dealers. Such institutions have elaborated an increasingly

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<sup>12</sup> Swaps were first invented in 1981 to facilitate a deal between IBM and the World Bank. They are a species of derivative that enable parties to exchange future cash flows, allowing parties to ‘swap’ their respective advantages in different markets for mutual benefit. (IBM in Deal on Currency, *New York Times*, 18<sup>th</sup> August 1981).

sophisticated range of financial instruments linked to food prices. Notably examples include commodity ‘options’,<sup>13</sup> commodity ‘swaps,’ and commodity ‘index funds’. Perhaps the most significant of these are the index funds, which are designed to give investors a return based on a mathematical formula aggregated from the values assigned to a specified basket of commodities including non-food commodities such as fuels and metals. The first such index was created by Goldman Sachs in 1991.<sup>14</sup> As researchers at WDM have underlined, commodity index funds have since become the primary vehicle for speculative capital involvement in food commodity markets.<sup>15</sup> The largest commodity swap dealers are Goldman Sachs, Bank of America, Citibank, Deutsche Bank, HSBC, Morgan Stanley and JP Morgan. These dealers have recorded record profits from the trade in commodity derivatives over the past decade. Goldman Sachs made around \$5 billion from commodities trading in 2009,<sup>16</sup> and JP Morgan made \$2.8 billion from commodity transactions, which made up more than a quarter of the bank’s principal transactions in 2011.<sup>17</sup>

The market in commodity derivatives has grown substantially over the past decade. As the FSA reported in 2007, on-exchange volumes have increased greatly in the past five to ten years with a rapid growth in the number of contracts traded on exchanges such as LIFFE (soft commodities) and ICE Futures (energy).<sup>18</sup> Equally, as data from the Bank of International Settlements evidences, levels of investment in OTC commodity derivatives have expanded rapidly since 2004.<sup>19</sup> This surge in levels

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<sup>13</sup> Whereas a futures contract commits the purchaser to buy or sell a commodity, or settle it in cash at a particular future date, an ‘option’ gives the holder the right, but not the obligation, to buy or sell. (“Futures and Options Markets,” *The Concise Encyclopaedia of Economics, 2<sup>nd</sup> Edition*, Library of Economics and Liberty, <http://www.econlib.org/library/Enc/FuturesandOptionsMarkets.html> Last accessed 12<sup>th</sup> February 2015).

<sup>14</sup> Goldman Sachs, “Standard & Poor’s to Acquire Goldman Sach’ GSCI,” 6<sup>th</sup> February 2007, Goldman Sachs website, <http://www2.goldmansachs.com/our-firm/press/press-releases/archived/2007/2007-02-06.html> Last accessed 24<sup>th</sup> June 2015.

<sup>15</sup> Jones, Tim, *The great hunger lottery*, World Development Movement, 2010, p. 9.

<sup>16</sup> Goldman Sachs, *2009 Annual report*, 2010, <http://www2.goldmansachs.com/our-firm/investors/financials/current/annual-reports/2009-complete-annual.pdf> Last accessed 25<sup>th</sup> June 2015.

<sup>17</sup> SOMO, “Challenges for Regulators Financial Players in the (Food) Commodity Derivatives Markets,” SOMO Briefing Paper, November 2012, p. 3.

<sup>18</sup> Doyle, Emmet, Jonathan Hill, Ian Jack, “Growth in commodity investment: risks and challenges for commodity market participants,” UK Financial Services Authority, FSA Markets Infrastructure Department, March 2007, [http://www.fsa.gov.uk/pubs/other/commodity\\_invest.pdf](http://www.fsa.gov.uk/pubs/other/commodity_invest.pdf) Last accessed 25<sup>th</sup> June 2015 p. 22.

<sup>19</sup> The notional amounts outstanding of commodity derivatives contracts was estimated at \$1,270 billion in June 2004 and had risen to \$6,394 billion by June 2006. (*BIS Quarterly Review*, December 2006).

of investment is central to the claim of those arguing that ‘banking speculation causes food crises’ — to employ the characterisation of the WDM.<sup>20</sup> Yet, the sheer volume of investment is not the only issue. Overwhelmingly, the emphasis of those arguing that investment in commodity derivatives was linked to the price volatility in 2007-08 and 2010-11 is on the speculative character of these investments.

‘Take the highest stakes, riskiest economic behaviour ever devised, and marry it to the most fundamental basic need of humankind, and you have the subject of this report.’<sup>21</sup> This is the line with which WDM opens its report, ‘The Great Hunger Lottery’ on the role of food commodity speculation in the global food crisis. There is, however, much about this characterisation of the behaviours of financial speculators and the practice of derivatives trading that is questionable. Before moving on to consider the question of a causal connection, I will first draw attention to some of the pervasive ambiguity that surrounds the concept of financial speculation and by whom and how it is practised in commodity derivative markets.

## ii. Ambiguity

### a. What counts as speculation?

As Edward Szado has explained, there is a great deal of uncertainty over what amounts to speculation, whether a practice is or isn’t ‘speculative’, and who can be accurately described as a ‘speculator’.<sup>22</sup> In a sense, all economic activity carried out to make a profit is ‘speculative’ as it involves a calculation about the future market value of a good or service. What is typically thought to distinguish financial speculation from other types of productive economic activity is that, in the latter case, something of value to broader society is produced. This distinction might be easy to grasp in

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<sup>20</sup> Jones, Tim, *The great hunger lottery: How banking speculation causes food crises*. World Development Movement, 2010.

<sup>21</sup> *Ibid*, Executive Summary.

<sup>22</sup> Szado, Edward, “Defining speculation: The first step towards a rational dialogue,” *The Journal of Alternative Investments* (2011), p. 14.



contemplation of the production of physical goods or the provision of a service which a person is able to use or enjoy. It is less straightforward when considering the distinction between financial speculation and other types of financial activity, such as investment. As Szado queries, '[a]t what level does investment become speculation?'<sup>23</sup> One possible answer is given by John Bogle, who has argued that, unlike speculation, investment is about long-term ownership of businesses and the creation of 'intrinsic value' over time.<sup>24</sup> The short-term selling of financial instruments — how he characterises financial speculation — on the other hand, derives profit from 'increased *prices* rather than increased *intrinsic value*'.<sup>25</sup>

Speculation as a market activity is commonly aligned with short-term trading activity as opposed to longer-term investment strategies. However, in modern discourse these categories have collapsed. It is as common to read about 'speculative investment' and descriptions of people 'investing speculatively', as to hear references to 'speculative trading'. Used in this way, as an adjective, 'speculative' increasingly denotes a particular kind of trading or investment. Analysts agree that speculative market practices typically involve taking higher levels of risk than the average market participant, often by investing in markets that are more volatile, and in anticipation of a high rate of return. In popular discourse, the label 'speculative' is increasingly used in a pejorative sense, translating to 'risky', 'reckless', and 'socially destructive' financial practices. Countering this, others maintain that speculation does have an intrinsic social value. As Bharat Kulkarni argues, '[b]y assuming risk, providing liquidity and capital the speculator brings stability to the market'.<sup>26</sup> Speculation is also seen to provide benefits in terms of aiding price discovery.

Since the global food and financial crises, the negative perception of speculation has become more pronounced. Numerous analysts have argued that

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<sup>23</sup> *Ibid* p. 76.

<sup>24</sup> Bogle, John, *Enough*, New Jersey: John Wiley and Sons, 2009, p. 49-50.

<sup>25</sup> *Ibid*.

<sup>26</sup> Kulkarni, Bharat, *Commodity Markets & Derivatives*, Excel Books, 2011, p. 40.

speculation is no better than gambling, but with much higher social stakes.<sup>27</sup> While some continue to maintain that there is an important difference — that speculation is ‘calculated’ and ‘rational’, whilst gambling is ‘reckless’ and ‘based on emotion’,<sup>28</sup> — many are of the view that this distinction has always been tenuous.<sup>29</sup> Others have suggested that it is hard to convincingly differentiate practices of speculation from market manipulation.<sup>30</sup> Essentially, both modern day financial speculators and market manipulators stand accused of the same wrongdoing: creating a condition in which prices no longer reflect fair market values in order to make a profit. However, whilst manipulators are acting illegally to distort the market away from its proper functioning, speculators are seen to be merely taking advantage of existing legal opportunities within the proper functioning of markets.

Two points bear further emphasis. Firstly, in spite of the vocabulary used by NGOs and in journalistic accounts, it is not at all clear that the riskiest or most short-term speculative trading practices were the ones most relevant in the causation of the price volatility. Secondly, it is important to note that these understandings of speculation have not remained stable over time. Perspectives on the social utility of speculation, particularly amongst economists, policy-makers, as well amongst the judiciary, changed significantly over the course of the 20<sup>th</sup> century. In fact, as I will argue in the concluding section of this chapter, this shift in the social tolerance of speculation may be of greater causal significance to the mechanisms whereby activity in commodity derivative markets came to impact on underlying food prices than the risky or short-term nature of ‘speculative’ trades.

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<sup>27</sup> Lynch, Timothy E., “Gambling by Another Name; The Challenge of Purely Speculative Derivatives,” *Stanford Journal of Law, Business and Finance* 17, no. 1 (2012).

<sup>28</sup> See M. Ranganatham, *Investment Analysis and Portfolio Management*, India: Pearson Education, 2006, p. 20.

<sup>29</sup> Hazen, Thomas Lee, “Rational Investments, Speculation, or Gambling – Derivative Securities and Financial Futures and Their Effect on the Underlying Capital Markets,” *Northwestern University Law Review* 86 (1991): 987.

<sup>30</sup> Greenberger, Michael, “Energy Speculation: Is greater regulation necessary to stop price manipulation?” 2007, [http://works.bepress.com/michael\\_greenberger/14](http://works.bepress.com/michael_greenberger/14) Last accessed 9<sup>th</sup> February 2015.

b. Who is a speculator and when are they speculating?

Financial speculators have been widely condemned within the literature on food commodity speculation. ‘Ruthless’, ‘risk-loving’, and ‘greedy’ are common words used to characterise them and their behaviour. Disparaging views on financial speculators have been aired at other junctures in history. It has been suggested that Adam Smith, writing in 1776, had speculators in mind when he described the activities of ‘projectors and prodigals’ who, given access to capital, ‘were most likely to waste and destroy it.’<sup>31</sup> Speculators were also denounced — this time explicitly in connection with their activities in commodity futures markets — by US President Franklin Roosevelt in the 1930s. Roosevelt condemned, ‘those reckless speculators with their own or other people's money whose operations have injured the values of the farmers' crops and the savings of the poor’.<sup>32</sup> As with the definition of speculation, however, there is considerably ambiguity as to precisely who within modern financial markets can accurately be labelled a speculator and when they can be said to be speculating.

It is critical to underline that not all of those involved in the trading of commodity derivatives, agricultural or otherwise, are speculating. In fact, a substantial proportion of the participants in commodity futures markets are not financial investors or traders. Many are what are termed ‘commercial participants’, seeking to hedge against risk in order to ensure that their commercial practices — farming, manufacturing, distributing — remain profitable. The risk-management function of futures markets for commercial participants is widely acknowledged within the literature on food commodity speculation. What is less commonly emphasised is that many ‘financial’ participants, both via the regulated exchanges and through OTC transactions, are also using these instruments to hedge against risk. As the Bank for International Settlements (BIS) observed in 1994, ‘[d]erivative instruments have

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<sup>31</sup> Sen, Amartya, “The Economist Manifesto”, *The New Statesman*, 23<sup>rd</sup> April 2010, <http://www.newstatesman.com/ideas/2010/04/smith-market-essay-sentiments> Last accessed 11<sup>th</sup> June 2015, citing Adam Smith, *The Wealth of Nations*, Books I-III, Penguin Classics: London, 1986, p. 457.

<sup>32</sup> Roosevelt, Franklin D., “State of the Union Address,” 1934, in Franklin D. Roosevelt, *State of the Union Addresses of Franklin D. Roosevelt: American Democracy*, Desmondous Publications, 3<sup>rd</sup> May 2015, p. 5.

become increasingly important to the overall risk profile and profitability of banking organisations throughout the world'.<sup>33</sup>

Upon closer inspection, one learns that the range of actors involved in the trade in these instruments, as well as the purposes for which they are bought and sold, is far more diverse than commonly represented. As Chris Sutton has noted, this range encompasses 'very short-term speculation by high velocity traders, and active trading by hedge funds and other financial players, to longer and more passive engagement by institutional investors looking for exposure to commodities via complex financial products such as commodity index funds'.<sup>34</sup> Many banks in the years leading up to the financial crisis engaged in what is known as proprietary trading, which is widely regarded as purely speculative in nature.<sup>35</sup> However, while banks and hedge funds are major dealers of commodity derivatives, this does not mean that they are always taking a speculative position in the market. Many of these institutions sell products which offer exposure to commodities to other investors, like pension funds,<sup>36</sup> and seek to mitigate the risk of their own exposure by purchasing a standardised futures contract to off-set the risk of that transaction. In effect, they are selling the speculative position — the position that seeks to capitalise on changing values of the commodity — and hedging against a risk commensurate with their commercial activity — that of retailing financial instruments.

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<sup>33</sup> Bank for International Settlements, *Risk Management Guidelines for Derivatives*, 1994, <http://www.bis.org/publ/bcbsc211.pdf> Last accessed 9<sup>th</sup> February 2015.

<sup>34</sup> Sutton, Chris, "Food prices: The ethics of financial speculation", Discussion Paper, Food Ethics Council, 2012, [http://www.foodethicscouncil.org/uploads/publications/2012-Ethics\\_of\\_speculation\\_discussion\\_paper-March\\_2012.pdf](http://www.foodethicscouncil.org/uploads/publications/2012-Ethics_of_speculation_discussion_paper-March_2012.pdf) Last accessed 11<sup>th</sup> June 2015.

<sup>35</sup> Proprietary trading involves using the bank's own capital to take a position on particular outcomes in a market for underlying assets or commodities. See Scott, Brett, "Barclays PLC & Agricultural Commodity Derivatives," Report produced for the World Development Movement, March 2011, p. 3, [http://www.banktrack.org/manage/ems\\_files/download/barclays\\_plc\\_and\\_agricultural\\_commodity\\_derivatives\\_report/brett\\_scott\\_barcap\\_report\\_march\\_2011.pdf](http://www.banktrack.org/manage/ems_files/download/barclays_plc_and_agricultural_commodity_derivatives_report/brett_scott_barcap_report_march_2011.pdf) Last accessed 11<sup>th</sup> June 2015, p. 5.

<sup>36</sup> The UK Financial Services Authority estimated that, as of 2007, approximately \$80 billion of capital from pension funds globally was invested in commodities. See Doyle, Emmet, Jonathan Hill, Ian Jack, "Growth in Commodity investment: risks and challenges for commodity market participants," FSA Markets Infrastructure Department, March 2007, [http://www.fsa.gov.uk/pubs/other/commodity\\_invest.pdf](http://www.fsa.gov.uk/pubs/other/commodity_invest.pdf) Last accessed 15<sup>th</sup> June 2015, p. 23.

In response to this transactional complexity, some analysts — both industry insiders and critical commentators — have begun using terminology such as ‘pure speculation’ and ‘partial hedging’ to differentiate these positions.<sup>37</sup> Yet, there is another layer of complication beyond the characterisation of the position in the instant transaction. Many financial institutions claim to be using OTC commodity derivatives and exchange-traded commodity futures to hedge against risks taken in other financial markets.<sup>38</sup> These macro-portfolio hedging strategies make it more difficult to distinguish which traders, or institutions, are acting as financial speculators or when they are doing it. As analysts at GRAIN have underlined, there is a ‘porous barrier between the two motivations’.<sup>39</sup>

Alongside financial traders using derivatives to hedge against risk, thereby eschewing the role of the speculator, many commercial actors use these instruments for speculative purposes. Large corporate traders of physical food commodities — Archer Daniels Midland (ADM), Bunge, Cargill and Louis Dreyfus — sell commodity derivative products to farmers and food processing companies.<sup>40</sup> As Cargill advertises on its website, its investment department has over 10 years’ experience of replicating commodity indices in the OTC markets.<sup>41</sup> As well as selling these instruments to third parties, large grain traders also engage in proprietary trading — i.e. taking speculative positions in the market with their own capital.<sup>42</sup> Some of these agricultural conglomerates own hedge funds that specialise in trading

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<sup>37</sup> Korn, Ralf, and Paul Wilmott, “A general framework for hedging and speculating with options,” *International Journal of Theoretical and Applied Finance* 1, no. 4 (1998): 507-522; Baines, Joseph, “Speculation vs Hedging: A False Dichotomy?” *Capital As Power*, 25<sup>th</sup> September 2014, <http://www.capitalaspower.com/2014/09/speculation-versus-hedging-a-false-dichotomy/> Last accessed 11<sup>th</sup> June 2015.

<sup>38</sup> See “Macro-hedge,” Investopedia, <http://www.investopedia.com/terms/m/macrohedge.asp> Last accessed 11<sup>th</sup> June 2015.

<sup>39</sup> Vargas, Mónica, and Olivier Chantry, “Ploughing through the meanders in food commodity speculation,” GRAIN, Report, February 2011, p. 20.

<sup>40</sup> Murphy, Sophia, David Burch, and Jennifer Clapp, “Cereal Secrets: The world’s largest grain traders and global agriculture,” Oxfam Research Report, August 2012, <https://www.oxfam.org/sites/www.oxfam.org/files/rr-cereal-secrets-grain-traders-agriculture-30082012-en.pdf> Last accessed 11<sup>th</sup> June 2015, p. 29.

<sup>41</sup> Cargill website, <http://www.cargill.com/products/financial-risk/> Last accessed 11<sup>th</sup> June 2015.

<sup>42</sup> Blas, Javier and Jack Farchy, “Glencore reveals bet on grain price rise,” *Financial Times*, 24<sup>th</sup> April 2011, <http://www.ft.com/cms/s/0/aea76c56-6ea5-11e0-a13b-00144feabdc0.html#axzz3cqNHPxni> Last accessed 11<sup>th</sup> June 2015.

commodity derivatives such as Black River Asset Management LLC, a subsidiary of Cargill, which was estimated to have \$6 billion in assets in October 2011.<sup>43</sup> Analysts at SOMO have suggested that these inter-connections ‘raise issue of manipulation’, suggesting that their activities could lead to the distortion of price for underlying food commodities.<sup>44</sup> Similar concerns have been raised by researchers at GRAIN, who have emphasised these companies made record gains at the peak of the price inflation during the global food crisis. Cargill reported an approximate 70 per cent increase in its profits compared with 2007 and an increase of 157 per cent compared with 2006.<sup>45</sup>

These definitional dilemmas have significantly complicated the efforts to regulate the trade in commodity derivatives. Equally, the centrality of derivatives to strategies of risk-management throughout both the commercial and financial sectors poses a challenge. It is not conceivable, under extant market arrangements, that such products could be banned outright. These dilemmas will be addressed in the discussion of the regulatory reforms in Chapter Three. For now, the ambiguity with which this chapter is concerned is that pervading over the role that food commodity speculation played in the global food crisis.

## II. COMPETING CAUSAL CLAIMS

At one end of the spectrum, NGOs and anti-speculation campaigners argue that financial speculation ‘caused’ the food crisis and that ‘only financial speculation can explain the extent of the wild swings in the price of food’.<sup>46</sup> At the other, banks and hedge funds involved in speculative activity deny that speculation played any role

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<sup>43</sup> SOMO, “Challenges for Regulators Financial Players in the (Food) Commodity Derivatives Markets,” p. 5.

<sup>44</sup> *Ibid*, p. 7.

<sup>45</sup> GRAIN, “Corporations are still making a killing from hunger,” April 2009, <http://www.grain.org/seedling/?id=592> Last accessed 1<sup>st</sup> March 2011.

<sup>46</sup> Jones, Tim, *The great hunger lottery*, World Development Movement, 2010, p. 7.

whatsoever.<sup>47</sup> I will now address these competing conceptions of the relationship between speculative financial investment and rising food prices in turn.

i. Claiming a causal connection

Those arguing speculation was to blame for recent food price volatility place great emphasis on the scale and timing of a phenomenal surge in financial investment in commodity derivatives in recent years, reinforcing that levels of investment have quadrupled from less than \$100 billion in 2005 to over \$400 billion in 2009.<sup>48</sup> A focus on excessive volumes of speculative activity is perhaps the unifying trend in the literature seeking to make the case for a causal connection. It is also the lynchpin of the regulatory reforms since introduced to tackle this problem and which aim explicitly to target ‘excessive’ levels of speculative investment in these markets. What remains unclear, however, is precisely how this surge in levels of investment has translated into rising and volatile food prices.

A common suggestion is that the sheer volume of activity in commodity derivatives markets has unbalanced them. Quoting a hedge fund manager who was interviewed by the *Financial Times*, WDM foregrounds his assertion that there has been a ‘substantial increase in fund flow into these markets, which are not big enough to withstand the increase in funds without pushing up prices’.<sup>49</sup> Other industry insiders, including George Soros,<sup>50</sup> have invoked the existence of a ‘speculative

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<sup>47</sup> Goldman Sachs has been particularly vocal in denying its causal significance, arguing that allegations that speculative activity pushed up prices are ‘horribly misinformed on a number of fronts.’ (Allen, Katie, “Hedge funds accused of gambling with lives of the poor as food prices soar,” *The Guardian*, 19<sup>th</sup> July 2010); Deutsche Bank has recently supported its decision to continue investing in commodity derivatives arguing that ‘there is no convincing evidence that the products we offer have a de-stabilizing impact on prices and cause more people to go hungry.’ (Deutsche Bank, “Our position: the key questions and answers,” <https://www.db.com/cr/en/concrete-current-questions-and-answers-may-2014.htm> Last accessed 13<sup>th</sup> June 2015).

<sup>48</sup> Herman, M. O., R. Kelly, and R. Nash. “Not a game: speculation vs. food security” Oxfam Issues Briefing, October 2011, p. 5.

<sup>49</sup> Jones, Tim, *The great hunger lottery*, citing interview in the *Financial Times*, 10<sup>th</sup> April 2006, p. 10.

<sup>50</sup> George Soros is a leading financier who is reported to have ‘set the standard for hedge fund success’ (<http://www.forbes.com/profile/george-soros/> Last accessed 13<sup>th</sup> June 2015). He famously made \$1 billion in a

bubble’, arguing that investors’ ‘expectations’ and their ‘gambling on futures help drive up prices.’<sup>51</sup> What Soros is suggesting is that it is not so much a question of the amount of commodity derivatives instruments being bought or sold — an increase in demand for them *per se* — but that the price at which these instruments are being bought and sold is inflated beyond ‘what an objective analysis of intrinsic value would suggest’.<sup>52</sup> A speculative bubble is typically understood to emerge when the values assigned to an asset by market actors exceed their ‘real’ or their intrinsic worth.<sup>53</sup> Some place considerable emphasis on the role of certain instruments, such as commodity index funds, and others tend towards a focus on the risky nature of speculative trading. The general consensus appears to be centred around a set of four core claims: first, that there has been a phenomenal surge in levels of investment in commodity futures markets over the past decade; second, that these markets have come to be dominated by financial speculators who now outnumber commercial hedgers in these markets by as many as four to one;<sup>54</sup> third, that commodity futures markets have been progressively ‘financialised’ as a result of this influx of financial investors (though there is considerable ambiguity over what this actually means); and, fourth, that this has enabled financial speculators to profit from volatile food prices that are being artificially distorted beyond supply and demand fundamentals. Frederick Kaufman has summarised it thus, ‘investment bankers have engineered an artificial upward pull on the price of grain futures... The result: Imaginary wheat dominates the price of real wheat’.<sup>55</sup>

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speculative trade against the British Pound in a single day in September 1992. Soros has been a leading proponent of claims that financial speculators are able to influence the prices of underlying assets. (see Loth, Richard, “The Greatest Investors: George Soros,” <http://www.investopedia.com/university/greatest/georgesoros.asp> Last accessed 13<sup>th</sup> June 2015).

<sup>51</sup> *Ibid* citing interview with George Soros: ‘We are in the midst of the worst financial crisis in 30 years’, George Soros interview with Stern magazine, 3<sup>rd</sup> July 2008.

<sup>52</sup> “Speculative Bubble,” <http://www.investopedia.com/terms/s/speculativebubble.asp> Last accessed 13<sup>th</sup> June 2015.

<sup>53</sup> *Ibid*.

<sup>54</sup> Michael Greenberger, speaking at the “High Level Thematic Debate on Addressing Excessive Price Volatility in Food and Related Financial and Commercial Markets,” United Nations, New York, on Wednesday 11<sup>th</sup> April 2012, <http://www.unmultimedia.org/tv/webcast/2012/04/general-assembly-thematic-debate-on-addressing-excessive-price-volatility-in-food-and-related-financial-and-commodity-markets.html> Accessed 28<sup>th</sup> November 2012.

<sup>55</sup> Kaufman, Frederick, “How Goldman Sachs Created the Food Crisis,” Foreign Policy, Washington D.C., 27<sup>th</sup> April 2011.



ii. Rejecting a causal connection

The somewhat nebulous claims evinced by campaigners and NGOs contrast dramatically with the categorical denial by the financial services industry that such a causal connection exists.<sup>56</sup> The objections to the claim that speculation in commodity derivatives could have impacted on prices are two-fold. Firstly, according to prevailing economic theory, prices in a market economy bear a rational relationship to their ‘true’ values as determined by fundamentals of supply and demand. This is thought to be particularly true of asset prices in financial markets. Even if a group of speculators were driving futures prices away from fundamentals, it is argued, ‘the market’ would correct this. Secondly, a futures price is only supposed to be a prediction about how the value of a commodity is going to change. It is therefore argued that it can have no direct bearing on the underlying ‘spot’ price — the price of the tangible food commodity.<sup>57</sup> As Paul Krugman has put it, ‘a futures contract is a bet about the future price. It has no, zero, nada direct effect on the spot price’.<sup>58</sup>

The particulars of this counter-claim require further elaboration. The mainstream economic theory upon which these arguments are based derives from neoclassical perspectives on price formation. Neoclassical economic theory posits that prices in a competitive market economy are formed by the interaction of forces of supply and demand. These ‘forces’ are composed of individual economic agents — people — whose hypothesised drive to maximise their own individual utility in accordance with a rational order of preferences has enabled economists to develop an increasingly scientific approach to modelling consumer choice and price formation.<sup>59</sup> Confusingly, however, it is through futures markets that prices of underlying

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<sup>56</sup> See *ibid* n47 regarding the denials of Goldman Sachs and Deutsche Bank.

<sup>57</sup> The spot price of a commodity represents its actual market value at the time at which it is physically bought and sold — the price that would be paid ‘on the spot’; or its real-time value.

<sup>58</sup> Krugman, Paul, “Speculative nonsense once again,” *The New York Times*, 23<sup>rd</sup> June 2008.

<sup>59</sup> Arnsperger, Christian and Yanis Varoufakis, “What Is Neoclassical Economics? The three axioms responsible for its theoretical oeuvre, practical irrelevance and, thus, discursive power,” *Post-autistic economics review* no. 38, article 1 (2006), <http://www.paecon.net/PAERReview/issue38/ArnspergerVaroufakis38.htm> Last accessed 8<sup>th</sup> April 2014.

commodities are now thought to be ‘discovered’. In contemporary global markets, it is financial actors that are seen to be best placed to obtain all the available information about supply and demand for commodities and transform it into a market price. The theory that financial markets are ‘informationally efficient’ is known as the ‘efficient markets hypothesis’.<sup>60</sup> In its strongest form, this theory suggests that all relevant market information, both public and private, will be reflected in prices on financial markets, futures prices, making these prices the most reliable indicators of the ‘real’ value of underlying commodities.<sup>61</sup> While Krugman may be correct that a bet about a futures price has no *direct* effect on a spot price, it has a very well-established *indirect* effect: it is a miniscule contribution — a claim to information — that goes towards the formation of a futures price that is used as a benchmark to set the underlying spot price.

The fact that futures prices function as ‘benchmark prices’ and are influential in the calculation of spot prices is beyond dispute. As Charles Carey, the Chairman of the preeminent futures exchange, the CBOT, confirmed in 2007, ‘[T]he whole world sees our prices, and the whole world reacts to our prices’.<sup>62</sup> There are applications for mobile phones that are marketed to farmers and grain commodity sellers to allow them to check futures prices for precisely this purpose.<sup>63</sup> Krugman is no doubt aware of this. His comments appear to have been widely misunderstood and taken out of context by those making the case for the causal significance of speculation. What Krugman is trying to dispute is the ‘mysticism’ over how speculation is supposed to drive prices higher.<sup>64</sup> He is countering the kinds of assertions made by NGOs who, as discussed above, suggest that the sheer volume of investment in commodity

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<sup>60</sup> Fama, Eugene F., “Efficient Capital Markets: A Review Of Theory And Empirical Work,” *The Journal of Finance* 25, no. 2 (1970): 383-417.

<sup>61</sup> The semi-strong form of this theory restricts this, claiming that only relevant information available publicly will be translated into market prices. It is widely believed that the efficient market hypothesis holds in its semi-strong form (see UNCATD, “Price formation in financialized commodity markets: The role of information,” p. 3).

<sup>62</sup> Bjerga, Alan, *Endless Appetites: How the Commodities Casino Creates Hunger and Unrest*, Vol. 151, John Wiley & Sons, 2011, p. 18.

<sup>63</sup> Kittrell, Audrey, “New app streamlines grain trading,” Agriculture.com website, [http://www.agriculture.com/news/technology/new-app-streamlines-grain-trading\\_6-ar17557](http://www.agriculture.com/news/technology/new-app-streamlines-grain-trading_6-ar17557) Last accessed 13<sup>th</sup> November 2012.

<sup>64</sup> Krugman, Paul, “Speculative nonsense once again,” *The New York Times*, 23<sup>rd</sup> June 2008.

derivatives can impact on underlying food prices by acting as *a source of demand* for physical food commodities. As he makes plain, even if there are 10 million speculators taking positions in the commodity derivatives market, this does not translate into actual demand for physical food commodities.<sup>65</sup>

The crux of the counter-claim, then, falls on the assertion not that futures prices have nothing whatsoever to do with spot prices, but that the information assimilated and produced into futures prices on financial markets is *the most reliable information* about the ‘real’ value underlying commodities. This counter-claim rests on a subset of claims about how people behave in markets. First, it is posited that most financial traders are trading based on information about supply and demand fundamentals. Second, it is argued that even if a contingent of unruly ‘speculators’ were driving futures prices away from fundamental values, this would be corrected by another contingent of market actors known as arbitrageurs who would act to restore prices to equilibrium.<sup>66</sup> As Milton Friedman argued in the context of currency market, when futures prices move away from ‘fair’ or ‘equilibrium’ value, an arbitrage opportunity is created.<sup>67</sup> This means that there is an incentive to buy up the undervalued assets, or sell the overvalued ones. In each case, it is assumed that arbitrageurs will take advantage of a risk-free profit opportunity, and in so doing move prices back to equilibrium levels. While it is widely acknowledged that prices between futures and spots diverge during the life-cycle of a futures contract, through arbitrage, prices are understood to converge as the contracts near maturity, thereby ‘discovering’ the correct price of the asset or commodity.

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<sup>65</sup> *Ibid.*

<sup>66</sup> For a comprehensive explanation of commodity price formation and the role of these different actors, see UNCATD, “Price formation in financialized commodity markets: The role of information,” New York and Geneva: UNCTAD, 2011.

<sup>67</sup> Friedman, M., *Essays in Positive Economics*, Chicago: University of Chicago Press, 1953, “The Case for Flexible Exchange Rates,” pp. 157-203.

### iii. Establishing causation

Parties on both sides of the debate have sought to provide evidence corroborating their view of the causal significance of speculation in the context of the price volatility. Sceptical economists have pointed to a number of economic indicators which would refute a connection and NGOs have sought to counter them. This has produced a substantial body of literature.<sup>68</sup> I will now seek to provide a sense of these debates.

#### a. Proving a link

One indicator used to refute a causal connection between speculation and the price volatility is that the prices of some agricultural commodities remained stable during this period, despite being traded on futures exchanges. Another is that one of the biggest price spikes was in evidence in rice; yet very little of it is traded on international commodity exchanges.<sup>69</sup> In reply to this, analysts at WDM have stressed that their claim is that financial speculators capitalised on and exacerbated an already tight and volatile market for grain. Markets for other commodities whose prices remained more stable, notably sugar and cotton, were just that, they argue — they were more stable and therefore less attractive and vulnerable to speculation.<sup>70</sup> In terms of rice, while acknowledging that it remained largely inaccessible to financial speculators, Timmer has presented evidence suggesting that the spike in the price of rice was caused by the preceding spike in the price of wheat.<sup>71</sup> He claims that consumers who suddenly found themselves unable to afford wheat switched to rice, creating a surge in demand and triggering export restrictions in key rice-exporting

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<sup>68</sup> The IATP provides a helpful compendium of much of this work, see Lilliston, Ben and Andrew Ranallo (Eds), "Excessive Speculation in Agriculture Commodities: Selected Writings From 2008-2011," Institute for Agriculture and Trade Policy, April 2011, <http://www10.iadb.org/intal/intalcdi/PE/2011/08247.pdf> Last accessed 13<sup>th</sup> June 2015.

<sup>69</sup> Gilbert, Christopher, "How to Understand High Food Prices," *Journal of Agricultural Economics* 61, no. 2 (2010): 398-425, p. 407.

<sup>70</sup> World Development Movement, "Food commodity speculation: Frequently Asked Questions," Briefing, <http://www.wdm.org.uk/stop-bankers-betting-food/frequently-asked-questions-commodity-speculation> Last accessed 12<sup>th</sup> January 2012.

<sup>71</sup> Timmer, C.P., "Did speculation affect world rice prices?" ESA Working Paper no. 09-07, 2009.

countries that then led to a spike. This explanation is considered to be persuasive by economists at both the World Bank<sup>72</sup> and the FAO.<sup>73</sup> Analysts at GRAIN have inverted traditional ways of looking at this causal relationship, arguing that this actually draws attention to the systemic effects of speculation, in that speculative practices in one market were able to have an indirect but no less real influence on the price of a foodstuff which is widely sold in futures markets.<sup>74</sup>

Perhaps the biggest challenge to the credibility of the argument that speculation was causally significant extends from the principal counter-claim about the role of arbitrage in restoring futures prices to fundamental values. As Krugman has argued, if futures prices had been distorted beyond fundamental values by speculation, arbitrageurs would have been buying up and hoarding physical grain to profit from the price divergence. ‘[A]ll of this involves keeping stuff off the market and storing it. So where is the surge in inventories?’<sup>75</sup> he asks. Since no inventory accumulation could be observed during the price spikes, Krugman has claimed that this negates the claims that speculation was causally significant in the volatility in underlying markets.<sup>76</sup> Krugman’s objections are undermined by analysis produced by economists at the FAO. As they have pointed out, stock inventory levels as referenced by Krugman are calculated based on data supplied by governments which does not include information on stocks held by private actors.<sup>77</sup> Not only do the five corporations that account for approximately three-quarters of the international grain trade — Cargill, ADM, Bunge, Dreyfuss and Glencore — keep information about the stocks in their global network of storage facilities confidential, but large investment banks like Goldman Sachs, Barclays, JP Morgan and Deutsche Bank have been buying off-quota storage

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<sup>72</sup> Mitchell, D., “A note on rising food prices,” World Bank, Policy Research Working Paper 4682, 2008.

<sup>73</sup> Food and Agriculture Organisation, “Food outlook: Global market analysis,” Briefing, December 2009, <http://www.fao.org/docrep/012/ak341e/ak341e00.htm> Last accessed 17<sup>th</sup> March 2012

<sup>74</sup> Vargas, Mónica, and Olivier Chantry, “Ploughing through the meanders in food commodity speculation,” GRAIN, Report, February 2011, p. 24.

<sup>75</sup> Krugman, Paul, “Commodity prices (wonkish),” *The New York Times*, Opinion Pages, 19<sup>th</sup> March 2008, <http://krugman.blogs.nytimes.com/2008/03/19/commodity-prices-wonkish/> Last accessed 14<sup>th</sup> June 2015.

<sup>76</sup> *Ibid.* Irwin and Sanders at the OECD have echoed this view, arguing that low stock levels are ‘inconsistent with the depiction of a price bubble in these markets.’ See Irwin, S. H. and D. R. Sanders, “The Impact of Index and Swap Funds on Commodity Futures Markets: Preliminary Results,” OECD, Food, Agriculture and Fisheries Working Papers No. 27, 2010, p. 8.

<sup>77</sup> FAO et al, “Price Volatility in Food and Agricultural Markets: Policy Responses,” 2011, p. 19, para. 63.

facilities.<sup>78</sup> The building of private grain silos is said to have gone through ‘an incredible boom’ in the last six years.<sup>79</sup> This occasions the possibility that arbitrageurs were buying up stocks of physical grain and hoarding to profit from what they perceived to be inflated futures prices.

As for how this could have impact on underlying spot prices, it is assumed that arbitrageurs would continue selling the inflated futures — shorting the market — thereby gaining profit, and, after purchasing underlying physical commodities at a cheaper price, would then begin selling it. According to Albert Phung at *Investopedia*, in terms of supply and demand the effect of this is to create an increase in the supply of futures contracts, thereby lowering the price, and to increase the overall demand for the spot price of the underlying asset.<sup>80</sup> As arbitrageurs continue to do this, he explains, ‘the futures prices and spot prices will slowly converge until they are more or less equal’.<sup>81</sup> What is not clear, at least from this account, is whether this occurs because the futures prices decrease or because spot prices increase. At least in the short term, Phung suggests it is because spot prices *increase*, thereby testifying to the role that futures prices inflated by speculation could condition inflation in underlying commodity markets. Importantly, as many analysts have noted, futures prices ‘systematically failed’ to converge with spot prices on US markets in the sale of certain contracts, notably for wheat, during the time of the crisis.<sup>82</sup> This has spawned a separate debate amongst economists known as the ‘non-convergence debate’<sup>83</sup> which centres on exploring the limitations of arbitrage — the very mechanism in

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<sup>78</sup> Breger, Sasha, “How Commodities Hoarding Distorts Food Prices,” *Naked Capitalism*, 5<sup>th</sup> June 2013, <http://www.nakedcapitalism.com/2013/06/sasha-breger-how-commodities-hoarding-distorts-food-prices.html> Last accessed 14<sup>th</sup> June 2015.

<sup>79</sup> Bjerga, Alan, *Endless Appetites*, p. 28.

<sup>80</sup> Phung, Albert, “Why do futures’ prices converge upon spot prices during the delivery month?” *Investopedia*, <http://www.investopedia.com/ask/answers/06/futuresconvergespot.asp> Last accessed 15<sup>th</sup> June 2015.

<sup>81</sup> *Ibid.*

<sup>82</sup> See Van Huellen S., “Price Non-Convergence in Commodities: A Case Study of the Wheat Conundrum,” SOAS Department of Economics Working Paper Series No. 185, 2013, p. 2.

<sup>83</sup> O’Brien, D. M., “Why Have the KC Wheat Futures and Cash Prices Not Converged?” Kansas: AG Manager, Kansas State Research and Extension, 2010, [http://www.agmanager.info/crops/insurance/risk\\_mgt/rm\\_pdf10/AB\\_Whtbasis.pdf](http://www.agmanager.info/crops/insurance/risk_mgt/rm_pdf10/AB_Whtbasis.pdf); Aulerich, N. M., R. P. Fishe, and J. H. Harris, “Why Do Expiring Futures and Cash Prices Diverge for Grain Markets?” *The Journal of Futures Markets* 31, no. 6, (2011): 503-533.

which Krugman and other sceptics place such faith.<sup>84</sup> The core argument of speculation sceptics — that market mechanisms would have restored speculative exaggeration to fundamental values — is weakened by the fact that this is demonstrably not the case. As discussed at the end of the last chapter, there is a clear gap of up to 30-40 per cent between the measure of the price inflation in 2007-08 that can be accounted for by fundamentals and the actual prices recorded at the time.<sup>85</sup> Economists rejecting a role for speculation have also failed to provide a convincing explanation for this gap.

The causal claims articulated by NGOs appear vague when contrasted with the flat denial and theoretical insistence of mainstream economic perspectives. Yet, on an evidential level, the NGOs have a more compelling case. WDM, SOMO, GRAIN, and Oxfam have presented convincing statistical evidence indicating the scale of speculative activity in commodity derivatives in recent years and how this maps onto the movements of commodity prices during the crisis.<sup>86</sup> Another persuasive body of research concerns new correlations between the movements of previously distinct commodities, and between commodities and other financial assets. Economists at UNCTAD have highlighted that the prices of many commodities including metals, agriculture and energy commodities are ‘clearly moving today in tandem’, when, prior to the development of derivative products such as commodity index funds, this was not the case.<sup>87</sup> Furthermore, they add, there is evidence of ‘a strong correlation of the prices in several commodity markets with prices in other speculative financial markets’.<sup>88</sup>

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<sup>84</sup> Van Huellen, S., “Price Non-Convergence in Commodities,” p. 2.

<sup>85</sup> FAO, “Volatility in Agricultural Commodities: An Update,” *FAO Food Outlook*, Rome: FAO, 2008.

<sup>86</sup> As WDM notes in *The great hunger Lottery*, the number of contracts held by index traders rises and falls in line with commodity prices during this period. See Tim Jones, *The great hunger lottery*, World Development Movement, 2010, p. 11.

<sup>87</sup> UNCTAD, “Don’t blame the physical markets: Financialization is the root cause of oil and commodity price volatility,” Policy Brief no. 25, September 2012,

[http://unctad.org/en/PublicationsLibrary/presspb2012d1\\_en.pdf](http://unctad.org/en/PublicationsLibrary/presspb2012d1_en.pdf) Last accessed 14<sup>th</sup> June 2015, p. 2.

<sup>88</sup> *Ibid* p. 2.

## b. Proving causation

In spite of the body of evidence supplied by NGOs, this cannot, under accepted economic standards, be equated with established proof of causation.<sup>89</sup> Economists on both sides of the debate have undertaken causal economic analysis to try and establish whether or not speculative activity in futures market was cause of the price volatility. Many have relied on Granger causality testing — a test developed by Nobel prize winning econometrician, Clive Granger, which has been acclaimed for developing a rigorous way of establishing when correlations might have a causal link.<sup>90</sup> Yet, studies relying on this test have reached disparate conclusions. A number of analysts claim to have established that there is a positive causal relationship between speculation and rising food prices, including Cooke and Robles,<sup>91</sup> and Hernandez and Torero,<sup>92</sup> however others found evidence that refuted a direct causal connection, notably OECD analysts Irwin and Sanders.<sup>93</sup> All in all, as Windawi concludes, attempts to model the pricing movements have produced ‘an unconvincing mix of results’.<sup>94</sup> David Frenk at Better Markets has since criticised the application and use of Granger causality testing, particularly as it was employed by Irwin and Sanders. He contends that the use of this model is inapplicable in the context of highly volatile markets, such as those for the commodities during the crisis.<sup>95</sup> Others have suggested that existing models of causal economic analysis are simply unable to explain the complex inter-linkages between contemporary global financial and global commodity markets. One such group, a coalition of researchers at NECSI, has

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<sup>89</sup> Ghosh, J., J. Heintz, and R. Pollin, “Speculation on commodities futures markets and destabilization of global food prices: exploring the connections,” *International Journal of Health Services* 42, no. 3 (2012): 465-483.

<sup>90</sup> See Granger, Clive W. J., “Investigating causal relations by econometric models and crossspectral methods,” *Econometrica* 37, (1969): 424-438.

<sup>91</sup> Cooke, B., and M. Robles, *Recent food prices movements: A time series analysis*, Discussion Paper 942, Washington, DC: International Food Policy Research Institute, 2009.

<sup>92</sup> Hernandez, M., M. Torero, “Examining the dynamic relationship between spot and future prices of agricultural commodities,” no. 988, International Food Policy Research Institute, 2010.

<sup>93</sup> Irwin, S. H. and D. R. Sanders, “The Impact of Index and Swap Funds on Commodity Futures Markets: Preliminary Results,” OECD Food, Agriculture and Fisheries Working Papers, no. 27.

<sup>94</sup> Windawi, A. Jason, “Speculation, Embedding and Food Prices: A Cointegration Analysis,” Institute for Social and Economic Research Policy, Working Paper Series no. 2 (2012), Available at SSRN <http://ssrn.com/abstract=2159945> Last accessed 11<sup>th</sup> July 2015.

<sup>95</sup> Frenk, David, et al, “Review of Irwin and Sanders 2010 OECD Reports,” in Ben Lilliston and Andrew Ranallo (Eds), “Excessive Speculation in Agriculture Commodities: Selected Writings From 2008-2011,” Institute For Agriculture and Trade Policy, 2011.



developed what they describe as a ‘dynamic mathematical model’ that ‘overcomes the limitations of earlier studies’ and establishes a significant causal role for speculation. This model, they claim, proves that ‘the two sharp peaks in 2007-08 and 2010-11 were specifically due to investor speculation, while an underlying upward trend is due to increasing demand from ethanol conversion’.<sup>96</sup>

A joint report on food price volatility written for the G20 by a number of agencies including the FAO, IMF, UNCTAD and the World Bank illustrates the difficulty in forming a conclusive recommendation on this issue. The report concludes that increased financial sector involvement in food commodity markets ‘probably acted to amplify short-term price swings and could have contributed to the formation of price bubbles in certain circumstances’.<sup>97</sup> This appears to be the most authoritative estimation of the contribution of speculative practices to the price volatility in 2007-08 and 2010-11. This has persuaded G20 governments to adopt a precautionary approach and to introduce regulations to tackle ‘excessive’ levels of speculation, as I will go on to discuss. However, these efforts have been beleaguered by unresolved doubts about the nature and extent of the role played by speculation in the causation of the price volatility. What is more, journalists at *The Economist* and the *Financial Times* continue to minimise the possible price impacts of speculation, arguing that there is ‘almost no evidence’ to connect commodity speculators with commodity price spikes.<sup>98</sup>

Chris Sutton, a researcher at the Food Ethics Council, has made some important points concerning who bears the burden of proof in this context.<sup>99</sup> As he emphasises, those arguing that speculation is having a significant negative impact come from a broad variety of backgrounds and include economists, hedge fund managers, prominent financiers and businessmen, alongside campaigning

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<sup>96</sup> Lagi, Marco, et al, “The Food Crises: A quantitative model of food prices including speculators and ethanol conversion,” 2011.

<sup>97</sup> FAO, IFAD, WFP UNCTAD et al, “Price Volatility in Food and Agricultural Markets: Policy Responses,” Policy Report, 2011, <http://www.oecd.org/tad/agricultural-trade/48152638.pdf> Last accessed 11<sup>th</sup> July 2015.

<sup>98</sup> “Know your onions,” *The Economist*, 11<sup>th</sup> November 2010.

<sup>99</sup> Sutton, Chris, “Food prices: The ethics of financial speculation”, Discussion Paper, Food Ethics Council, 2012, p. 4.

organisations.<sup>100</sup> They have made a persuasive case for a causal link between practices of speculation and volatility food prices, albeit without being able to ‘prove causation’. Should not, he suggests, the onus then be on *those benefiting from financial investments in food commodity markets* to prove that they are *not* causing harm, rather than on the *critics of speculation*?<sup>101</sup>

A further question concerns why it is that the assertions of the financial services industry and those economists maintaining the neoclassical position on price formation seem to carry so much more weight than the claims and corroborating evidence of this significant network of NGOs and campaigners. The answer, I would venture to suggest, is that, in the public consciousness, the financial services industry and the mainstream economists are established as ‘the experts’. Scholarship pioneered by Bruno Latour<sup>102</sup> and Sheila Jasanoff,<sup>103</sup> has demonstrated the contingency and subjectivity involved in the production of such ‘expert knowledge’.<sup>104</sup> What their work helps to remind us of is that even in the so-called ‘hard’ sciences, facts, and claims to truth and knowledge, are produced by people, embedded in particular institutional and cultural contexts. The subjectivity and contingency of knowledge about economic phenomena is, perhaps, even greater, as what is being studied are not material objects, geographic terrains, or other tangible matter, but social relationships. For all of its sophistication, economic theory and the mathematical formulas used to produce prices in contemporary financial markets are, at root, based on assumptions about how people behave in markets.

In Part IV I will engage in a critique of the dominant theory of price formation that aims to take a small step towards breaking the hold that expert financial knowledge and privileged economic theory has on conceptions of causation. The first

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<sup>100</sup> *Ibid* p. 4.

<sup>101</sup> *Ibid*, p. 6.

<sup>102</sup> Latour, Bruno, and Steve Woolgar, *Laboratory life: The construction of scientific facts*, Princeton: Princeton University Press, 2013; Latour, Bruno, *Politics of nature*, Cambridge Mass: Harvard University Press, 2009.

<sup>103</sup> Jasnoff, Sheila, *Science and Public Reason*, London: Routledge, 2012; Jasanoff, Shelia, *States of Knowledge: The Co-Production of Science and Social Order*, London: Routledge, 2004.

<sup>104</sup> Hackett, Edward J., et al, *The handbook of science and technology studies*, Cambridge Mass: The MIT Press, 2008.

movement in this direction, however, requires going backwards, to history, in order to make sense of the broader claim that unifies disparate assertions on the causal impact of speculation, which is that commodity futures markets have been ‘financialised’ in recent decades, and that this has overwhelmed the traditional relationship between futures prices and spot prices in modern commodity markets.<sup>105</sup> With that in mind, I will now provide an overview of the history of the futures contract, charting its evolution from a form of agricultural insurance to its present-day incarnation as a new variety of financial asset.

### III. THE FINANCIALISATION OF FUTURES TRADING

Today, the trade in commodity derivatives is a global enterprise. However, the development of commodity futures into more sophisticated financial derivatives owes much to a series of events within the US. A great deal of the literature on the history of futures trading reflects this, and this account will also evince this geographical bias.

#### i. Commodification

The original futures contract — then termed a ‘forward’ — was widely adopted in the US in the 18<sup>th</sup> century as a mechanism of agricultural insurance. Such contracts were typically negotiated between a farmer and a grain merchant, and operated so as to ‘lock in’ a price for the crop in question, preventing a change in market conditions from impacting too drastically on their profits. Using a forward contract to mitigate the risk involved in one’s business in this way became known as ‘hedging.’ While forward contracts did reduce some of the hazards involved in agricultural production, the bilateral nature of the arrangements meant that one party could always go bankrupt and end up forfeiting on their commitments. Moreover, as the US economy expanded,

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<sup>105</sup> Herman, M. O., R. Kelly, and R. Nash, “Not a game: speculation vs. food security,” p. 5.

the need arose for a centralised marketplace for the trading of commodities, and the transferring of risk. For these reasons, agricultural entrepreneurs in the city of Chicago, the preeminent city for commodities trading at that time, founded the Chicago Board of Trade (CBOT) in 1848.<sup>106</sup>

The CBOT took control of the mountains of grain arriving in Chicago from the increasingly productive farms of the American mid-West, creating better storage facilities, grading supplies, and taking on the role of an intermediary guaranteeing both sides of forward contracts.<sup>107</sup> The CBOT would pay the purchase price of the grain to the seller, and deliver the merchandise to the buyer, meaning that entrepreneurs on opposite sides of America could trade without having to travel to Chicago. In order to do business in this way, one had to be a member of the CBOT, pay a membership fee, and demonstrate one's financial solvency. Thus the outstanding risks inherent in the formerly bilateral arrangements were resolved.

The development of a centralised exchange was the first step towards making these contracts a commodity in their own right. The second step in this transition was taken in 1865. The trading of individualised contracts had proved both inefficient and time-consuming and so it was that the CBOT began mandating the use of standardised contracts that were identical in terms of the quantity, quality, delivery month and terms of the trades being made.<sup>108</sup> The most significant difference between the new standardised futures contracts and the former forward contracts was that futures were exchangeable. In short, 'a new market was created',<sup>109</sup> and these contractual documents were transformed into articles of monetary value. They became paper claims to wealth that functioned like a form of currency and could be exchanged to make profit.

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<sup>106</sup> Bjerga, Alan, *Endless Appetites*, p. 6.

<sup>107</sup> *Ibid*, p. 17.

<sup>108</sup> "Timeline of CME achievements," <http://www.cmegroup.com/company/history/timeline-of-achievements.html> Last accessed 15<sup>th</sup> June 2015.

<sup>109</sup> Vargas, Mónica, and Olivier Chantry, "Ploughing through the meanders in food commodity speculation," p. 10.

## ii. Globalisation

The globalisation of commodity futures markets first began in the mid-19<sup>th</sup> century, on account of several new developments in transport and communication — most notably the installation of the transatlantic cable in 1865.<sup>110</sup> By the end of the 19<sup>th</sup> century, futures exchanges based on the Chicago model had been established across the world: in Liverpool, Frankfurt, New York, and Vienna, and later in India and Argentina.<sup>111</sup> However, whilst the success of the Chicago model had propelled the world towards a globalised system of agricultural production, back in the US there was trouble on the home front. Government subsidies and mechanised production methods had led to the chronic overproduction of many staple crops. After World War One, agricultural commodity prices in the US collapsed. Wages were falling, and consumption levels no longer accommodated supply. Vast quantities of grain were left rotting in the warehouses of Chicago. This led to an epidemic of price manipulation as farmers, manufacturers and grain handlers began to hoard physical commodities and to trade in futures contracts in an attempt to drive prices back up.<sup>112</sup> The volatility of US agricultural futures markets during this period and the activities of the hoarders created the perfect conditions for a new breed of participant to colonise the domain of futures trading: enter the financial speculator.

During the 1920s, a new trade in grain futures by parties who had nothing whatsoever to do with agricultural production emerged, and the prices of many staple grains inflated dramatically. Common law courts began to employ what was known as

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<sup>110</sup> Baffes, John, “Commodity Futures Exchanges: Historical Evolution and New Realities,” Presentation from the Forum for Agricultural Risk Management in Development Annual Conference, Zurich, 9-10<sup>th</sup> June 2011 <http://www.agriskmanagementforum.org/farnd/content/commodity-futures-exchanges-historical-evolution-and-new-realities> Last accessed 18<sup>th</sup> March 2012.

<sup>111</sup> Berg, Ann, “The Rise of Commodity Speculation: From Villainous to Venerable,” in Adam Prakash (Ed), *Safeguarding Food Security in Volatile Global Markets*, Rome: FAO, 2011, p. 248.

<sup>112</sup> For a discussion of the Common Law regulating off-exchange futures contracts see Lynn A. Stout, “Uncertainty, Dangerous Optimism, and Speculation: An Inquiry into Some Limits of Democratic Governance,” *Cornell Law Review* 97 (2011-12): 1199-1202.

‘the rule against difference contracts’ to discourage speculative transactions in futures contracts outside of regulated exchanges.<sup>113</sup> Whether the parties to a futures contract ‘intended’ or could have ‘reasonably intended’ to take physical delivery was the test used by judges to differentiate legitimate hedging from what was then characterised as ‘simple gambling’ on the future price of a commodity.<sup>114</sup> However, even if neither party to a difference contract expected to take delivery, courts would nonetheless enforce the contract if one party had some pre-existing economic interest in the underlying good that would be damaged by the occurrence of the same event that would allow it to profit under the contract.<sup>115</sup> They aimed to afford commercial actors the opportunity to hedge against risk.

A critical development in the 20<sup>th</sup> century provoked a legislative clamp-down on speculation. ‘Shadow’ exchanges known as ‘bucket-shops’ were set up and began to rival the fee-paying members-only exchanges.<sup>116</sup> Bucket-shops allowed anyone who walked in the door to buy or sell futures, without paying for a membership or acting through a broker. The spate of speculation that ensued led to widespread condemnation of bucket-shops as gambling dens, and many states in the US moved to declare bucket-shop wagers legally void, in some instances making running a bucket-shop criminal. Following the Wall Street Crash of 1929, and propelled by a wave of hostile public sentiment towards the banks, the Roosevelt government introduced regulations to prevent manipulation of prices through hoarding and to curtail speculative activity by the agriculturally unaffiliated. Three separate pieces of legislation were passed by Congress to prevent what was seen to be an undesirable interference in commodity markets by financial investors: namely, the Securities Act of 1933,<sup>117</sup> the Securities Exchange Act of 1934,<sup>118</sup> and the Commodity Exchange Act

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<sup>113</sup> *Ibid*, p. 1202.

<sup>114</sup> *Ibid*.

<sup>115</sup> Stout, Lynn A., “Derivatives and the Legal Origin of the 2008 Credit Crisis,” *Harvard Business Law Review* 1 (2011): 1-38, p. 12.

<sup>116</sup> Cowing, Cedric B., *Populists, Plungers, and Progressives: A Social History of Stock and Commodity Speculation, 1890–1936*, Princeton, 1965, pp. 28-29.

<sup>117</sup> 15 USC. 77a-77aa.

<sup>118</sup> 15 USC 78a-78jj

of 1936 (CEA).<sup>119</sup> The CEA created the Commodity Exchange Authority — a regulatory body that had the power to limit the size of speculative positions by individual traders or those acting in concert with each other. The trading of commodity options was also banned because such instruments were viewed to be highly speculative. The effect was to rope off these commodities from financial investors as they were considered to be too important to the lives of ordinary people.

Although the trade in commodity futures contracts continued to boom during the early 20<sup>th</sup> century, this was interrupted by the advent of World War Two. On account of government intervention schemes such as those administered in the US under the Commodity Credit Corporation, the pricing function of futures remained suspended in the decades after the war.<sup>120</sup> It wasn't until the 1970s that the trade in commodity futures was resurrected, as a result of the liberalisation policies that fundamentally restructured global economic relations.

### iii. Liberalisation

It is well known that, at the behest of a new political allegiance intent on giving effect to the free market philosophies of economists such as Friedrich Hayek and Milton Friedman, a wave of liberalisation and deregulation swept the world throughout the 1970s and 1980s. The watershed moment was the decision to abandon the Bretton Woods system of fixed exchange rates in the early 1970s. Under Bretton Woods, all international currencies had been pegged to the US Dollar, and the international flow of capital was tightly controlled.<sup>121</sup> When US economic interests became compromised by these arrangements, leading the US to affect a unilateral withdrawal in 1971, a new system of floating exchange rates was devised.<sup>122</sup> To enable trade between the United States Dollar and foreign currencies, the Chicago

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<sup>119</sup> P.L. 74-765, 49 Stat. 149.

<sup>120</sup> Berg, Ann, "The rise of commodity speculation: from villainous to venerable," p. 252.

<sup>121</sup> Singh, Kavaljit, *Taming Global Financial Flows: Challenges and Alternatives in the Era of Financial Globalisation: A Citizen's Guide*, Zed Books Ltd, 2000, p. 1.

<sup>122</sup> *Ibid.*

Mercantile Exchange (CME) — formerly the Chicago Butter and Egg Board — introduced the first currency futures contracts in 1972. It became possible to exploit price fluctuations between the British Pound, Canadian Dollar, Deutsche Mark, French Franc, Japanese Yen, and Mexican Peso.<sup>123</sup> Currencies began to be bought and sold on a market that would soon dwarf the markets for all other asset classes put together.

By the 1980s, new exchanges for the trading of these instruments were created in Europe. The London International Financial Futures Exchange (LIFFE) was established in 1982, followed by Paris's *Marché à Terme International de France* (MATIF) in 1986, and Frankfurt's *Deutsche Börse* in 1990. Alongside New York, these new hubs of financial trading became the cornerstones of a new financial world order, and signified the transition in the world economy from a structure based on productive activity divided along national borders to a structure based on financial activity concentrated in a small handful of global financial centres.<sup>124</sup> With the advent of increased liberalisation, producers, manufacturers and retailers were forced to compete in an increasingly globalised world economy. Their incomes became newly vulnerable to fluctuations in global interest and exchange rates. A new breed of financial derivatives was developed by the financial services industry, ostensibly to assist in hedging against these market movements.

By the late 1980s, futures trading had taken on a very different character from the traditional open outcry trading first established in Chicago. Previously dominated by traders in company-designed suits, communicating through elaborate hand signals, these traditions were gradually replaced by screens, mobile phones, and television channels.<sup>125</sup> Along with the advent of electronic trading, a new trade in OTC instruments or 'swaps', as they are called in the US, began to emerge. Concerns about the legality of these transactions led to the financial services industry in the US

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<sup>123</sup> Berg, Ann, "The Rise of Commodity Speculation: From Villainous To Venerable," p. 253.

<sup>124</sup> Correa, Eugenia, Wesley Marshall, Roberto Soto, "Financial speculation, global crisis and food sovereignty," The Critical Development Studies (CDS) Network Conference, Zacatecas, Mexico, 13-15<sup>th</sup> August 2009, p. 3.

<sup>125</sup> Bjerga, Alan, *Endless Appetites*, pp. 13-14.



pressuring the government to officially exempt derivatives from the mechanisms of regulatory oversight for other stocks and securities. Doubts about the safety of the proposals were raised at congressional hearings; however, pressure from powerful financial lobbyists, began to build.<sup>126</sup> By the late 1990s, the resistance to deregulation collapsed. The Commodity Futures Modernization Act (CFMA), signed into law by President Clinton in 2000, amended the CEA to enable the trading of OTC derivative instruments outside of the regulatory remit of the Commodity Futures Trading Commission.<sup>127</sup>

As well as legitimating a market in OTC derivative instruments, the CFMA also removed the restrictions set up under the CEA that had placed limits on the numbers of ‘financial’ participants able to transact in the exchange-traded arena. A provision known as the ‘swap-dealer’ loophole benefited financial institutions selling OTC derivatives by treating them as commercial hedgers for the purposes of investing in exchange-traded futures contracts. This critical re-characterisation allowed financial institutions dealing in swaps to take long- term positions in commodity futures markets — a change in trading practice that was to have significant repercussions. Coupled with the Gramm-Leach-Bliley Act of 1999 — which had repealed the Glass-Steagall Act mandating a separation between retail and investment banking — the CFMA legitimated the growing market in OTC derivatives traded outside of regulated exchanges.<sup>128</sup>

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<sup>126</sup> Montopoli, Brian, “Report: Wall Street Spent 5 Billion for Political Influence,” *CBS News*, 4<sup>th</sup> March 2009, <http://www.cbsnews.com/blogs/2009/03/04/politics/politicalhotsheet/entry4842645.shtml> Last accessed 25<sup>th</sup> June 2015.

<sup>127</sup> A similar piece of legislation was also passed in the UK at this time: the UK Financial Services and Markets Act of 2000 (FSMA).

<sup>128</sup> Ghosh, Jayati, “The Commodity Price Rollercoaster,” World Development Movement, Paper, August 2008, [www.networkideas.org/news/aug2008/Roller\\_Coaster.pdf](http://www.networkideas.org/news/aug2008/Roller_Coaster.pdf) Last accessed 19<sup>th</sup> February 2012, p. 5.

#### iv. Financialisation

Though the CFMA opened the gates, other developments during the 1990s established food commodities as the ‘next generation asset-class’,<sup>129</sup> as Jim Rogers, bestselling author of *Adventure Capitalist*<sup>130</sup> and *Hot Commodities*,<sup>131</sup> termed them in 2004. Following the collapse of the ‘dot.com bubble’ in the 1990s, a new haven for capital was located in the market for property. However, when the real estate boom began to unravel, the consequences were beyond what many had imagined possible. A combination of subprime mortgage lending practices and a complex web of securitised debt created via complex derivatives mortgage-backed debt securities and collateralised debt obligations had distributed ‘toxic’ assets to banks and financial institutions all over the world. When the housing bubble burst, people defaulted on their loans, and the web of treacherous securities embroiled the world in a situation of unprecedented financial mayhem and global insecurity — the global financial crisis of 2007.

In the post-crisis economic climate, commodity futures markets were cast in the role that the dot.com and real estate markets had played before them — they became an attractive haven for financial investment.<sup>132</sup> In light of the financial climate, investment banks such as Goldman Sachs began to tout commodity investment as a ‘portfolio enhancer’<sup>133</sup> that would enable investors to ‘diversify’ their investment portfolios and protect their assets in the aftermath of the financial crisis. New products were created by financial institutions in London and New York that sought to ‘redefine’ the commodities market place for financial investors.<sup>134</sup> The appeal of commodity futures was further advanced by the CBOT, which ‘embraced

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<sup>129</sup> Rogers, Jim, *Hot Commodities: How Anyone Can Invest Profitably in the World’s Best Market*, John Wiley & Sons, 2007, p. 43.

<sup>130</sup> Rogers, Jim, *Adventure Capitalist: The Ultimate Road Trip*, reprint, Random House Trade, 2004.

<sup>131</sup> Rogers, Jim, *Hot Commodities*.

<sup>132</sup> Gorton, Gary, K. Geert Rouwenhorst, “Facts and Fantasies about Commodities Futures”, *Financial Analysts Journal* 62, no. 2 (2006): 47-68.

<sup>133</sup> Robison, Peter, Asjlynn Loder, Alan Bjerga, “Amber Waves of Pain,” *Business Week*, 22<sup>nd</sup> July 2010.

<sup>134</sup> See “Redefining the Commodities Marketplace: Exchange Traded Commodities,” Brochure, London Stock Exchange, 2009, <http://www.londonstockexchange.com/specialist-issuers/etps/etcbrochure.pdf> Last accessed 16<sup>th</sup> February 2015.

the deregulatory spirit' and relaxed position limits put in place since the 1930s to restrict financial participation in futures markets. From a limit of up to 600 contracts per commodity, financial actors and institutions were allowed up to 22, 000, 10, 000 and 6, 500 contracts for maize, soybeans and wheat respectively.<sup>135</sup> Levels of financial investment skyrocketed, both on the exchanges, and in the OTC market, which ballooned to around \$9 trillion by the end of 2007.<sup>136</sup> From the humble forward contracts of the 19<sup>th</sup> century, commodity futures had evolved into an established asset class in the market for global capital.

This critical transition is no better illustrated than by the merger of the CBOT with the several key financial and stock trading institutions in 2007. The exchange was bought by the CME Group — a corporation that now not only owns the CBOT, but also the Chicago Mercantile Exchange (CME), and the New York Mercantile and Commodity Exchanges (NYMEX and COMEX), as well as a majority share in the Dow Jones Indexes (one of the major stock market indexes).<sup>137</sup> Its range of derivatives include futures and options based on interest rates, equity indexes, foreign exchange, energy, agricultural commodities, weather and real estate.<sup>138</sup> Food and financial futures are now traded under the auspices of a single multinational trading corporation, indistinguishable in their form and purpose to the traders who move vast sums of money between stocks, currencies, and grain commodities and back again with the click of a mouse. A \$300 million dollar tunnel has been dug through the earth's crust from Chicago to New York in order to shave three milliseconds off communication times between the two locations in order to create profitable opportunities to be exploited by automated trading algorithms.<sup>139</sup>

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<sup>135</sup> Berg, Ann, "The Rise of Commodity Speculation: From Villainous To Venerable," p. 256.

<sup>136</sup> Ghosh, Jayati, "The unnatural coupling: Food and global finance," *Journal of Agrarian Change* 10, no. 1 (2010): 72-86.

<sup>137</sup> <http://www.cmegroup.com/company/history/> Last accessed 15<sup>th</sup> November 2012.

<sup>138</sup> <http://www.cmegroup.com> Last accessed 15<sup>th</sup> November 2012

<sup>139</sup> Dellinger, Matt, "Fiber-Optic Transatlantic Cable Could Save Milliseconds, Millions by Speeding Data to Stock Traders," *Popular Science*, 2011 <http://www.popsci.com/technology/article/2011-04/new-transatlantic-cable-will-speed-information-exchange-price> Last accessed 26th June 2015.

Zooming out from Chicago, the bigger picture is one of a global economy dramatically altered over the course of the past century, from an arena in which production was paramount to one in which finance finances finance, and the real economy is left ‘dancing to the rhythms’ of financial markets.<sup>140</sup> Banks and institutional investors like Citibank and JP Morgan deal in currencies the way General Motors and Ford used to deal in cars, and a culture of speculating on how all of these simultaneously distinct but increasingly interlinked markets will move has caused numerous analysts to dub the new economic era with the label ‘casino capitalism’.<sup>141</sup>

By turning to history, it is possible to see the conditions of possibility under which food commodity speculation became a phenomenon in the years leading up to the global food crisis. As well as demonstrating how financial speculative actors came to dominate commodity futures markets in numerical terms, it speaks to fundamental shifts in the character of these markets — or, in other words, the claim that they have been ‘financialised’. According to Epstein, financialisation can be described in its broadest sense as ‘the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies’.<sup>142</sup> Herein lies the major challenge to the adequacy of the neoclassical theory on price formation used to contravene claims on the causal contribution of food commodity speculation in 2007-08. As mentioned above, at root, this theory rests on a set of assumptions about how people behave in markets. What this theory fails to account for is that processes of financialisation may have altered this market behaviour.

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<sup>140</sup> Strange, Susan, *Mad Money: When Markets Outgrow Governments*, Michigan: University of Michigan Press, 1998.

<sup>141</sup> Strange, Susan, *Casino capitalism*, Manchester: Manchester University Press, 1997.

<sup>142</sup> Epstein, Gerald A. (Ed), *Financialization and the world economy*, UK: Edward Elgar Publishing, 2005, p. 3.

#### IV. CRITIQUE OF NEOCLASSICAL THEORY OF PRICE FORMATION

Neoclassical economic theory is predicated on a number of core assumptions about how people behave in markets. First, they are assumed to act a) rationally and b) as individuals in the maximization of their own utility. Assumptions are also made about c) the quality of information that these actors are able to obtain and how they act on it and d) the competitive nature of the markets in which they are transacting. In some cases, they are assumed to have perfect information and be operating in conditions of optimal competitiveness, although increasingly it is recognised that this is not always the case. In the context of the specific debate over food commodity speculation, three further assumptions pertain, namely that e) their actions in terms of taking a position in these markets are ‘bets’ that do not act to determine the ‘real’ prices of underlying assets or commodities, f) that financial traders do not systematically trade against market fundamentals,<sup>143</sup> and g) that arbitrageurs will act to exploit risk-free arbitrage opportunities and will purchase and store physical commodities in the event that futures prices are inflated beyond fundamental values.

I will now move through a number of arguments that contravene dominant neoclassical wisdom on pricing dynamics. In doing so, I intend to work towards developing a more precise understanding of how the financialisation of commodity futures markets could have impacted on underlying food prices, and what the role of speculative practices may be in that causal relationship.

##### i. Market conditions

Taking assumption c) first, there have, as the previous section has demonstrated, been considerable shifts in the scale and operation of commodity markets as they have been globalised. This poses a challenge to the ability of financial traders to gauge accurate information on market fundamentals. Analysts at UNCTAD,

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<sup>143</sup> Van Huellen, S., “Price Non-Convergence in Commodities,” p. 5.

who have carried out an extensive study on the dynamics of commodity price formation, have noted that while ample information on supply and demand fundamentals is available, it is ‘not easy to obtain in a systematic way’.<sup>144</sup> Much of it is only available via secondary sources, such as FAO data. It also comes in a variety of different formats, meaning that it ‘takes time and expertise to find out which are the most useful, relevant and reliable sources’.<sup>145</sup> Consequently, as their report surmises, price discovery in contemporary global commodity markets tends to be based on information related to ‘a few commonly observable events, or even on mathematical models that mainly use past — rather than just current — information for price forecasts’.<sup>146</sup> Trading decisions are taken in an environment of considerable uncertainty.<sup>147</sup>

This uncertainty also speaks to the accuracy of assumptions on the behaviour of market actors. In a liberalised climate of fluctuating exchange and interest rates, the assertion that arbitrage opportunities are ‘risk-free’ is highly debatable as the value of the purchased goods could be affected by shifts in economic conditions. Furthermore, as Van Huellen has argued, in global markets there have been changes in delivery instruments and a high financial carry which has ‘discouraged arbitrage traders’ in recent years.<sup>148</sup> As well as disincentives, opportunities to profit without handling physical grains have expanded significantly with the development of commodity derivative instruments. The ability of institutions that act in a hybrid capacity — as retailers and traders of commodity derivatives and traders of physical food commodities — presents further challenges to assumption d), the notion that these markets are competitive. These institutions effectively monopolise the market for food commodities, particularly for grain. They can now engage with ease in both speculative proprietary trades and the storage and trading of physical grain. There is good reason to think that this could all have impacted on the capacity and motivations of financial traders, as have those of commercial actors and those who have

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<sup>144</sup> UNCATD, “Price formation in financialized commodity markets: The role of information,” p. 5.

<sup>145</sup> *Ibid.*

<sup>146</sup> *Ibid.*, p. 2.

<sup>147</sup> *Ibid.*, p. vii.

<sup>148</sup> Van Huellen, S., “Price Non-Convergence in Commodities,” p. 2.

traditionally engaged in arbitrage. While perhaps not altering their practices beyond all recognition, new incentives have been introduced as to the timeframe under which either set of actors would be motivated to act on fundamentals. Why burst the bubble if profit can be made from pushing it higher?

## ii. Market practice

A weight of market practice contravenes assumption f), that financial traders do not systematically trade against market fundamentals. An important point in this regard relates to the development of commodity index funds, which are premised on the expectation that prices for commodities can only go up. Index investors automatically roll their expiring contracts over into new ‘long’ positions.<sup>149</sup> Vast sums of money are channeled into indexes by large institutional investors, such as pension funds, irrespective of the day-to-day movements of each individual commodity. In effect, the investment is ‘on autopilot’.<sup>150</sup> For this reason, commodity index investors are known as ‘massive passives’ or the ‘brontosaurus of the investment world’.<sup>151</sup> As of March 2008, commodity index funds were estimated to control an amount of corn, wheat and soybeans equivalent to half of total US stocks for such grains.<sup>152</sup>

Another common market practice known as ‘herding’ negates both the assumption that traders follow fundamentals, and assumption b), that they act as individuals. Since it is more efficient and requires less time and investment for traders to trade by watching the markets — that is to say, each other — market movements

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<sup>149</sup> Investing ‘long’ means investing in the expectation that an asset is going to rise in value. It involves buying up the asset or derivative in question. Going ‘short’, by contrast, involves selling the relevant asset or derivative, based on the belief that prices are going to decline. See “Short Selling: What Is Short Selling?” Investopedia, <http://www.investopedia.com/university/shortselling/shortselling1.asp> Last accessed 15<sup>th</sup> June 2015.

<sup>150</sup> Rogers Jim, “*Hot Commodities*,” p. 58.

<sup>151</sup> Brett, Scott, “A guide to food speculation: How to argue with a banker,” *The Ecologist*, 9<sup>th</sup> June 2011.

<sup>152</sup> Wilson, Jeff, “Wall Street Grain Hoarding Brings Farmers and Consumers Near Ruin,” *Bloomberg News*, 28<sup>th</sup> April 2008, <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aDZej7GJppjM> Last accessed 12<sup>th</sup> January 2012.

generated by other actors can be interpreted by other traders as incorporating new market information.<sup>153</sup> Some describe this as ‘uninformed trading’, resulting in the accidental transmission of a ‘false’ signal that disturbs the rationality of the market. As Avery and Zemsky have observed, uninformed herd behaviour can have dramatic effects on prices and can lead to bubbles and excessive volatility.<sup>154</sup> Other economists, including John Maynard Keynes and Hyman Minsky, have argued that it can become irrational for traders to persist in trying to trade on fundamentals when so-called uninformed — also called ‘technical’ or ‘noise’ — traders are driving asset prices upwards of fundamentals.<sup>155</sup> Termed ‘intentional herding’ by researchers who have studied this phenomenon, their arguments would suggest that this is not accident, but strategy.<sup>156</sup>

These trends away from fundamentals are exacerbated by new market technologies. Many of the new participants in commodity futures markets delegate all of the decision-making about investments to cutting-edge computers that engage in ‘high frequency trading’ (HFT) to execute thousands of trades in a matter of seconds. Far from being executed by rational traders acting as individuals to faithfully interpret data on fundamentals, many of these trades are not executed by human actors at all — at least not directly. In March 2011 cocoa futures crashed down 12 per cent in under a minute during a ‘flash crash’ associated with this form of trading<sup>157</sup> — something that could hardly have reflected fundamental shifts in supply and demand. More than 95 per cent of futures are bought and sold today through computer networks,<sup>158</sup> many of which operate to exploit a twitch in market movement or value irrespective of what informed it. Economists at UNCTAD have

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<sup>153</sup> United Nations Conference on Trade and Development, “The Global Economic Crisis: Systemic Failures and Multilateral Remedies,” Report UNCTAD/GDS/2009/1, 2009, p. 35.

<sup>154</sup> Avery, A., and Zemsky, P., “Multidimensional uncertainty and herd behaviour in financial markets,” *American Economic Review* 88, no. 4 (1998): 724-748.

<sup>155</sup> For a discussion of this and the psychology of investment see Dow, Sheila, “The psychology of financial markets: Keynes, Minsky and emotional finance,” In Dimitri B. Papadimitriou and L. Randall Wray (Eds), *The Elgar Companion to Hyman Minsky*, UK: Edward Elgar Publishing, 2010, p. 246.

<sup>156</sup> UNCATD, “Price formation in financialized commodity markets: The role of information,” p. 21.

<sup>157</sup> Herman, M. O., R. Kelly, and R. Nash. “Not a game: speculation vs. food security,” p. 6.

<sup>158</sup> FoodWatch, “*The Hunger Makers: How Deutsche Bank, Goldman Sachs and Other Financial Institutions Are Speculating With Food at the Expense of the Poorest*,” Berlin: FoodWatch, 2011, p. 24.



concluded that innovations in trading technology such as high frequency trading, algorithmic trading and herding behavior may have given way to an endogenous — or reflexive — dynamic in financial markets.<sup>159</sup> Testing this theory, they point to an overall increase of the level of endogeneity since the mid-2000s to October 2012, implying that at least 60-70 per cent of commodity price changes are now due to self-generated activities rather than novel information.<sup>160</sup>

### iii. Market rationality

Another key insight gleaned from the history of futures trading is that activity in food commodity markets has become ‘increasingly embedded’ in broader speculative trading activity across financial markets.<sup>161</sup> Coupled with developments in market practice, this presents a notable challenge to assumption a), that people transact ‘rationally’ in markets. Challenges to the hypothesized rationality of *homo economicus* are not novel. Scholars in the fields of behavioural economics, cognitive psychology and neuroscience have produced a plethora of studies in contravention of this representation of market behaviour.<sup>162</sup> As practitioner Jim Rogers has argued, ‘anyone with any experience in the stock market already knows how important psychology is to successful investing. Emotion can drive the markets up or down, and the mind-set of individual investors drives these emotions’.<sup>163</sup> Previously labelled ‘speculative mania’, the common term today to denote the collective consequences of such ‘irrational’ market behaviours is ‘irrational exuberance’, a term coined by Alan Greenspan and popularised by Robert Shiller. Shiller won a Nobel Prize for his work on speculative bubbles in financial markets in the 1990s in which he demonstrated

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<sup>159</sup> UNCATD, “Price formation in financialized commodity markets: The role of information”.

<sup>160</sup> Arezki, Rabah, et al, “Understanding international commodity price fluctuations,” *Journal of International Money and Finance* 42 (2014): 1-8, p. 4.

<sup>161</sup> Windawi, A. Jason, “Speculation, Embedding and Food Prices,” p. 2.

<sup>162</sup> Simon, Herbert A., “A Behavioural Model of Rational Choice,” *Quarterly Journal of Economics* (1955): 99-118; Simon, Herbert A., *Models of Man: Social and Rational*, New York: John Wiley and Sons, 1957; Lindblom, C., “The Science of Muddling Through,” *Public Administration Review* 19, no. 2 (1959): 79-88; Kahneman, D., and A. Tversky, “Subjective Probability: A Judgement of Representativeness,” *Cognitive Psychology* 3 (1972).

<sup>163</sup> Rogers, Jim, *Hot Commodities*, p. 42.

how ‘feedback loops’ created by traders adopting positions informed by the behaviour of other traders could drive prices away from fundamentals and result in market volatility.<sup>164</sup>

This work lends powerful support to the argument that speculation was significant in the causation of the price volatility. However, though Shiller’s work does explain how a bubble could have emerged in commodity futures, debate remains petrified over the question of how this can translate into volatility in underlying commodity markets.<sup>165</sup> While the precise causal linkages remain poorly understood, industry insiders have persistently acknowledged that price contagion between futures prices and spots can and does occur. As George Soros has remarked, ‘[s]peculators create the bubble that lies above everything. Their expectations, their gambling on futures help drive up prices, and their business distorts prices, which is especially true for commodities’.<sup>166</sup> One contributory mechanism is the use of futures prices as benchmarks for the setting of spot prices, as discussed earlier. However, neoclassicists remain adamant that it is fundamental values which ultimately determine futures prices by the end of the contract cycle. This is based on assumption g), that arbitrageurs will act to exploit risk-free arbitrage opportunities and will purchase and store physical commodities in the event that futures prices are inflated beyond fundamental values. Now embedded in a broader speculative trading culture, however, what is to prevent these actors getting caught up in the speculative frenzy? Considerable faith is put in the ability of rational arbitrageurs to cut through market exuberance and make accurate predictions on where the market will go and, more importantly, to discern what ‘real’ fundamentals of supply and demand even are.

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<sup>164</sup> Shiller, Robert J., *Irrational exuberance*, Princeton: Princeton University Press, 2015; Shiller, Robert J. “From efficient markets theory to behavioral finance,” *Journal of economic perspectives* (2003): 83-104.

<sup>165</sup> This is the central controversy of economics described by the NECSI analysts. See Marco Lagi, “The Food Crises: A quantitative model of food prices including speculators and ethanol conversion”.

<sup>166</sup> See George Soros: “We are in the midst of the worst financial crisis in 30 years’. George Soros interview with Stern magazine, 3<sup>rd</sup> July 2008

In spite of the suggestion in the title of seminal work — *Irrational Exuberance*<sup>167</sup> — Shiller has since argued that he does not consider speculative bubbles to be ‘a wild orgy of delusions’ but ‘a natural consequence of the principles of social psychology coupled with imperfect news media and information channels’.<sup>168</sup> Speculative bubbles, he reinforces, are about their ‘epidemic nature’ not the ‘craziness’ of the investors. In fact, as he says, we might argue that the activities of so-called ‘uninformed’ traders are ‘in some sense rational, since there is a cost to collecting information’.<sup>169</sup> Is it possible that what has changed within commodity futures markets as they have been progressively financialised is what is perceived as the rational thing to do?

#### iv. Market value

Further evidence that contravenes the veracity of the neoclassical conception of price formation can be found in a significant body of alternative theories on how prices are produced and what values they reflect. For over a century, classical economists and Marxist economists were embroiled in a debate over the cost of production versus labour theories of value. Early neoclassicists were considered revolutionary when, at the end of the 19<sup>th</sup> century, they introduced the notion of supply and demand — based on consumer perceptions of value. Furthermore, though supply and demand fundamentals and the grounding concept of utility remain central to neoclassical theory, there have been important refinements and developments since.<sup>170</sup> Nonetheless, a critical limitation of neoclassical perspectives on price formation is that they are unable to reckon with other theories of value.

Scholars in other disciplines have contested dominant conceptions of price formation and value. Emile Durkheim argued that prices are not produced by an

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<sup>167</sup> Shiller, Robert J., *Irrational exuberance*, Princeton: Princeton University Press, 2015.

<sup>168</sup> Shiller, Robert J., “Speculative asset prices,” *American Economic Review* 104, no. 6 (2014), p. 1487.

<sup>169</sup> *Ibid*, p. 1505.

<sup>170</sup> Colander, David, Richard Holt, and J. Barkley Rosser Jr., “The changing face of mainstream economics,” *Review of Political Economy* 16, no. 4 (2004): 485-499.

aggregation of individual preferences but result from social norms — that they reflect public opinion on the just allocation of goods.<sup>171</sup> In his view, this cannot be determined mathematically by extrapolating from conceptions of individual utility as neoclassical theory would suggest.<sup>172</sup> Other sociologists, notably Pierre Bourdieu have developed these insights, arguing that prices are the product of social and political forces of the market ‘field’.<sup>173</sup> On this view, price ‘depends on the structure of relationships in the market’.<sup>174</sup> Different theorists have foregrounded different influences on these relationships. Some focus on social networks,<sup>175</sup> others on power dynamics within institutions,<sup>176</sup> and more on the role of market technologies.<sup>177</sup> What all of this analysis does is to destabilise the notion of a ‘correct’ price and to show the plurality of ways that prices can be produced and how this relates to broader notions of value — both social and economic. On this view, there is no such thing as an objectively and determinably ‘real’, ‘true’, or ‘equilibrium’ price for the fundamental value of a commodity. This negates the very possibility that any trader, no matter how well informed, could trade on the basis of ‘fundamentals’.

The significance of this scholarship will be explored throughout the thesis. At the present moment, I wish to concentrate on two critical points about the role of a particular ‘market technology’<sup>178</sup> which upset the critical neoclassical assumption e), that the actions of financial traders in terms of taking a position in these markets are ‘bets’ that do not act to determine the ‘real’ prices of underlying assets or commodities. As well as apparent blindness to the contestability of the ‘correct’

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<sup>171</sup> Durkheim, Emile, *On the Division of Labour in Society*, Palgrave Macmillan, 1893.

<sup>172</sup> *Ibid*, p. 299.

<sup>173</sup> Bourdieu, Pierre, *The Field of Cultural Production*, Cambridge, UK: Polity Press, 1993.

<sup>174</sup> Zbaracki, Mark J., *Pricing Structure and Structuring Price*, Philadelphia: University of Pennsylvania, 2004, p. 1.

<sup>175</sup> Granovetter, Mark and Richard Swedberg (Eds.), *The Sociology of Economic Life*, Boulder, CO: Westview Press, 1992.

<sup>176</sup> Fligstein, Neil, *The Architecture of Markets*, Princeton: Princeton University Press, 2001; Scott, Richard W., *Institutions and Organizations: Ideas and Interests*, 3<sup>rd</sup> edition, London: Sage, 2008.

<sup>177</sup> Callon, Michel, “Introduction: The Embeddedness of Economic Markets in Economics,” In Michel Callon (ed.), *The Laws of the Market*, Oxford: Blackwell Publishers, 1998, pp. 1-57; Preda, Alexandru, “Socio-technical Agency in Financial Markets: The Case of the Stock Ticker,” *Social Studies of Science* 36, no. 5 (2006): 753-782; Muniesa, Fabian, “Market Technologies and the Pragmatics of Prices,” *Economy and Society* 36, no. 3 (2007): 377-395.

<sup>178</sup> In Chapter Four I take issue with the characterisation of derivatives as a ‘financial technology’, suggesting that they might be more accurately and usefully understood as a legal one.

price or value, neoclassical theory overlooks the contribution to the formation of that value made by the very instruments being traded in financial markets. As Donatella Alessandrini has argued, derivatives ‘do something to the value that they are supposed to measure’.<sup>179</sup> As she further underlines, ‘[w]e are dealing with contracts in which to anticipate or speculate on the value of an asset is also to intervene in, influence or make that very value’.<sup>180</sup>

Although mainstream theories of price formation do appear, on close scrutiny, to acknowledge that traders taking a position in a futures market make an incremental contribution to price formation, this is presented in terms of price ‘discovery’. This language grossly underplays the extent to which, by trading futures and derivatives, financial actors *are producing the very values that they claim to be ‘discovering’ or ‘recording’*. A number of studies have been carried out by academics in the field of Social Studies of Finance that suggest that financial actors, financial institutions, financial formulas, and financial instruments have to be understood as producing what are essentially subjective measures of value as objective market prices.<sup>181</sup> As Donald Mackenzie has described it, financial formulas are best understood as ‘engines’ not as ‘cameras’; they produce the values that they purport to measure.<sup>182</sup> In a seminal case study, MacKenzie and Millo demonstrated how the foundational formula for valuing the prices of financial options — the Black and Scholes formula — was performed via institutional structures into an ‘accurate’ tool for pricing such options. Initially producing inconsistencies, over time, through widespread use and the shaping of trader expectations, the formula generated the price data needed to confirm its validity.<sup>183</sup> It is important to emphasise that the data used by many of the financial models used to ‘calculate’ the prices of instruments such as commodity options and commodity index funds is data on the values at which those instruments

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<sup>179</sup> Alessandrini Donatella, “Financial Derivatives and the challenge of performance,” in Emilie Cloatre and Martyn Pickersgill, *Knowledge, Technology and Law*, London: Routledge, 2014, p. 154.

<sup>180</sup> *Ibid*, p. 158.

<sup>181</sup> See the work of scholars *ibid* n177.

<sup>182</sup> MacKenzie, Donald A., *An engine, not a camera: How financial models shape markets*, Cambridge Mass and London: MIT Press, 2006.

<sup>183</sup> Mackenzie, D., and Millo Y., “Constructing a Market, Performing Theory: The Historical Sociology of a Financial Derivatives Exchange,” *American Journal of Sociology* 109 (2003): 107-145, p. 107.

have been traded in the past. As Donatella Alessandrini emphasises, the value of a derivative is derived from the trend of that value in the market.<sup>184</sup>

Alessandrini has been carrying out pioneering work on the role of derivatives in producing prices and the relationship of this with broader debates about social value. Some of her conclusions in this regard are illuminating:

‘derivatives can be seen as providing the crucial link between prices and “fundamental values” not because the latter actually exist but because they represent the way in which the market judges or perceives “fundamental values”. They turn the contestability of fundamental value into a tradable commodity... Derivatives are therefore significant because they point clearly to the fact that while value is contested, its measurement is nonetheless always instituted’.<sup>185</sup>

#### v. Implications

The financialisation of commodity futures trading introduces radical doubt about the veracity of many of the foundational assumptions upon which mainstream market pricing theory is based. Neoclassical theories of price formation do not register the fact that commodity prices are being ‘discovered’ by a set of boundedly-rational, informationally-challenged market actors who are operating in volatile, liberalised global markets in which it is cheaper, and less risky, to follow the herd. This theory makes no account for the fact that financial traders are using instruments that contribute to the creation of the value that they purport to measure. Taken as a whole, the arguments outlined above evidence serious limits to the adequacy of the economic theory used to negate a possible causal relationship between food commodity speculation and the events of the global food crisis.

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<sup>184</sup> Alessandrini, Donatella, “Financial Derivatives and the challenge of performance,” p. 157.

<sup>185</sup> Alessandrini, Donatella, “Regulating Financial Derivatives? Risks, Contested Values, and Uncertain Futures,” *Social & Legal Studies* 20, no. 4 (2011): 441-462, p. 450.

Importantly, however, closer scrutiny of contemporary market practice also brings to light flaws in the accounts of campaigners and NGOs who focus on the ‘short-term’ or ‘highly risky’ nature of speculative behaviour.<sup>186</sup> Index fund speculation is carried out over the long-term and provides stable, as opposed to risky returns.<sup>187</sup> Practices of ‘herding’ and algorithmic trading, while more likely to be transacted as short-term trades, are also difficult to characterise as risky or reckless — quite the opposite. Such trading strategies may now be less risky than trading based on research into fundamentals. What is more, ascribing blame to individual financial ‘speculators’ elides the fact that food commodity speculation has become an industry, involving a diverse array of practitioners many of whom are commercial actors. Above all, both camps in the debate over speculation misrepresent the dynamics of this trading behaviour in presenting it as in some way exceptional, extraordinary or irrational — be it in terms of the risks taken or in the sense of going against market ‘rationality’. Increasingly, trading speculatively and against ‘fundamental’ values is commonplace and ordinary. It is the rational way to transact in financial markets.

By examining the historical context in which futures trading has been financialised and the changes in market practice that have resulted I have illustrated critical limitations to the explanatory power of neoclassical economic theory on commodity pricing dynamics. I will now reach for a broader explanation of this shift in market dynamics by locating the origins and identifying the hallmarks of a market logic of speculation — the operation and implications of which I will trace throughout the thesis.

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<sup>186</sup> Please see Part I of this chapter on popular perceptions of food commodity speculation.

<sup>187</sup> Clapp, Jennifer, *Food*, Cambridge: Polity Press, 2012, p. 142.

## V. EXPLANATION

For centuries, economic behaviour among human beings in many parts of the world has been seen to exhibit a logic of what might be termed ‘accumulation’.<sup>188</sup> People in markets tend to exhibit the characteristics of *homo economicus* — they seek to maximise their own self-interest and to make profit when engaging in market exchange. Now widely naturalised, this behaviour is commonly assumed to be a function of basic human proclivities. However, as the work of many scholars, including Marxists, institutional sociologists, economic anthropologists and SSF theorists has demonstrated, there is nothing necessary or natural about this behaviour. Instead, this body of work makes clear that the characteristics of *homo economicus* are socially constructed — conditioned through an array of different forces inhering in centuries of capitalist modes of market exchange.

In recent years, numerous analysts have suggested that this now pervasive economic logic based on individual utility maximisation has morphed into something more extreme. Scholars analysing both trends and crises have made reference to the operation of a ‘speculative’ market logic. As Olivier De Schutter told *The Independent* in March 2012, ‘[t]he result of this financialisation of the commodities market is that the prices of the products respond increasingly to a purely speculative logic’.<sup>189</sup> A similar phenomenon is intimated by Saskia Sassen, who, describing global finance, argues that ‘its organizing logic has evolved into a relentless push for hyperprofits and a need to develop instruments that enable it to expand the range of what can be financialized’.<sup>190</sup> It is my argument that the events in global food commodity markets in 2007-08 and beyond are, at least in part, attributable to the emergence of this speculative market logic and to related changes in pricing dynamics

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<sup>188</sup> It is important to reinforce that this is not a universal trend. As Marcel Mauss and other scholars in the field of economic anthropology have discovered, some societies exhibit radically different economic behaviours in the field of exchange. See Mauss, Marcel, and Wilfred Douglas Halls, *The gift: Forms and functions of exchange in archaic societies*, New York: WW Norton & Company, 1954.

<sup>189</sup> Livingstone, Grace, “The real hunger games: How banks gamble on food prices – and the poor lose out,” *The Independent*, Last accessed 1<sup>st</sup> April 2012.

<sup>190</sup> Sassen, Saskia, *Expulsions*, Cambridge Mass: Harvard University Press, 2014, p. 4.



for food commodities. In order to make this argument convincingly, it is necessary to attend to three critical questions. First, how are we to explain the rise of speculation as a means of profit making? Second, how can ‘speculative logic’ be differentiated from the logic of accumulation — from the logic of *homo economicus*? And third, how can speculative behaviours be convincingly described as a logic of the marketplace?

I have already discussed the history of the financialisation of commodity futures markets and established that financialisation has changed the institutional environments in which market actors are embedded. However, this does not tell us what informed processes of financialisation in the first instance. Nor does it entirely account for the dramatic surge in levels of speculative activity in the years leading up to the global food crisis. Explaining this requires paying attention to the policy context in which speculative trading practices came to be enabled, and even celebrated: enter neoliberalism.

#### i. Neoliberalism and the logic of speculation

While the precise connotations of ‘neoliberalism’ are by no means uncontested, I use the term to refer to the political programme advanced by governments in the West since the 1980s that has led to the privatisation, liberalisation, and ‘deregulation’ of markets based on the conviction that both the freedom of the individual and the good of society are best advanced through efficient markets left to operate without government interference.<sup>191</sup> The catalogue of actors, influences, organisations, and events that combined to produce this distinctive programme is now very familiar: Jevons,<sup>192</sup> Walras,<sup>193</sup> and Marshall<sup>194</sup> — market equilibrium, utility, and value;

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<sup>191</sup> For a discussion of some of the different perspectives on the phenomenon of neoliberalism see Harvey, A *Brief History of Neoliberalism*, Oxford University Press, 2005.

<sup>192</sup> Stanley, Jevons William, *Theory of Political Economy*, London and New York: Macmillan, 1871.

<sup>193</sup> Walras, Léon, *Elements of Pure Economics*, London: Routledge, 16<sup>th</sup> October 2013.

<sup>194</sup> Marshall, Alfred, *Principles of Economics*, New York: Cosimo Classics, abridged edition, 2010.

Menger and Mises and methodological individualism;<sup>195</sup> Adam Smith, economic liberalism, and the ‘invisible hand’;<sup>196</sup> Arrow and Debreu<sup>197</sup> and ‘Pareto efficiency’; Friedrich Hayek,<sup>198</sup> ‘self-regulating markets’, Mont Pelarin, and the Chicago School; Buchanan, Tullock<sup>199</sup> and Riker<sup>200</sup> and ‘rational choice theory’; the 1973 oil crisis, the collapse of Bretton Woods, and the fall of Keynesianism; Milton Friedman,<sup>201</sup> monetarism, and monopoly; Eugene Fama, the ‘efficient market hypothesis’ and ‘informational efficiency’;<sup>202</sup> Reagan, Thatcher, Clinton, Blair, Obama, Cameron, etc.<sup>203</sup>

Using a broad conceptual brush, it is possible to connect with the neoliberal policy agenda a) the wider market conditions in which grain prices became more volatile ; b) the rise of a specialised financial market structure within which financial actors were increasingly incentivised to speculate ; c) the emergence of a more speculative logic, or mode of engagement with markets, that transcends financial markets ; and d) the hegemony of a form of economic analysis that has impeded understanding of the new dynamics occasioned under the neoliberal policy agenda. These themes will be explored throughout this thesis. For now, however, I want to focus on c) — the emergence as part of the neoliberal turn of a speculative mode of engagement, or a more speculative logic, as a result of the neoliberal policy climate. I will now gesture to some of the critical shifts pursued under neoliberal policies that

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<sup>195</sup> Economists of the Austrian tradition believed in the existence of unalterable economic laws centred on the individual. See, for example, Von Mises, Ludwig, *Human Action: A Treatise on Economics*, 1949.

<sup>196</sup> Smith, Adam, *The wealth of nations*, vol. 3, ed. Andrew S. Skinner, New York: Prometheus Books, 1991,

<sup>197</sup> Arrow, Kenneth, and Gerard Debreu, “Existence of an Equilibrium for a Competitive Economy,” *Econometrica* 22 (1954).

<sup>198</sup> Hayek, Friedrich August, *Individualism and Economic Order*, Chicago: The University of Chicago Press, 1948;

Hayek, Friedrich August, “The use of knowledge in society,” *The American economic review* (1945): 519-530.

<sup>199</sup> Buchanan, J.M., and G. Tullock, *The Calculus of Consent*, vol. 3, Ann Arbor: University of Michigan Press, 1962.

<sup>200</sup> Riker, W.H., *The theory of political coalitions*, New Haven: Yale University Press, 1962.

<sup>201</sup> Friedman, Milton, “The Role of Monetary Policy,” address to the American Economic Association, 29<sup>th</sup> December 1967 in *The Essence of Friedman*, Stanford, CA: Hoover Institution, 1986; Friedman, Milton, and Anna Jacobson Schwartz, *A Monetary History of the United States: 1867-1960*, Princeton University Press, 2008, first published 1963.

<sup>202</sup> Fama, Eugene F., “Efficient Capital Markets: A Review Of Theory And Empirical Work,” *The Journal of Finance* 25, no. 2, (1970): 383-417.

<sup>203</sup> For more elaboration of the policies of neoliberalism as it is perceived by critical academics, please see Harvey, David, *A Brief History of Neoliberalism*, Oxford University Press, 2005; Saad-Filho, Alfredo, and Deborah Johnston (Eds), *Neoliberalism: A Critical Reader*, Chicago: Pluto Press, 2005.

have made engaging in speculation the logical thing to do within modern financial markets.

First of all, through processes of liberalisation and deregulation, neoliberal policies unleashed the essential conditions for speculation by creating a global market in which capital could move. Previously, when capital was held captive and exchange rates were fixed, the opportunities to profit from shifts in value were far more limited. As well as creating an incentive to speculate on market pricing movements, this also created a disincentive to engage in productive forms of activity as commercial industries and manufacture were threatened by the prospect of new species of ‘financial risk’. The risks of engaging in productive activity — particularly agricultural production — were further exacerbated by the dismantling of centralised institutions designed to stabilise prices, such as buffer stocks and marketing boards. However, this risk was supposed to be mitigated by the development of a new range of financial products — derivatives — which were positioned as a solution to the risk-management problems faced by commercial hedgers. In fact, it was the purported use of commodity derivatives for hedging purposes that legitimated the increased involvement of financial actors in commodity futures markets. Alongside the claim of finance to have ‘mastered risk’ via mathematical formulas, the need to provide liquidity to hedgers was leveraged by the financial services industry to persuade legislators, regulators, and the judiciary to legalise trade in OTC derivatives. The bespoke nature of these instruments further enabled financial actors — banks, hedge funds and individual traders — to engage in more speculative and increasingly risky forms of trading as they could back up myriad financial risks using derivatives. They could balance their investment portfolios on a macro level. This assisted financial institutions in meeting the requirements of new principles and guidelines for their ‘self-regulation’, such as capital adequacy standards. The trust in industry self-regulation under neoliberalism and the culture of incentives that resulted further contributed to a rise in speculative trading by rewarding successful traders with large bonuses.

On a broader macro-economic level, the active pursuit of social goals was replaced by a focus on monetary stability and the promotion of market efficiency as the principal objective of economic policy under the neoliberal policy agenda. Financial markets play a vital role in enabling this economic vision as they are deemed to be efficient at processing information into prices. Thus, speculative practices condemned as socially harmful in prior eras were seen to comprise a new measure of social utility. Speculation went ‘from villainous to venerable’<sup>204</sup> — to use Ann Berg’s characterisation. Simply by transacting in financial markets financial actors were serving the cause of ‘informational efficiency’. As David Harvey has argued, under neoliberalism, ‘market exchange is an ethic in itself, capable of acting as a guide for all human action’.<sup>205</sup> Critically, however, whilst forming a key part of the neoliberal social vision, such a vision is not operative in the minds of market actors themselves. Indeed, following the prescriptions of classical economic thought, the neoliberal position is that there is no need for market participants to contemplate the broader economic and social implications of their transactions. This is entrusted to the invisible hand of the market. Whilst ostensibly in the service of market efficiency, the resulting mode of transactional behaviour actually appears to correspond more to the layman’s definition of efficiency: that of attempting to achieve maximum productivity, or profitability, with minimum wasted effort or expense.

Taken together, I argue, these shifts in economic policy, modes of regulation, and social attitudes towards speculation have served to make speculating more attractive than investing in other more productive forms of economic activity. They have made speculating on fluctuating values, rather than trading based on perceptions of fundamental ones, increasingly the rational thing to do. While it may be carried out via an array of different kinds of trading or investment strategy — index fund investment, short-term speculative trading, arbitrage, or algorithmic trading — under neoliberalism, financial speculation is not extraordinary. It is the norm. More than that, it is normative — that is to say, it has led to a way of behaving in financial

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<sup>204</sup> Berg, Ann, “The Rise of Commodity Speculation: From Villainous to Venerable”.

<sup>205</sup> Harvey, David, *A Brief History of Neoliberalism*, p. 23.

markets that has become increasingly prescriptive. Increasingly, financial traders feel that speculating is what they should or even must do.

ii. Hallmarks of speculative logic

I am by no means alone in arguing that economic behaviours have fundamentally shifted under the influence of the neoliberal policy agenda.<sup>206</sup> Thus, for example, in a series of lectures on the ‘operative thought’ of neoliberalism, Michel Feher explores what he contends is a fundamental shift in the ‘human condition’ to what he calls the ‘neoliberal condition’ — a consciousness that he argues is now endemic amongst the populations of many Western states.<sup>207</sup> Wendy Brown, drawing on Feher’s work and that of Michel Foucault, argues that neoliberalism itself must be understood as ‘a normative order of reason developed over three decades into a widely and deeply disseminated governing rationality’ — a rationality that ‘transmogrifies every human domain and endeavour, along with humans themselves, according to a specific image of the economic’.<sup>208</sup>

What both Feher and Brown argue is that under neoliberalism, not only is humanity ‘only and everywhere *homo economicus*’<sup>209</sup> — but that the traits of *homo economicus* have changed, such that people exhibit increasingly ‘financialised’ behaviours. As Brown puts it, humans are now ‘human capital’, tasked with improving and leveraging their competitive positioning and enhancing their (monetary and non-monetary) portfolio value across all of their endeavours and ventures.<sup>210</sup> The result, as Foucault intimated in his work on biopolitics, and as Brown develops in her book, *Undoing the Demos*, is that the political consciousness of both the state and

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<sup>206</sup> Lapavistas, Costas, *Profiting Without Producing: How Finance Exploits Us All*, London and New York: Verso Books, 2014; Epstein, Gerald A. (Ed), *Financialization and the world economy*.

<sup>207</sup> Feher, Michel, “The Age Of Appreciation: Lectures on the Neoliberal Condition,” in *Operative Thought: An annual lecture series on the Political Practices of Ideas*, Goldsmiths University, London, Podcasts available at <http://www.gold.ac.uk/visual-cultures/guest-lectures/> Last accessed 10<sup>th</sup> March 2015.

<sup>208</sup> Brown, Wendy, *Undoing the Demos*, pp. 9-10.

<sup>209</sup> *Ibid*, p. 10.

<sup>210</sup> *Ibid*.

individual human beings is being formatted through neoliberal governance into a subjectivity that ‘economizes the social’ or regulates society in the interests of the market.<sup>211</sup> This forms a central part of my thesis — directing us as it does to the idea that current approaches to the regulation of food speculation fail to take into account the role of law constructing market subjectivities. In Chapters Four and Five I will consider the way legal entitlements help to lay a basis for *homo economicus* and market society. At present, however, I want to focus on what distinguishes the new mode of economic rationality discussed by Feher and Brown, and how this relates to what I term ‘speculative logic’.

If the logic of *homo economicus* is constructed through capitalist modes of market exchange, it stands to reason that changes in capitalist modes of market exchange would produce an altered economic logic. As Costas Lapavistas has argued, through processes of financialisation — processes themselves conditioned by neoliberalism — the monetary framework of capitalist accumulation has radically altered since the 1970s, both internationally and domestically.<sup>212</sup> There has been a fundamental shift away from production-focused capital accumulation towards financial forms of accumulation. Finance is no longer in the service of productive activities that make money; financial activities are, increasingly, how money is made. There are, however, important differences in the way money is made through financial activity. This takes us back to the issue of defining speculation, discussed at the start of this chapter. As Lapavistas emphasises, ‘[p]roduction creates value; its motive is profit (surplus value) deriving from the exploitation of labour; its aim is the accumulation of capital. Circulation does not create value; it results in profits, but they derive mostly — though not exclusively — from redistributing surplus value’.<sup>213</sup> While the ultimate objective remains the same — the pursuit of profit — the logic of accumulation is different when one is trying to ‘profit without producing’ — to use Lapavistas’s catch-all phrase.<sup>214</sup> Money is principally produced through ‘speculative

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<sup>211</sup> Brown, Wendy, *Undoing the demos*, p. 62; Foucault, Michel, *Birth of Biopolitics*, p. 145.

<sup>212</sup> Lapavistas, Costas, *Profiting Without Producing: How Finance Exploits Us All*, p. 3.

<sup>213</sup> *Ibid*, p. 4.

<sup>214</sup> Lapavistas, Costas, *Profiting Without Producing: How Finance Exploits Us All*.

multiplications’ — through the creative use and development of financial instruments that profitably liquidate, redistribute, and circulate capital, like securities; instruments and trading strategies that enable market actors to profit from anticipating how capital will move and impact on market values, like derivatives; and the provision of capital and risk management services, such as investment schemes, hedging tools, and investment advice.<sup>215</sup> This is increasingly how money is made in centres of global finances, like New York and the City of London. What, then, can market actors take to be true in economies in which the mode of accumulation shifts from one centred on the production of surplus value to one centred on the profitable circulation of surplus value? And further, what forms of reasoning might ensue? Without attempting to be exhaustive, I would like to suggest a number of possibilities.

First, there are now two economies — one in the production and circulation of commodities, and the other in financial assets that derive their value from commodities or redistribute value accumulated from the production of commodities. Profit can be made in both; however, profiting *without producing* is typically less costly and less time-consuming. Second, the pricing of assets and the movement of capital in the financial economy impacts on values in the underlying productive economy. This presents a risk — and thereby a disincentive — to productive modes of accumulation in which a stable revenue stream is desirable, or in which an upfront investment must be made that takes time to produce value. Third, the need to manage risks arising from capital movements is a market opportunity: risk management can be a profitable industry, which incentivises instruments to manage different types of financial risk. If risks can be managed, more risks can be taken, making speculative ‘bets’ on the movement of capital increasingly safe and profitable. Fourth, capital in the financial economy is circulated by the financial services industry. Bankers and financial traders advise on and transact capital movements in accordance with predictions about future market values. What they are predicting, in the pricing of financial assets, is why and when other bankers and financial traders are going to buy

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<sup>215</sup> In Marxist terms, it is the shift from accumulation from money to commodity-value to more money (M-C-M) to simply money to more money (M-M).

and sell assets and move capital. Thus, while many financial assets are purportedly linked to underlying commodities, they are valued in an intra-industry dynamic. The ‘real’ values of commodities may become less important than the values assigned to financial assets by other financial actors. Increasingly, decisions informing the circulation of capital and the pricing of financial assets are dissociated from the needs of the productive economy. Fifth, capital must be liquid and there must be a degree of market volatility in order to ensure ongoing profitability from the circulation of capital.

Taken together, I argue, speculative market logic is distinguished from the logic of the pre-financialised-era *homo economicus*, not by the postulated objectives of economic activity but by the preferred means of meeting those objectives. *Homo speculativus* — as we might call him — displays a marked preference for making and managing future profits through financial instruments; and for speculating on capital movements and the values of existing assets, rather than producing things. He is further distinguished by a tendency to value assets according to predictions on how other financial actors will value them, as opposed to attempting to discover their ‘true’ values; by a mode of transacting that is not only not in the service of the productive economy, but is instead dissociated from the needs and operations of that economy; and by drive towards ensuring the existence of future modes of profitable accumulation through financial instruments that facilitate the circulation of capital and speculations on market movements.

### iii. A market logic of speculation?

In terms of how this could have evolved from something that was logical to do in the marketplace to a shared rationale that could be accurately described as a logic of the market place, and even a dominant logic, it is instructive to consider the work of scholars associated with the Science and Technology Studies. Callon argues that



market actors can be ‘formatted’ into acting a certain way.<sup>216</sup> Over time, through processes of institutionalisation, knowledge production, behaviour legitimation and especially performativity,<sup>217</sup> there may emerge a socially incentivised market preference for short-term profit realisation and, with that, a prescription for how to enter into economic transactions. Market actors may be swept up into a trading culture in which successful trading is speculative trading; those who successfully transact risky trades are rewarded with big bonuses; new instruments and incentives to trade speculatively proliferate; every risky trade appears capable of being counterbalanced with a hedge; models and technologies that transcend human capacities for economic calculation start to structure market movements into conformity; and it becomes increasingly unprofitable to follow fundamentals. Eventually, market actors are no longer freely choosing to engage with markets in a mode of speculative acquisition, they are cognitively structured into conformity. However, it goes beyond this. This behaviour and the instruments developed to further enable it — legitimated by a shift in the social toleration of speculation — also impact on the production of values, on prices. Those speculating on shifts in market value are not just individual impartial observers taking positions — or placing ‘bets’ — about fundamentals. They become active agents of price formation collectively manifesting behaviours that they have been conditioned to engage in, and reconditioning their ‘ecologies’ as a result. Under this reappraisal, speculation constitutes a socially conditioned, cumulative force of price manipulation in the market for food commodities.

As a wise man once said: ‘people know what they do; frequently they know why they do what they do; but what they don’t know is what what they do does’.<sup>218</sup> What this critical mass of financial speculators appear to have done is to have remade

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<sup>216</sup> Callon M. and F. Muniesa, “Economic Markets as Calculative Collective Devices,” *Organization Studies* 26, no. 8 (2005), p. 1229.

<sup>217</sup> According to Callon, to say that something is ‘performative’ is to argue that it is ‘actively engaged in the constitution of the reality that it describes’. Thus, financial traders purporting to trade based on fundamental values are actively engaged in producing those values. See further Callon, Michel, “What does it mean to say that economics is performative?” accessed online at <halshs.archives-ouvertes.fr> Last accessed 16<sup>th</sup> August 2015, p. 10.

<sup>218</sup> Foucault, Michel, *Madness and Civilization: A History of Insanity in the Age of Reason*, London: Routledge, 2001.

the world that made them.<sup>219</sup> The implications of this for food prices have been discussed at length in this chapter. Financialisation means that the price of food is now vulnerable to influence by financial actors acting according to a diverse range of motives that have nothing whatsoever to do with food. Beyond the problematic tendencies in the global food system I identified in Chapter One — that food has come to be understood first and foremost as a commodity, by reference to its exchange value — food as a financial commodity is increasingly traded by those who have no conception that what they are trading is food at all. As Frederick Kaufman reminds us, ‘[o]ur age has fallen in love with the virtual, with the derivative, with the indexical. But when food becomes something virtual, it is no longer food’.<sup>220</sup>

## CONCLUSION

In this chapter, I have sought to elucidate the phenomenon of food commodity speculation, as well as quell some of the residual anxieties over its causal significance in the context of the global food crisis. My aim has been to shift some of the doubt surrounding the causal significance of food commodity speculation onto the neoclassical theory commonly invoked to reject the argument that speculative activity contributed to recent price volatility. While finding much of the evidence put forth by campaigners persuasive, I argued that they erred both in their focus on individual ‘speculators’, and in their identification of ‘risky’ ‘speculative’ practices as the ones conditioning price volatility. Instead, I suggested, the problem is both more structural and more societal. Those labelled ‘speculators’ are but the visible tip of the iceberg; emblematic of a paradigmatic shift in mode of capital accumulation that is dependent on this manner of market behaviour. I will now move on to consider the implications

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<sup>219</sup> Wacquant, Loïc, *Pierre Bourdieu and Democratic Politics: The Mystery of Ministry*, New York: Wiley, 2005.

<sup>220</sup> Frederick Kaufman speaking at “High Level Thematic Debate on Addressing Excessive Price Volatility in Food and Related Financial and Commercial Markets,” United Nations: New York, 11<sup>th</sup> April 2012, <http://www.un.org/News/Press/docs/2012/ga11223.doc.htm> Last accessed 17<sup>th</sup> April 2012.

of this for the regulatory initiatives developed to respond to concerns about excessive speculation in commodity derivative markets.

## Chapter Three

### Regulation

Catalysed by recognition of the role that derivatives played in aggravating the global financial crisis, in 2009, G20 member states committed to an overhaul of the regulatory structures governing the global financial system.<sup>1</sup> A key target has been to improve regulatory oversight of the market in OTC derivatives — the swaps market — in which speculative trading practices are understood to have proliferated. In pursuit of this goal, governments in the US and in Europe have devised new regulations for the OTC trading space. Some of the provisions are explicitly aimed at addressing ‘excessive’ levels of speculation in commodity derivative markets. NGOs which have fought to gain recognition of the role of food commodity speculation in the causation of the price spikes in 2007-08 and 2010-11 have welcomed the measures.<sup>2</sup> Influential figures, including Olivier de Schutter, former Special Rapporteur on the Right to Food, have argued that other governments should follow suit and regulate to protect food prices from speculative practices.<sup>3</sup>

The aim of this chapter is to provide an overview of the new regulations and to assess the potential that they hold in terms of shielding commodity prices from speculative interference. Part I will recall the key events comprising the global financial crisis and will note how concerns about the role that derivatives played in bringing it about have motivated regulatory reform. Part II will provide a summary of

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<sup>1</sup> See “G20 Leaders Statement: The Pittsburgh Summit,” 24-25<sup>th</sup> September 2009, Pittsburgh, *Preamble* <http://www.g20.utoronto.ca/2009/2009communique0925.html> Last accessed 1<sup>st</sup> March 2014.

<sup>2</sup> See WDM, “Broken Markets: How financial market regulation can help prevent another global food crisis,” Report, September, 2011.

<sup>3</sup> De Schutter, Olivier, “Food crises: five priorities for the G20,” *The Guardian*, 16<sup>th</sup> June 2011.

the new regulatory measures installed in US and in Europe, foregrounding those provisions that campaigners hope will address the phenomenon of food commodity speculation. Part III will then discuss a number of challenges that have emerged as efforts to implement the regulations have gotten under way. Moving on to engage in a critical analysis of the provisions, Part IV will expose a number of limitations of the regulatory project for the project of tackling food commodity speculation. I will argue that the new regulations are flawed on two principal grounds. Firstly, they replicate a problematic ‘neoliberal-neoclassical’ understanding of how financial markets function that fails to account for the way practices of food commodity speculation could have impacted on spot prices in the first place. Secondly, the regulations largely attempt to reinstate regulatory measures used to tackle speculation in commodity futures prior to the creation of the OTC market in the 1990s. Though once effective, reinstating these measures now fails to account for the fact that something was produced by processes of deregulation that is not so easily contained. In Part V, I will expand the analysis beyond the potential of the existing reforms and suggest that there are limits to what financial regulation as a broader endeavour can hope to achieve in terms of tackling the speculative market logic identified at the end of Chapter Two.

## I. THE GLOBAL FINANCIAL CRISIS

The global financial crisis of 2007-08 is widely recognised to be the worst financial crisis since the Great Depression of the 1930s. Like its predecessor, its origins are traced to the US. A glut of credit amassed as a result of large inflows of foreign funds in the aftermath of the Asian financial crisis in 1997-98 encouraged US banks to engage in increasingly risky lending practices in the years leading up to the crash. Financial institutions began to extend dubiously collateralised loans to customers whom they would not formerly have considered eligible for credit. This encouraged a spate of ‘sub-prime’ mortgage lending and eventually culminated in a real estate bubble. A further consequence of this credit boom was that financial

investors were seeking profitable vehicles for investment at this time. Innovators in the financial services industry seized upon the US housing boom as an opportunity to develop new financial products. The result was a highly lucrative market in financial derivatives such as mortgage-backed securities (MBS) and collateralised debt obligations (CDO). These financial instruments pooled the risks associated with the mortgages and loans on offer, repackaged them, and marketed them as an attractive vehicle for investment. A further layer of derivatives was added to this financial mille-feuille in the form of the Credit Default Swap (CDS). CDS instruments allowed institutions buying MBSs and CDOs to insure themselves against the risk of default by transacting to 'swap' their outstanding credit risks with those of other institutions.

Whilst these instruments purported to lower financial risk, with the benefit of hindsight it has become apparent that in fact they were aggravating overall levels of risk in the global economy. The threat that this complex web of debts posed to the stability of the global financial system was grossly misunderstood. When the bottom fell out of the US housing market in 2006 and scores of lenders began to default on their loans, the values of mortgage-backed securities plummeted rapidly. Thousands of lenders and investors then sought to claim what was owed to them only to find that many financial entities did not have sufficient funds conserved to pay them. Instead of keeping adequate capital in reserve, many banks and financial institutions had instead re-invested this capital in more derivatives. The financial traffic jam that ensued ultimately triggered a global liquidity crisis which resulted in numerous bankruptcies of financial institutions in countries throughout the world. A mass bailout of the banks was undertaken by national governments in an effort to prevent the financial system from caving in on itself. The effects of the global financial crisis are still being felt to this day and many countries continue to suffer the consequences of a global recession.<sup>4</sup>

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<sup>4</sup> "Recession 2013? IMF Warns That Global Economic Slowdown Is Getting Worse," *The Huffington Post*, 9<sup>th</sup> October 2013, [http://www.huffingtonpost.com/2012/10/08/recession-2013-imf\\_n\\_1950004.html](http://www.huffingtonpost.com/2012/10/08/recession-2013-imf_n_1950004.html) Last accessed 5<sup>th</sup> March 2013.

It is widely acknowledged that the global financial crisis was born of a catalogue of different factors. However, as the post-mortem on causation has been carried out, derivatives have been increasingly implicated in aggravating the turmoil.<sup>5</sup> Derivative instruments are seen to have greatly exacerbated conditions of systemic risk in the global economy and have been lambasted for causing a ‘chain reaction of defaults’ amongst systemically important institutions.<sup>6</sup> The fact that many such instruments were being traded OTC — and thereby outside of the ambit of regulatory supervision — is now seen as a critical failing of financial governance. The threat that derivatives are now seen to pose to financial stability has of itself been a strong motivation for regulatory intervention. At the same time, there has also been significant pressure on regulators to tackle the culture of speculation seen to have grown up alongside the market in derivatives trading. Anger at the use of public funds to bail out banks has been channelled towards speculators who now stand accused of having created social havoc by playing ‘Wall Street roulette’ at the expense of the taxpayer.<sup>7</sup> The common narrative that speculators have socialised risk while privatising profit has been taken up by leading political figures, including former Brazilian President Luiz Inacio Lula da Silva, who has openly chastised ‘the irresponsibility of speculators who have transformed the world into a gigantic casino’.<sup>8</sup>

It is against this backdrop of financial chaos that the motivation to strengthen the regulation of global finance has formed. In September 2009 world leaders met at the G20 forum in Pittsburgh and sought to ‘turn the page on an era of irresponsibility’, agreeing to develop regulations to stabilise the financial system in order to meet the

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<sup>5</sup> OECD, “Financial Market Highlights: The Recent Financial Market Turmoil, Contagion Risks and Policy Responses,” OECD, 2008, <http://www.oecd.org/finance/financial-markets/40850026.pdf> Last accessed 5<sup>th</sup> April 2013.

<sup>6</sup> Ariail, Laurin C., “The Impact of Dodd-Frank on End-Users Hedging Commercial Risk in Over-the-Counter Derivatives Markets,” *North Carolina Banking Institute Journal* 15, no. 175 (2011) p. 179.

<sup>7</sup> Kaufman, Frederick, “Want to stop banks gambling on food prices? Try closing the casino,” *The Guardian*, 10<sup>th</sup> May 2012.

<sup>8</sup> Henderson, Hazel, “G-20: Reform The Global Casino,” *Inter Presse Service*, 21<sup>st</sup> September 2009, St. Augustine, Florida, <http://www.ipsnews.net/2009/09/g-20-reform-the-global-casino/> Last accessed 26<sup>th</sup> February 2013.

needs of the 21<sup>st</sup> century global economy.<sup>9</sup> Wide ranging reforms to multiple areas of financial services supervision including new guidance for the valuation of securities,<sup>10</sup> an overhaul of global accounting regulations,<sup>11</sup> revision of the standards for credit rating agencies,<sup>12</sup> and greater capital adequacy requirements for banks<sup>13</sup> have since been agreed. This chapter will not attempt to address the totality of these reforms. Instead, the forthcoming analysis will focus specifically on regulatory interventions in the OTC trading arena that campaigners hope will address the phenomenon of food commodity speculation.

## II. REGULATORY INITIATIVES

Among the commitments made at the G20 Summit was a specific pledge to improve the regulation, functioning, and transparency of financial and commodity markets in order to ‘address excessive commodity price volatility’.<sup>14</sup> G20 leaders undertook to ensure that ‘where appropriate’ all standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms and cleared through central counterparties by end-2012 at the latest.<sup>15</sup> Whilst all of the member states have committed to enact this reform, the US and Europe have been leading the charge. Owing to the size of the US market and the speed at which it has enacted its reforms, it is expected that the US provisions will act as a blue print for other countries in their

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<sup>9</sup> See “G20 Leaders Statement: The Pittsburgh Summit,” 24-25<sup>th</sup> September 2009, Pittsburgh, *Preamble* <http://www.g20.utoronto.ca/2009/2009communique0925.html> Last accessed 1<sup>st</sup> March 2014.

<sup>10</sup> IOSCO, “Objectives and Principles of Securities Regulation,” June 2010, <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD323.pdf> Last accessed 1<sup>st</sup> March 2014.

<sup>11</sup> For more information see <http://www.ifrs.org/Features/Pages/2013-IFRS-Red-Book-now-available.aspx> Last accessed 1<sup>st</sup> March 2014.

<sup>12</sup> See Europe: Regulation (EC) No 1060/2009 of the European Parliament and of the Council on credit rating agencies [http://ec.europa.eu/internal\\_market/rating-agencies/index\\_en.htm](http://ec.europa.eu/internal_market/rating-agencies/index_en.htm) Last accessed 1<sup>st</sup> March 2014; US: The Dodd-Frank Wall Street Reform and Consumer Protection Act, Title IX, Subtitle C — Improvements to the Regulation of Credit Rating Agencies, §§ 931-939H.

<sup>13</sup> See Basel Committee on Banking Supervision, *Basel III: A global regulatory framework for more resilient banks and banking systems*, Bank for International Settlements, 2011; Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, Bank for International Settlements, 2013.

<sup>14</sup> “G20 Leaders Statement: The Pittsburgh Summit,” 24-25<sup>th</sup> September 2009, Pittsburgh, *Preamble* <http://www.g20.utoronto.ca/2009/2009communique0925.html> Last accessed 1<sup>st</sup> March 2014, at para. 12.

<sup>15</sup> *Ibid*, para. 13.



efforts to develop regulations.<sup>16</sup> With an estimated 43 per cent of the global market in OTC derivatives traded from London,<sup>17</sup> the European reforms are also of critical significance. The next section will offer an analysis of the two regimes.

i. US and European Reforms: Dodd-Frank, EMIR and MiFID II

In the US, the provisions giving effect to the G20 commitment on OTC derivatives have been merged with the broader project of financial sector reform and consolidated into a single piece of legislation: The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank).<sup>18</sup> The reforms to the trading of derivatives are enacted in Title VII of the Act, entitled 'Wall Street Transparency and Accountability'. In Europe the G20 commitment will be met by two separate instruments: the European Market Infrastructure Regulation (EMIR)<sup>19</sup> and the Markets in Financial Instruments Directive (MiFID II).<sup>20</sup>

In broad terms, the overall ambit of both these sets of reforms is to construct a framework of rules to ensure that the trade in OTC derivatives is more effectively monitored, better collateralised and poses less of a threat to the stability of the global financial system. It is important to emphasise that neither the text of Dodd-Frank nor of EMIR-MiFID II comprises the totality of provisions to be implemented in their respective jurisdictions. National and regional regulatory agencies have been tasked with refining the rules and elaborating technical standards to give substantive effect to the broader objectives outlined in the framework agreements. In the US this falls to

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<sup>16</sup> Several countries have indicated that they are waiting for regulatory provisions in the US and in Europe to be refined before they finalise their own regimes of reform. See Financial Stability Board, "OTC Derivatives Market Reforms: Third Progress Report on Implementation," 15<sup>th</sup> June 2012, p. 1, [http://www.financialstabilityboard.org/list/fsb\\_publications/tid\\_149/index.htm](http://www.financialstabilityboard.org/list/fsb_publications/tid_149/index.htm) Last accessed 3<sup>rd</sup> April 2013.

<sup>17</sup> Jones, Lynton, *City Of New London, Current Issues Affecting The OTC Derivatives Market And Its Importance to London*, 2009.

<sup>18</sup> The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 Pub.L. 111–203, H.R. 4173 hereafter 'Dodd-Frank'

<sup>19</sup> The Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties (CCPs) and trade repositories (TRs) Hereafter 'EMIR'.

<sup>20</sup> Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU Text with EEA relevance.

either the Commodity Futures Trading Commission (CFTC) or the Securities and Exchange Commission (SEC) depending on how a given instrument is classified.<sup>21</sup> In Europe, the task has been allocated to the European Securities and Markets Authority (ESMA), a new regulatory body established to oversee financial stability and investment practices in the EU.<sup>22</sup> In effect, this means that the regulations will come into force in stages over a number of years. Thus far, the US rules have been finalised significantly in advance of the EU measures.

ii. Outline of key provisions

a. Central counterparty clearing

The consensus reached in the aftermath of the global financial crisis was that it was the bilateral character of OTC trades that was particularly problematic. Accordingly, the centrepiece of the OTC reforms is a requirement that trades go through ‘centralised clearing’. Under this process, instead of trading bilaterally with one another, the counterparty of each trader taking a position in a derivative market will ultimately be an institution known as a clearing house — labelled ‘CCPs’ under EMIR and ‘DCOs’ under Dodd-Frank.<sup>23</sup> A central counterparty is an entity that ‘interposes itself’, in one or more markets, between counterparties to the contracts traded, becoming ‘the buyer to every seller and the seller to every buyer’ and thereby guaranteeing the performance of contracts.<sup>24</sup> New clearing houses attached to futures exchanges including the Chicago Mercantile Exchange, the NASDAQ stock market in the US, and NYSE and LIFFE in Europe have been established to fulfil this purpose.

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<sup>21</sup> The CFTC is responsible for finalising the rules on the trade of the vast majority of derivative instruments, and the SEC is responsible for a smaller category of derivatives based on securities.

<sup>22</sup> European Securities Market Authority (ESMA), “Draft technical standards under the Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC Derivatives, CCPs and Trade Repositories,” ESMA/2012/600, 27<sup>th</sup> September 2012.

<sup>23</sup> See Dodd-Frank Sec.723, Clearing and EMIR Article 4(1).

<sup>24</sup> European Central Bank/Eurosystem, “Glossary of Terms Related to Payment, Clearing and Settlement Systems,” December 2009, p. 4.

In terms of how central clearing is intended to mitigate the risks of bilateral trading, this is accomplished in a number of ways. Firstly, centralised clearing houses are directly regulated by the CFTC and SEC, in the case of the US, and by ESMA in Europe. Secondly, these organisations are required to submit OTC transactions that they wish to clear to the relevant regulator, which will then determine whether the instruments should be subject to mandatory clearing taking into account factors relating to notional exposures, liquidity, pricing data and the effect that clearing might have on systemic risk. Categories of derivatives that are subject to the mandatory clearing requirements must also be transacted on a regulated trading arena: a futures exchange, a swap-execution facility (SEF), a registered electronic trading platform, or an organised trading facility (OTF). Thirdly, cleared trading requires market participants to post greater margin payments than those typically stipulated under bilateral OTC trades. Whereas the execution of an OTC trade involves ‘variation’ margin — pledging a sum of money to act as a buffer against daily market movements — additional payments in the form of ‘initial’ margin are involved in centrally cleared transactions. Initial margin thereby functions as an additional source of collateral for making trades and has been described as a clearing organisation’s first line of defence against the insolvency of a market participant.<sup>25</sup>

#### b. Reporting requirements

A dominant theme in debates over the market in OTC derivatives is that they are opaque, and that this lack of transparency has impaired regulators in their efforts to monitor these markets. Key provisions under Title VII of Dodd-Frank and Article 9 of EMIR require both trading entities and central clearing organisations to report details of all derivatives contracts to the CFTC and SEC in the US, and to designated ‘trade repositories’ in the EU. Both sets of reporting requirements are broadly similar, comprising requirements to maintain daily trading records, to provide transparent pricing policies, and provide transaction data to regulators. However, EMIR is

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<sup>25</sup> Braithwaite, Joanne P., “Private Law and the Public Sector’s Central Counterparty Prescription for the Derivatives Markets,” LSE Law, Society and Economy Working Papers 2/2011, [www.lse.ac.uk/collections/law/wps/wps.htm](http://www.lse.ac.uk/collections/law/wps/wps.htm) Last accessed 1<sup>st</sup> March 2014, p. 18.

considered to be slightly more demanding as it requires reports from both parties to a transaction.<sup>26</sup> Dodd-Frank only requires reports from larger banks and financial institutions that deal in large volumes of derivatives. The overall purpose of these provisions is to give regulators more information in order that risks may be identified at an earlier stage. Reporting requirements are also intended to make the prices at which derivatives are traded more transparent.

### c. Position limits

The key measure that campaigners hope will tackle food commodity speculation is the imposition of limits restricting the number of positions that financial institutions can hold in commodity derivatives markets. Position limits place an upper limit — a quantitative ceiling — on the number of contracts other than bona fide hedging positions which an investor or combined group of investors may hold for a specific commodity. Dodd-Frank mandated the CFTC to calibrate position limits with the explicit intent to ‘diminish, eliminate, or prevent excessive speculation’.<sup>27</sup> CFTC commissioners voted in October 2012 to issue position limits on 28 commodity derivative contracts including nineteen agricultural commodities, metals, and fuels.<sup>28</sup> The position limits apply for exchange-traded futures contracts and their ‘economically equivalent’ futures, options and swaps — the OTC contracts.<sup>29</sup> The proposed rules set forth two types of speculative limits: spot-month position limits and non-spot-month position limits.<sup>30</sup> The standards vary as the spot month is the month in which a futures contract matures and becomes deliverable. Since physical delivery is

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<sup>26</sup> Article 2(1) EMIR.

<sup>27</sup> Dodd-Frank Act § 737, Stat 4173, 1620-31.

<sup>28</sup> Commodity Futures Trading Commission, “Aggregation, Position Limits for Futures and Swaps,” Proposed Rule: 17 CFR Part 151 (RIN 3038-AD82 77) Federal Register (FR 31767 // PDF Version) [http://www.cftc.gov/LawRegulation/DoddFrankAct/Rulemakings/DF\\_26\\_PosLimits/index.htm](http://www.cftc.gov/LawRegulation/DoddFrankAct/Rulemakings/DF_26_PosLimits/index.htm) Last accessed 17<sup>th</sup> February 2013 at p. 31768

<sup>29</sup> Commodity Futures Trading Commission, “Fact Sheet: Proposed Regulations on Position Limits for Derivatives,” <http://www.cftc.gov/LawRegulation/DoddFrankAct/Rulemakings/PositionLimitsforDerivatives/index.htm> Last accessed 17<sup>th</sup> June 2015.

<sup>30</sup> CFTC, “Q & A – Position Limits for Derivatives,” [http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/pl\\_150\\_qa.pdf](http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/pl_150_qa.pdf) Last accessed 17<sup>th</sup> June 2015.

required in that month, excessive positions and disorderly trading practices are thought to be particularly disruptive and the limits are therefore stricter.<sup>31</sup> The CFTC has set spot-month limits at 25 per cent of estimated deliverable supply. For non-spot-month contracts the limits will be set at 10 per cent of open interest in the first 25,000 contracts and 2.5 per cent thereafter.<sup>32</sup>

The specifics of the EU position limits regimes were still being negotiated at the time of writing. At present, the Draft Regulatory Technical Standards developed by ESMA under the auspices of MiFID II are largely identical to the US provisions, setting a limit of 25 per cent of deliverable supply in spot-month contracts.<sup>33</sup> Positions on non-spot month contracts are yet to be decided. However, there is one important difference in that Draft RTS 29, article 1(5) allows national authorities within the EU to use their discretion to set higher limits than those recommended by ESMA.<sup>34</sup> National authorities may vary the baseline by either increasing or decreasing it by up to an additional 15%. In practice this would mean that no position limit is higher or lower than 40% of deliverable supply.<sup>35</sup>

#### d. High frequency and automated trading technologies

Automated and high frequency trading technologies are widely regarded as having played a key role in aggravating leading commodity futures prices to diverge from fundamentals. The CFTC is in the process of developing a range of interventions to respond to technologies that encourage reliance on trading algorithms. A Technology Advisory Committee and a further Subcommittee on Automated and High Frequency Trading have been charged with conducting investigations and holding a series of public meetings to develop knowledge on these innovations with a view to

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<sup>31</sup> "Position limits," Legal Information Institute, Cornell University Law School, [https://www.law.cornell.edu/wex/position\\_limits](https://www.law.cornell.edu/wex/position_limits) Last accessed 17<sup>th</sup> June 2015.

<sup>32</sup> CFTC, "Q & A – Position Limits for Derivatives," p. 2.

<sup>33</sup> ESMA, "Consultation Paper – Annex B Regulatory technical standards on MiFID II/MiFIR," RTS 29 and RTS 30, [http://www.esma.europa.eu/system/files/2014-1570\\_cp\\_mifid\\_ii\\_part\\_2.pdf](http://www.esma.europa.eu/system/files/2014-1570_cp_mifid_ii_part_2.pdf) Last accessed 17<sup>th</sup> June 2015, pp. 381-399.

<sup>34</sup> *Ibid*, p. 385.

<sup>35</sup> *Ibid*.

formulating new regulations.<sup>36</sup> An agreement on provisions impacting upon high frequency trading that is to be implemented under MiFID II has recently been agreed by the European Parliament. The measures include regulations designating a standardised ‘tick’ size — the size of the individual trade — in a bid to prevent exchanges and other trading venues from attracting aggressive trading based on miniscule differences in price.<sup>37</sup> Other provisions include a requirement for exchanges and trading venues to synchronise their clocks to make it easier to spot abuses, testing of algorithms and trading software on regulated exchanges, and the use of ‘circuit breakers’ to stop the trading process if price volatility gets too high.<sup>38</sup>

#### e. Proprietary trading

A final provision relates to provisions on proprietary trading. In the US this measure is enacted under Title VI of Dodd-Frank and is known as the Volcker Rule.<sup>39</sup> This form of trading occurs when financial entities use their own funds to trade in addition to that of customers in order to make a profit. Such practices are deemed to be largely speculative in nature by industry experts, such as Paul Volcker, the former chairman of the US Federal Reserve and the proponent of the rule. Under the Volcker Rule, banks are prohibited from using or investing more than 3 per cent of their capital for this variety of trading.<sup>40</sup> The aim is to deter banks from using the deposits of customers insured by the state through the Federal Deposit Insurance Corporation (FDIC) from taking risky speculative positions in complex financial derivatives.<sup>41</sup> Commercial banks are restricted from short-term proprietary trading in certain kinds

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<sup>36</sup> For more information see <http://www.cftc.gov/PressRoom/Events/AdvisoryCommitteeMeetings/index.htm> Last accessed 5<sup>th</sup> January 2014.

<sup>37</sup> “MiFID II Update: HFT Crackdown, Speculative Position Limits, and Investor Protection,” *Forex Magnates*, 17<sup>th</sup> January 2014, <http://forexmagnates.com/update-on-mifid-ii-hft-crackdown-trading-systems-position-limits-and-investor-protection/> Last accessed 3<sup>rd</sup> March 2014.

<sup>38</sup> *Ibid.*

<sup>39</sup> Dodd-Frank Act § 619, 124 Stat 1376, 1620-31.

<sup>40</sup> Volcker, Paul A., “Commentary On The Restrictions On Proprietary Trading By Insured Depository Institutions,” [online.wsj.com/public/resources/.../Volcker\\_Rule\\_Essay\\_2-13-12.pdf](http://online.wsj.com/public/resources/.../Volcker_Rule_Essay_2-13-12.pdf) Last accessed 18<sup>th</sup> February 2013.

<sup>41</sup> Tropeano, Domenica, “Financial Regulation After the Crisis Where Do We Stand?” *International Journal of Political Economy* 40, no. 2 (2011): 45-60, p. 47.

of instruments, including securities, futures and commodity derivatives, as well as from investing that capital in other institutions, such as hedge funds.<sup>42</sup>

On the European side, draft plans by the EU financial services chief Michel Barnier propose to restrict systemically important banks from proprietary trading from 2018 onwards. Whilst the US Volker rule applies to small and mid-tier banks, the EU's ban will only apply to the EU's biggest banks — those deemed global systemically important institutions.<sup>43</sup> The EU proposes to deal with the risks emanating from proprietary trading through the use of supplementary provisions that 'ring-fence' such trading, requiring banks to transfer other high-risk trading activities including complex derivatives and securitisation operations to separate legal trading entities within the group.<sup>44</sup> This regulatory enforced subsidiarisation echoes the separation between retail and investment activities put in place under the Glass-Steagall Act in the US in 1933. It is intended to avoid the risk that banks would attempt to circumnavigate the prohibition of these trading activities by engaging in hidden proprietary trading activities which could lead to systemic risk.<sup>45</sup>

### iii. Classifications and exemptions

Provisions on trading technologies and proprietary trading aside, the cumulative impact of the Dodd-Frank and EMIR-MiFID II reforms will be to subject the trade in OTC derivatives to many of the prudential regulations that are used to

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<sup>42</sup> Securities Industry and Financial Markets Association (SIFMA), "Volker Rule: Overview," <http://www.sifma.org/issues/regulatory-reform/volcker-rule/overview/> Last accessed 17<sup>th</sup> June 2015.

<sup>43</sup> Mont, Jo, "European Commission Proposes EU Version of Volcker Rule," Compliance Week, 29<sup>th</sup> January 2014, <https://www.complianceweek.com/blogs/global-glimpses/european-commission-proposes-eu-version-of-volcker-rule#.VYF5PfnwbGh> Last accessed 17<sup>th</sup> June 2015.

<sup>44</sup> *Ibid.*

<sup>45</sup> "Commission proposes structural reform of the EU banking sector," European Commission, Press Release, 29<sup>th</sup> January 2014, [http://ec.europa.eu/ireland/press\\_office/news\\_of\\_the\\_day/commission-proposes-structural-reform-eu-banking-sector\\_en.htm](http://ec.europa.eu/ireland/press_office/news_of_the_day/commission-proposes-structural-reform-eu-banking-sector_en.htm) Last accessed 3<sup>rd</sup> March 2014.

govern futures exchanges.<sup>46</sup> Such are the similarities that it would be reasonable to wonder why legislators did not simply require all derivatives trading to be carried out via these forums. However, commercial lobbyists stressed that many companies have come to rely on the flexibility afforded by the OTC market to mitigate risks to their business emanating from global markets.<sup>47</sup> Accordingly, an exemption has been built into the Dodd-Frank and EMIR-MiFID II provisions to retain the benefits of bilaterally negotiated OTC trading for commercial hedgers. Title VII of Dodd-Frank delineates between numerous categories of market participant including: ‘Swap Dealers’, ‘Major Swap Participants’, and ‘End Users’. The full spectrum of the regulations in Title VII is reserved to ‘Swaps Dealers’ — large financial entities such as banks who create financial products, formulate indices and habitually deal in derivative instruments.<sup>48</sup> The principal justification behind imposing a higher regulatory burden on these institutions is that they pose a greater threat in terms of systemic risk owing to the instability that they would create were they to become insolvent. Commercial ‘end-users’ seeking to hedge against commercial risks are deemed less systemically risky, and are therefore able to claim an exemption that lightens their regulatory burden.<sup>49</sup> Most critically, parties able to claim this exemption are not subject to the mandatory clearing requirement and are also exempt from the provisions on position limits.

The European reforms distinguish only between ‘financials’ — banks, insurers, asset managers — and ‘non-financials’ — defined as any EU firm whose positions in OTC derivative contracts (unless for hedging purposes) exceed the EMIR clearing

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<sup>46</sup> Biggins, John, and Colin Scott, “Public-Private Relations in a Transnational Private Regulatory Regime: ISDA, the State and OTC Derivatives Market Reform,” *European Business Organization Law Review* 13: 309-346, p. 337.

<sup>47</sup> Yallop, Mark, “The Future Of The OTC Markets,” 3<sup>rd</sup> of January 2008, <http://www.icap.com/Download.aspx?fileid=2a233c27-8736-406c-bb4a-e3c9ebfbl419> Last accessed 16<sup>th</sup> August 2015.

<sup>48</sup> CFTC, “Final Rules Regarding Further Defining “Swap Dealer,” “Major Swap Participant” and “Eligible Contract Participant,” [http://www.cftc.gov/LawRegulation/DoddFrankAct/Rulemakings/DF\\_2\\_Definitions/index.htm](http://www.cftc.gov/LawRegulation/DoddFrankAct/Rulemakings/DF_2_Definitions/index.htm) Last accessed 12<sup>th</sup> February 2013.

<sup>49</sup> Section 2(h)(7) of the Commodity Exchange Act (CEA).



threshold.<sup>50</sup> However, some of the provisions are targeted at larger global financial institutions deemed to be systemically risky.<sup>51</sup>

a. Bona-fide hedging and de minimis exemptions

Commercial risk has been defined by the CFTC as risk that it ‘economically appropriate to the reduction of risks in the conduct and management of a commercial enterprise, where the risks arise in the ordinary course of business’.<sup>52</sup> Examples given are risks arising from a potential change in the value of assets that a person ‘owns, produces, manufactures, processes, or merchandises’.<sup>53</sup> The CFTC has further emphasised that the definition of hedging does not include a market position that is held for a purpose that is in the nature of ‘speculation, investing, or trading’,<sup>54</sup> defined as ‘those positions executed primarily to take an outright view on market direction or to obtain an appreciation in value of the swap position itself’.<sup>55</sup> Article 10 of EMIR carves out very similar provisions to define the meaning of legitimate hedging for ‘non-financial counterparties’. A further exemption based on the volume of trade that an entity is carrying out has been granted under Dodd-Frank and under EMIR. Title VII of Dodd-Frank grants an exemption to what are termed ‘small financials’ engaged in a ‘de minimis quantity’ of derivatives trading.

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<sup>50</sup> “OTC derivatives and clearing obligation,” <http://www.esma.europa.eu/page/OTC-derivatives-and-clearing-obligation> Last accessed 17<sup>th</sup> June 2015.

<sup>51</sup> “Regulation of systemically important financial institutions and of the shadow banking system,” speech by Steven Maijoor, Chair of the CDU/CSU congress in Berlin, <http://www.esma.europa.eu/content/Regulation-systemically-important-financial-institutions-and-shadow-banking-system-speech-St> Last accessed 17<sup>th</sup> June 2015.

<sup>52</sup> CFTC, “Final Rules Regarding Further Defining “Swap Dealer,” “Major Swap Participant” and “Eligible Contract Participant””, p. 4, [http://www.cftc.gov/LawRegulation/DoddFrankAct/Rulemakings/DF\\_2\\_Definitions/index.htm](http://www.cftc.gov/LawRegulation/DoddFrankAct/Rulemakings/DF_2_Definitions/index.htm) Last accessed 12<sup>th</sup> February 2013.

<sup>53</sup> *Ibid.*

<sup>54</sup> *Ibid.*, p. 5.

<sup>55</sup> *Ibid.*

## b. Scope of exemptions

Regarding the scope of the exemptions, the de minimis exemption has been defined with some precision. In the US, in order to claim such an exemption, the aggregate gross notional amount of the swaps that the person enters into over the prior twelve months in connection with dealing activities must not exceed \$3 billion.<sup>56</sup> Similar provisions enacted under EMIR allow financial counterparties to bypass central clearing up to a threshold volume of 3 billion euros of commodity derivatives.<sup>57</sup> It is likely that only smaller banks, savings institutions and hedge funds will be able to claim this exemption. Parties claiming these exemptions will still be subject to minimum requirements relating to adequate capital and risk management but will escape the more onerous requirements of centralised clearing and, importantly, will be exempt from position limits.

Bona fide hedging, on the other hand, has several differing definitions within the CFTC rulemaking areas.<sup>58</sup> The CFTC has recently updated the relevant sections of the Code of Federal Regulations<sup>59</sup> and the Commodity Exchange Act (CEA) to clarify what would appear to be its overarching definition. CEA Section 4(a)(c) requires that a bona fide hedge must be ‘economically appropriate to the reduction of risks in the conduct and management of a commercial enterprise’.<sup>60</sup> This is expanded on in 17 CFR 151.5 which elaborates that a bona fide hedge must, among other criteria, arise from the potential change in the value of one or several: (a) assets that a person owns, produces, manufactures, processes, or merchandises or anticipates owning, producing, manufacturing, processing, or merchandising; (b) liabilities that a person owns or

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<sup>56</sup> Securities Industry and Financial Markets Association (SIFMA), “Volker Rule: Overview”.

<sup>57</sup> Article 10(4)(b) of Regulation (EU) No 648/2012, cited in: ESMA, “Draft technical standards under the Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC Derivatives, CCPs and Trade Repositories Council of 4 July 2012,” Final Report, ESMA/2012/600, September 2012, p. 82, [http://www.esma.europa.eu/system/files/2012-600\\_0.pdf](http://www.esma.europa.eu/system/files/2012-600_0.pdf) Last accessed 16<sup>th</sup> July 2015.

<sup>58</sup> Deloitte, “An interpretation of the ‘hedge or mitigate risk’ criteria and the impact to compliance with the Dodd-Frank Act,” Deloitte Development LLC, 2012, [http://deloitte.wsj.com/riskandcompliance/files/2013/05/Dodd-Frank\\_Hedge\\_Mitigate.pdf](http://deloitte.wsj.com/riskandcompliance/files/2013/05/Dodd-Frank_Hedge_Mitigate.pdf) Last accessed 17<sup>th</sup> June 2015, p. 6.

<sup>59</sup> 17 CFR 151.5. See also CEA section 4a(c)(1) & (2).

<sup>60</sup> *Ibid.*

anticipates incurring; or (c) services that a person provides, purchases, or anticipates providing or purchasing.<sup>61</sup> EMIR has proposed an almost identical definition in its draft regulations under RTS 30, Article 1.<sup>62</sup>

While EMIR stipulates that a bona fide hedge must be a transaction made by a ‘non-financial entity’, the Dodd-Frank classification rests on the qualification of the transaction, rather than the entity making it. There remains considerable ambiguity over which transactions may or may not be able to qualify as bona fide hedges under the reforms. This has led numerous financial companies and law firms to publish guidance seeking to clarify the terms of — and to find loopholes in — the regulations.<sup>63</sup> Notably, it has been suggested with respect to Dodd-Frank that a person who does not directly hedge commercial activity, such as a swap dealer, can nonetheless benefit from the hedging exemption if such swap would qualify as a bona fide hedge for the swap dealer’s counterparty.<sup>64</sup> This could mean that banks and hedge funds are exempted from position limits entered into with other actors with a commercial interest in the underlying commodity; a farmer, manufacturer, or, potentially, an agricultural conglomerate. NGOs have recently criticised the MiFID II reforms for allowing such indirect commercial hedging to be exempted, arguing that ESMA was only mandated to exempt positions ‘reducing risks directly relating to commercial activities’.<sup>65</sup>

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<sup>61</sup> *Ibid.*

<sup>62</sup> ESMA RTS 30 Article 1 and 1(a).

<sup>63</sup> See: Deloitte, “An interpretation of the “hedge or mitigate risk” criteria and the impact to compliance with the Dodd-Frank Act”; Arbit, Terry, et al, “Taking it to the Limit One More Time: The CFTC’s New Speculative Position Limits Proposal,” Norton Rose Fulbright, 3<sup>rd</sup> December 2013, <http://www.nortonrosefulbright.com/files/20131203-taking-it-to-the-limit-one-more-time-the-cftcs-new-speculative-position-limits-proposal-109791.pdf> Last accessed 17<sup>th</sup> June 2015.

<sup>64</sup> Skadden, Arps, Slate, Meagher & Flom LLP & Affiliates, 24<sup>th</sup> December 2015, [http://www.skadden.com/newsletters/CFTC\\_Re-Proposes\\_Speculative\\_Position\\_Limit\\_Rules\\_for\\_Futures\\_Options\\_and\\_Swaps\\_on\\_Physical\\_Commodities.pdf](http://www.skadden.com/newsletters/CFTC_Re-Proposes_Speculative_Position_Limit_Rules_for_Futures_Options_and_Swaps_on_Physical_Commodities.pdf) Last accessed 17<sup>th</sup> June 2015, pp. 4-5.

<sup>65</sup> Finance Watch et al, “Letter to Marcus Ferber Re: Markets in Financial Instruments Directive (MiFID II) level 2 – appropriate implementation of the position limits regime for commodity derivatives,” Brussels, 19<sup>th</sup> May 2015, <https://www.sosfaim.org/be/wp-content/uploads/sites/3/2015/05/NGO-letter-commodities-in-MiFID-level2-19-05-2015-.pdf> Last accessed 17<sup>th</sup> June 2015.

#### iv. Response

The reaction to the new regulations in both the US and in Europe has been highly polarised. Hailed by advocates as ‘one of the most significant regulatory reform measures since the Great Depression’, they are seen by many people — including those within the financial services community — as vital if another global financial crisis is to be prevented.<sup>66</sup> Others have been highly critical, arguing that the ‘Dodd-Frankenstein’ reforms are far too extensive and complex and are ‘too big not to fail’.<sup>67</sup> Concerns have been raised about the impact on financial sector competitiveness<sup>68</sup> and about the unintended consequences of the ambitious provisions.<sup>69</sup>

Many NGOs and campaigners have welcomed the reforms, suggesting that they represent ‘some success’ in tackling food commodity speculation.<sup>70</sup> However, others have argued that the provisions don’t go nearly far enough. There is widespread concern that the provisions will be watered down as the guidelines provided in the framework agreements are transposed into technical rules. NGOs in Europe including SOMO and Finance Watch have argued that ESMA’s decision to allow national authorities to raise position limits by up to 15 per cent are contrary to the spirit of the MiFID II agreement and, if approved, will turn limits on speculation decided by the

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<sup>66</sup> Markovich, Steven J., “The Dodd-Frank Act,” US Council on Foreign Relations, <http://www.cfr.org/united-states/Dodd-Frank-act/p28735> Last accessed 17<sup>th</sup> June 2015.

<sup>67</sup> “Too big not to fail,” *The Economist*, 18<sup>th</sup> February 2012, <http://www.economist.com/node/21547784> Last accessed 17<sup>th</sup> June 2015.

<sup>68</sup> Bennetts, Louise, “Regulatory Fragmentation, the Balkanization of Financial Markets and the Competitiveness of the American Financial Services Sector,” Cato Institute, <http://www.cato.org/publications/testimony/regulatory-fragmentation-balkanization-financial-markets-competitiveness> Last accessed 17<sup>th</sup> June 2015.

<sup>69</sup> Rebecca Healey of TABB Group, quoted in “A bigger bang: A bold new law will reshape Europe’s capital markets,” *The Economist*, 26<sup>th</sup> April 2014.

<sup>70</sup> Henn, Markus, “MiFID: some success in tackling food commodity speculation and high speed trading,” SOMO website, <http://somo.nl/dossiers-en/sectors/financial/eu-financial-reforms/newsletter-items/issue-22-february-2014/mifid-some-success-in-tackling-food-speculation-and-high-speed-trading> Last accessed 17<sup>th</sup> June 2015.

European Parliament into ‘an empty shell’.<sup>71</sup> Much would appear to rest on the final shape of the reforms as they are implemented by the CFTC, SEC and ESMA.

### III. CHALLENGES FOR REGULATORS

As the efforts to implement the regulations have gotten underway, a number of challenges have emerged that threaten to impede their successful operation.

#### i. Funding

A major challenge in terms of implementing the provisions has been a lack of funding for regulators. Prior to Dodd-Frank the CFTC issued an average of three or four rules a year. Now, however, the agency has been handed the ‘Herculean task’ of finalising more than 50 rules in that same time allocation.<sup>72</sup> This leap in organisational efficiency is anticipated in the absence of any substantial increase in resources. The situation is aggravated by the fact that the Republican-dominated House of Representatives continues to reject proposed budget increases to implement Dodd-Frank rules and is moving to reduce the budget of the CFTC.<sup>73</sup> Some analysts have argued that this is a deliberate tactic to ‘beat the law’.<sup>74</sup> ESMA has also run into funding difficulties and has put out an urgent request that it be fully funded by the EU. Currently, the agency relies on national regulators for 60 per cent of its budget — a

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<sup>71</sup> Lewis, Barbara, and Huw Jones, “EU told rules on commodity price speculation risk losing their teeth,” Reuters, 21<sup>st</sup> May 2015, <http://uk.reuters.com/article/2015/05/21/eu-regulation-commodities-idUKL5N0YC35Y20150521> Last accessed 15<sup>th</sup> June 2015.

<sup>72</sup> “Smart Regulatory Reform and the Perils of High-Frequency Regulation,” remarks by Commissioner Scott D. O’Malia at MarkitSERV’s 2012 Outlook for OTC Markets, New York City, 31<sup>st</sup> May 2012, <http://www.cftc.gov/PressRoom/SpeechesTestimony/opaomalia-14> Last accessed 24<sup>th</sup> February 2013.

<sup>73</sup> *Ibid.*

<sup>74</sup> Reis, Patrick, “CFTC budget on chopping block,” *Politico*, 19<sup>th</sup> June 2012, <http://www.politico.com/news/stories/0612/77601.html> Last accessed 4<sup>th</sup> April 2013.

position that looks untenable owing to the difficult budgetary situation faced by a number of EU member states.<sup>75</sup>

## ii. Litigation

A second major hurdle has arisen with attempts to impose the provisions on position limits. The CFTC's position limits were due to be imposed in October 2012. However, two trade associations associated with the derivatives industry, the Securities Industry and Financial Markets Association (SIFMA) and the International Swaps and Derivatives Association (ISDA), successfully petitioned to have the regulations struck down. The text of Dodd-Frank only mandates the imposition of such limits 'as appropriate'.<sup>76</sup> These groups contend that this was not the case since it remains unclear that excessive levels of speculation were the cause of recent price volatility. On 28<sup>th</sup> September 2012, a District Court in Washington DC ruled that the CFTC's decision to impose the limits was not in line with instructions from Congress.<sup>77</sup> Judge Robert Wilkins ruled that the CFTC had failed to heed instructions requiring it to determine that its rule was 'necessary to diminish, eliminate or prevent excessive speculation'.<sup>78</sup> CFTC Commissioner Chilton has made it plain that he considers that court's judgment to be 'deeply flawed'.<sup>79</sup> The CFTC appealed the judgement, and has since drafted a new rule to impose the limits on the basis of a finding that they are indeed 'necessary and appropriate' to this goal. The re-proposed

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<sup>75</sup> Cave, Tim, "Esma repeats call for funding shake-up," *Financial News*, 16<sup>th</sup> March 2012, <http://www.efinancialnews.com/story/2012-03-16/esma-repeats-call-for-funding-shake-up?ea9c8a2de0ee111045601ab04d673622> Last accessed 4<sup>th</sup> March 2014.

<sup>76</sup> Dodd-Frank Wall Street Reform and Consumer Protection Act, Sec. 737, "Position Limits" (2)(A) Establishment of Limitations.

<sup>77</sup> International Swaps And Derivatives Association Inc. and Securities Industry and Financial Markets Association v. United States Commodity Futures Trading Commission, District Court For The District Of Columbia (Civil Action No. 11-CV-2146 (RLW)).

<sup>78</sup> Farchy, Jack, and Javier Blas, "CFTC urged to act on position limits," *The Financial Times*, 1<sup>st</sup> October 2012, <http://www.ft.com/cms/s/0/49ce495c-0be4-11e2-8032-00144feabdc0.html#axzz2L4UvwFtM> Last accessed 17<sup>th</sup> February 2013.

<sup>79</sup> Brush, Silla, "CFTC Should Appeal Ruling on Speculation Limits, Chilton Says," *Bloomberg* 1<sup>st</sup> October 2012, <http://www.bloomberg.com/news/2012-10-01/cftc-should-appeal-ruling-on-speculation-limits-chilton-says.html> Last accessed 7<sup>th</sup> March 2013.

rules closely mirror the vacated rules.<sup>80</sup> However, there is widespread concern that the victory in the court of Judge Robert Wilkins will embolden banks to challenge other new rules and result in similar legal challenges being mounted against the European provisions.<sup>81</sup>

### iii. Evasion

Another set of challenges concerns efforts by the financial services industry to mitigate the impact of the regulations. Firstly, financial institutions are reorganising to get around the rules. *The Economist* has noted: '[a]nticipating the Volcker rule, bank departments previously using the word "proprietary" have been dropped, renamed or quietly shifted to sheltered corners'.<sup>82</sup> Secondly, the global character of OTC derivative markets has prompted fears, based on substantial precedent, that financial institutions will relocate their derivatives trading 'offshore' or, at any rate, to jurisdictions that offer the most attractive set of regulations. Anxiety within the financial industry over so-called 'jurisdictional arbitrage' is centred on a loss of competitiveness. However, the possibility that an uneven patchwork of global regulation could drive OTC derivative trading into less regulated arenas where systemic risks could ferment presents a broader challenge to the success of the regulatory endeavour as a whole.<sup>83</sup> Thirdly, product innovation has already conditioned a new shift in trading to the exchange-traded arena. CME Group, the largest derivatives exchange in the US, has already begun to enable novel trading practices facilitated by instruments known as 'swap-futures' that allow OTC swaps to be executed as block futures trades and are thereby exempted from Dodd-Frank

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<sup>80</sup> Arbit, Terry, "Market participants weigh in regarding CFTC's re-proposed position limits rules," Norton Rose Fullbright, 2<sup>nd</sup> September 2014, <http://www.regulationtomorrow.com/us/market-participants-weigh-in-regarding-cftcs-re-proposed-position-limits-rules/> Last accessed 17<sup>th</sup> June 2015.

<sup>81</sup> "The Speculators Win a Round," Editorial, *The New York Times*, 14<sup>th</sup> October 2012, [http://www.nytimes.com/2012/10/15/opinion/the-speculators-win-a-round.html?\\_r=0](http://www.nytimes.com/2012/10/15/opinion/the-speculators-win-a-round.html?_r=0) Last accessed 1<sup>st</sup> April 2013.

<sup>82</sup> "Too big not to fail," *The Economist*, 18<sup>th</sup> February 2012, <http://www.economist.com/node/21547784> Last accessed 17<sup>th</sup> June 2015.

<sup>83</sup> For a discussion of this, see Johnson, Christian, "Regulatory Arbitrage, Extraterritorial Jurisdiction and Dodd-Frank: The Implications Of US Global OTC Derivative Regulation," *Nevada Law Journal* 14 (2014).

regulations.<sup>84</sup> These products ‘take the functionality’ of OTC derivatives and standardise their trading for futures markets.<sup>85</sup> Product innovation has been a longstanding problem within financial markets. As Partnoy observed in 1996, ‘[F]inancial intermediaries are constantly structuring new financial derivatives in response to changes in financial regulation’.<sup>86</sup>

#### iv. The particular challenge of food commodity speculation

Since the provisions were first tabled, a great deal of analysis has been carried out on the challenges faced by regulators and the likely efficacy of the reforms. However, with a few exceptions, comparatively little analysis has emerged assessing the impact that the regulations will have in terms of tackling food commodity speculation. I will now seek to reinstall this question into this debate. I will draw on the assessments that have been offered by analysts including as Jayati Ghosh,<sup>87</sup> and Cornelia Staritz, and Karin Küblböck<sup>88</sup> to assess the potential of the new regulations in tackling practices of food commodity speculation and addressing their impact on commodity price volatility.

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<sup>84</sup> Mackenzie, Michael, and Gregory Meyer, “US swaps shake-up set to boost exchanges,” *The Financial Times*, 1<sup>st</sup> November 2012, [www.ft.com/intl/cms/s/0/cadeef74-2377-11e2-a46b-00144feabdc0.html#axzz2BANPEiOh](http://www.ft.com/intl/cms/s/0/cadeef74-2377-11e2-a46b-00144feabdc0.html#axzz2BANPEiOh) Last accessed 18<sup>th</sup> February 2013.

<sup>85</sup> Finadium, “The Futurization of the Swaps Market: Players, Products and Collateral,” Finadium Research Report, March 2013, <http://www.finadium.com/site/futurizationofswaps.php> Last accessed 4<sup>th</sup> March 2014.

<sup>86</sup> Partnoy, Frank, “Financial Derivatives and the Costs of Regulatory Arbitrage,” *Journal of Corporation Law* 22 (1996): 211.

<sup>87</sup> Ghosh, Jayati, “Implications of regulating commodity derivatives markets in the USA and EU,” *PSL Quarterly Review* 64, no. 258 (2011).

<sup>88</sup> Staritz, Cornelia and Karin Küblböck, “Re-regulation of commodity derivative markets – Critical assessment of current reform proposals in the EU and the US,” ÖFSE – Austrian Research Foundation for International Development, October 2013, [http://www.oefse.at/fileadmin/content/Downloads/Publikationen/Workingpaper/WP45\\_re-regulation.pdf](http://www.oefse.at/fileadmin/content/Downloads/Publikationen/Workingpaper/WP45_re-regulation.pdf) Last accessed 17<sup>th</sup> June 2015.



a. Limits of position limits

The only measure in both the US and European regulations explicitly enacted to address concerns about speculatively conditioned commodity price volatility are position limits. Campaigners at the WDM and Oxfam have fought hard to ensure that these limits are put in place. In particular, these groups have lobbied European regulators to ensure that the provisions under MiFID II would not be limited to a weaker approach of ‘position management’.<sup>89</sup> As well as a strong stance on position limits, Staritz and Küblböck have noted that the US provisions could also be considered something to emulate as they explicitly cover the trade in OTC instruments — swaps — which the EU proposals do not.<sup>90</sup> However, critics have pointed out that the US limits are set so high as to be of dubious value in the efforts to tackle speculation. As analysts at the IATP have pointed out, at 25 per cent, ‘in theory, four trading entities could control the market in a specific contract’.<sup>91</sup> Even assuming that the CFTC is able to successfully implement its new proposed rule on position limits, reissued following the lawsuit brought by the ISDA, there are doubts about the likely efficacy of the measures.<sup>92</sup>

The biggest problem with reliance on position limits is that they don’t correspond with the most persuasive explanation of how practices of food commodity speculation have come to influence underlying food prices in the first place. As explained in Chapter Two, evidence from market practice suggests that recent commodity price volatility was not a consequence of the excessive volume of speculative trading, or ‘outsize’ derivatives transactions by single market actors, but of new trading techniques: index fund trading, reliance on trading algorithms, and a

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<sup>89</sup> WDM, “Back to fundamentals: Why position limits are needed to help prevent food price hikes,” Report, June 2012, p. 18.

<sup>90</sup> Staritz, Cornelia, and Karin Küblböck, “Re-regulation of commodity derivative markets,” p. 20.

<sup>91</sup> Hansen-Kuhn, Karen, and Steve Suppan, “Speculation Update: Progress Report on US Commodity Market Reforms,” Institute for Agriculture and Trade Policy, February 2012  
<http://www.iatp.org/documents/speculation-update-progress-report-on-us-commodity-market-reforms> Last accessed 8<sup>th</sup> March 2013.

<sup>92</sup> “Position limits for derivatives: Proposed Rule: 1/5/2015,” Commodity Futures Trading Commission, <http://www.cftc.gov/LawRegulation/DoddFrankAct/Rulemakings/PositionLimitsforDerivatives/index.htm> Last accessed 17<sup>th</sup> February 2015.

culture of herding behaviour. Rather than a product of the activities of single monopolistic market actors, price volatility needs to be understood as a consequence of the cumulative trading practices of thousands of individual traders, located across a diverse range of banks, hedge funds, and commercial companies, who were incentivised to exploit market fluctuations and push prices higher. On this understanding, position limits miss the mark entirely in terms of the efforts to curb price volatility. Staritz and Küblböck have raised this concern with respect to the EU provisions, arguing that the focus on individual traders does not account for the ability of aggregate classes of trade to have an influence. They suggest that a more effective strategy would be to deny certain types of investors (irrespective of their trading strategy) access to commodity derivative-related investments.<sup>93</sup>

#### b. Ancillary potential

In light of these limitations, the capacity of the Dodd-Frank and EMIR-MiFID II reforms to protect food prices from speculative interference would appear to rest on the ancillary effect of the other regulations principally crafted to respond to systemic risk. On an initial appraisal, these provisions hold some potential. Clearing and margin requirements along with proprietary trading rules will make it more costly and laborious for financial institutions that deal in derivatives to do so for speculative purposes; reporting requirements will help to counteract the market opacity that disabled regulators in the years leading up to the global financial crisis; and the restrictions on proprietary trading are likely to curb the volume of capital used by financial institutions to enter into short-term speculative trading ventures. There would appear to be significant potential for introducing regulations to curb high frequency trading. However, the efficacy of the provisions will depend on their final shape and implementation. Anti-spoofing measures have already resulted in some criminal prosecutions for traders using algorithms to submit false bids for gold, soybean and copper futures — activity now considered to be a criminal manipulation

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<sup>93</sup> Staritz, Cornelia, and Karin Küblböck, “Re-regulation of commodity derivative markets,” p. 23.

of the market.<sup>94</sup> On the other hand, the European Parliament has backed down from a provision imposing a minimum resting period that would have required a trade to stay on an order book for 500 milliseconds — a provision financial industry lobbyists argued would effectively kill off high-frequency trading as dealers now routinely operate at much faster speeds measured in microseconds.<sup>95</sup>

Upon closer scrutiny, these provisions form part of a broader framework of regulations centred on an uncertain, and some might say unworkable, classification of market participants and their behaviours. The *de minimis* exemption and confused classification regarding what amounts to commercial hedging have created loopholes that could allow a proportion of purely speculative OTC contracts to escape the bulk of the market infrastructure reforms.<sup>96</sup> The hybrid nature and porous motivations of both sets of market actor remain largely unaddressed. Not only do the plurality of operations carried out by large agricultural conglomerates such as Cargill and ADM confound the classification, many of these entities are global actors and can easily move ‘speculative’ operations off-shore or create functionally ‘independent’ subsidiaries. Armajaro Asset Management LLP — the London-based hedge fund that infamously ‘cornered’ the entire European cocoa market in 2010, pushing prices to a 33-year high<sup>97</sup> — owns seven other hedge funds, four of them based in the Cayman Islands.<sup>98</sup> Black River Asset Management, the hedge fund owned by Cargill, advertises on its website that its investment professionals are located in thirteen countries spanning five continents.<sup>99</sup> As Joshua Schneyer has suggested, the kind of proprietary trading carried out by such firms would fall foul of extensive regulations

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<sup>94</sup> Chon, Gina, “Dodd-Frank under fire in trading case,” *Financial Times*, 15<sup>th</sup> December 2015, <http://www.ft.com/cms/s/0/ed3ce1f0-8489-11e4-ba4f-00144feabdc0.html#axzz3S0EnPtL6> Last accessed 17<sup>th</sup> February 2015.

<sup>95</sup> Stafford, Philip, “Europe agrees on high-speed trading regulation,” *Financial Times*, 22<sup>nd</sup> October 2013.

<sup>96</sup> Finance Watch et al, “Letter to Marcus Ferber”.

<sup>97</sup> WDM, “Broken Markets,” p. 35.

<sup>98</sup> “Challenges for Regulators Financial Players in the (Food) Commodity Derivatives Markets,” SOMO Briefing Paper, November 2012, p. 6.

<sup>99</sup> <https://www.black-river.com/> Last accessed 16<sup>th</sup> June 2015.

restricting insider trading if it were carried out on the stock market.<sup>100</sup> Yet, the Dodd-Frank and EMIR-MiFID II regulations appear largely insensitive to these critical inter-linkages.

As with position limits, many of the provisions are also wide of the mark concerning how speculative practices impact on food prices. The prevailing view that measures increasing market transparency will be beneficial to the project of tackling food commodity speculation is highly contestable. As financial industry insiders have noted, greater transparency affected through data reporting allows opportunistic market participants to learn about their competitors' trading strategies.<sup>101</sup> As discussed in Chapter Two, so-called 'uninformed' noise traders who follow market trends are seen to have contributed significantly to driving prices away from fundamentals. Coupled with the pervasive practice of basing spot prices on those listed on those in futures markets, greater market transparency could serve to put food prices in further jeopardy.

Overall, at the current juncture, the utility of the Dodd-Frank and EMIR-MiFID II regulations for the project of tackling food commodity speculation would appear to be limited at best. Instead of constraining speculation, the regulations would appear to displace it — or become the target of it. As correspondents for the *Washington Post* have noted, hedge fund EJP Debt Opportunities Fund has been reaping in profits by 'making bets on how lenders would alter their capital structure' in the aftermath of Dodd-Frank.<sup>102</sup>

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<sup>100</sup> Schneyer, Joshua, "Corrected: The Billion Dollar Club," Reuters, 28<sup>th</sup> October 2011, <http://www.reuters.com/article/2011/10/28/us-commodities-houses-idUSTRE79R4S320111028> Last accessed 17<sup>th</sup> June 2015.

<sup>101</sup> Rosenberg, Gabriel D., and Jai R. Massari, "Regulation through substitution as policy tool: Swap futurization under Dodd-Frank," *Columbia Business Law Review* 667 (2013) p. 729.

<sup>102</sup> Westbrook, Jesse, and Robert Schmidt, "How one hedge fund seized on fallout from Dodd-Frank," *Washington Post*, 3<sup>rd</sup> February 2013, [http://articles.washingtonpost.com/2013-02-03/business/36729038\\_1\\_hedge-fund-debt-fund-investment-bank](http://articles.washingtonpost.com/2013-02-03/business/36729038_1_hedge-fund-debt-fund-investment-bank) Last accessed 17<sup>th</sup> February 2013.

#### IV. CRITIQUE OF DODD-FRANK AND EMIR-MiFID II

In this section I engage in a more critical analysis of the regulatory provisions as enacted in the US and in Europe and suggest that they suffer from a number of deeper structural flaws as a result of the assumptions upon which they are predicated.

##### i. Reproducing problematic assumptions

At the end of Chapter Two, I provided a sketch of a speculative market logic that I suggested has resulted from processes of financialisation brought about under neoliberalism. My concern at that juncture was to explain how practices of food commodity speculation could have impacted on underlying spot prices, and why traditional tools of causal economic analysis were unable to account for this new market dynamic. I noted that with the ascendancy of neoliberalism came the ascendancy of neoclassical economics. While not able to explain recent patterns of commodity price volatility, this economic theory produced a powerful set of assumptions about how financial markets operate that have been used to discredit the argument that speculation contributed to the price volatility. What I am now seeking to demonstrate is how this neoliberally-conditioned neoclassical vision of how financial markets operate is being reproduced in Dodd-Frank and EMIR-MiFID II. By that I mean that the regulations fail to adequately contend with the dynamics of these markets, leaving the logic of speculation intact.

The ‘neoliberal-neoclassical’ vision of financial markets to which I am referring has been identified in other scholarly work. As Julia Black has argued, ‘[t]he global financial crisis demonstrated that market actors, governments and regulators were operating on the basis of a set of understandings about how markets worked that were based in neoclassical economics, and in particular rational actor theory, which

were largely erroneous, with disastrous consequences'.<sup>103</sup> Lord Turner, former Chairman of the Financial Services Authority (FSA),<sup>104</sup> has made a similar diagnosis.<sup>105</sup> The problematic features of this vision, made explicit by both Black and Turner, might be summarised as follows: assumptions relating to the rationality of market actors; overestimation of market actors' risk-management and information gathering capacities; underestimation of the impact of their immediate and broader social environments on their trading decisions; misplaced faith in the benefits of price discovery, liquidity, mathematical modelling and product innovation; and a limited approach to intervention focused principally on the prevention of monopolies.<sup>106</sup>

Numerous academics have charted the rise of neoliberalism and have attempted to lend specificity to the label commonly used to describe the policy climate since the 1980s.<sup>107</sup> Some, notably Ha-Joon Chang, have sought to explain the relationship between neoliberalism and neoclassical economics. Chang describes neoliberalism as 'an alliance' between neoclassical economics, which provides most of the analytical tools, and what he terms 'the Austrian-libertarian tradition', which informs its political and moral philosophy.<sup>108</sup> What is missing is an account of how the rise of neoliberalism led to the oversimplified neoclassical wisdom that resulted in a 'lax' regulatory treatment of financial markets — identified by Turner and Black — in the run up to the global crisis. Whilst neoclassical economics is almost universally cited as forming a core part of the economic theory underpinning neoliberalism, the precise nature of the relationship between this principally micro-economic theoretical

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<sup>103</sup> Black, Julia, "Seeing, Knowing, and Regulating Financial Markets: Moving the Cognitive Framework from the Economic to the Social," *LSE Law, Society and Economy Working Papers* 24 (2013), p. 5

<sup>104</sup> The FSA was a quasi-judicial body responsible for the regulation of the financial services industry in the United Kingdom between 2001 and 2013. It was abolished and in 2014 its responsibilities split between two new agencies — the Prudential Regulation Authority and the Financial Conduct Authority — and the Bank of England.

<sup>105</sup> Turner, Lord, "Reforming Finance: Are We Being Radical Enough?" Clare Distinguished Lecture in Economics and Public Policy, 2011, p. 26.

<sup>106</sup> *Ibid*, pp. 26-7.

<sup>107</sup> Stedman Jones, Daniel, *Masters of the Universe: Hayek, Friedman, and the Birth of Neoliberal Politics*, Princeton: Princeton University Press, 2012, p. 2; Saad-Filho, Alfredo and Deborah Johnston, *Neoliberalism – A Critical Reader*, London: Pluto Press, 2005; Harvey, David, *A Brief History of Neoliberalism*, Oxford: Oxford University Press, 2005. .

<sup>108</sup> Chang, Ha-Joon, "Breaking the mould: an institutionalist political economy alternative to the neoliberal theory of the market and the state," *Cambridge Journal of Economics* 26 (2002): 539-559, p. 540.

discipline and the neoliberal movement is perhaps less frequently elaborated. A few thoughts on this relationship will now be offered.

a. Neoliberal-neoclassical market vision

As discussed in the last chapter, at the heart of neoclassical economics is a theory of how prices are formed in a market economy that is constructed around a set of central assumptions about how people behave in markets. Friedrich Hayek used this neoclassical pricing mechanism to translate his conviction that free markets safeguarded human freedom into a persuasive argument that markets are self-regulating and that prices act as a mechanism for social coordination that surpasses the capabilities of centralised regulation. Developing this further, Milton Friedman developed the macro-economic theory of monetarism, which contended that even during times of recession and high inflation governments should not intervene as intervention would be likely to make things worse.<sup>109</sup> Through the macro-economic theories of Hayek and Friedman, the characteristics of the rational economic actor of neoclassical economics were translated into a broader force of market rationality that precluded the government from actively steering the market towards social goals. Since the 1970s, furthered by Fama's work on the efficient market hypothesis, financial markets have come to function as the font of this broader market rationality.<sup>110</sup> Regarded as 'the epitome of neoclassical economics in their operation',<sup>111</sup> these markets have come to be viewed as both an authority on value and as an arena in which risk can be accurately identified, measured, priced and predicted.<sup>112</sup>

Neoclassical economics is the theory operationalised to make the neoliberal political agenda of securing the freedom of the individual by restricting the powers of

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<sup>109</sup> *Ibid*, p. 549.

<sup>110</sup> Fama, Eugene F., "Efficient Capital Markets: A Review Of Theory And Empirical Work," *The Journal of Finance* 25, no. 2 (1970): 383-417.

<sup>111</sup> Black, Julia, "Seeing, Knowing, and Regulating," p. 16.

<sup>112</sup> For an example of the scholarship advancing this position see Artzner, Philippe, et al, "Coherent measures of risk," *Mathematical finance* 9, no. 3 (1999): 203-228.

government a reality. Under neoliberalism, this school of economic thought has been positioned as a science that is capable of producing economic truths. It has also been a building block for the creation of modern global financial markets that appear to self-regulate and fulfil a broader regulatory function in terms of regulating market fluctuations and coordinating economic actors. The result, as identified by Turner and Black, is that financial markets were effectively left to self-regulate and entrusted with the regulation of the broader economy in the years leading up to the global financial crisis. Critically, however, what this agenda overlooked was that underpinning financial markets is the same set of basic assumptions about individual market behaviour. As Dan Awrey has argued, along with the efficient market hypothesis, many of the other ‘canonical theories’ of financial economics including modern portfolio theory and capital asset pricing models share a ‘common and highly stylized view of financial markets — one characterized by, inter alia, perfect information, the absence of transaction costs, and rational market participants’.<sup>113</sup> The problem with treating financial markets as though they self-regulated was that the theory that helped to make them appear self-regulating treated economic actors as though they behaved in a certain way when, in fact, they didn’t — or, at least, not always. The result, in Turner’s estimation, was the propagation of an ‘over-simplified and dogmatic adherence to neoclassical economic assumptions’ by the ‘reasonably intellectual men and women who are employed in the policymaking functions of central banks, regulators and governments and in the risk management departments of banks’.<sup>114</sup> In other words, Black’s ‘erroneous neoclassical understandings’ or what I term ‘neoliberal-neoclassical’ market vision.

In his Clare Distinguished Lecture in Economics and Public Policy, given at Cambridge University in 2011, Lord Turner was speaking as the Chairman of the FSA. Recognition of the flaws in the neoclassical vision inhering in the decades before the crisis has thus been accorded at the highest levels of the regulatory establishment. Nevertheless, moving beyond analysis of the substantive provisions

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<sup>113</sup> Awrey, Dan, “Complexity, Innovation, and the Regulation of Modern Financial Markets,” *Harvard Business Law Review* 2, no. 235 (2012), p. 236.

<sup>114</sup> Turner, “Reforming Finance: Are We Being Radical Enough?” p. 27.



and focusing on the broader theoretical underpinnings of the US and EU financial market regulations suggests that this dominant wisdom continues to hold.

b. Restricted vision, restricted reform

As discussed at the end of Part III, the principal regulatory measures implemented to respond to speculatively-conditioned commodity price volatility — position limits — are grounded in a market-power analysis of how flows of speculative trade have impacted on food prices. The measures seek to limit the monopoly that any given financial entity can exercise within a contract cycle for a commodity derivative. The propensity to attribute market imperfections to instances of monopoly is a neoclassical proclivity. Another such proclivity is to assume that greater transparency will improve matters by enabling ‘rational’ market actors to produce the ‘right’ prices, fulfilling their price discovery function. This diagnosis and treatment of the problem is fundamentally at odds with theory from behavioural economics and evidence from market practice — discussed in Chapter Two — as to how food prices could have been impacted by speculation in the first place. The incongruous result is that regulators are seeking to respond to market phenomena that can only be explained by alternative theories on market dynamics using tools informed by neoclassical financial theory — the teachings of which would preclude the possibility of speculation impacting on underlying commodities in the first instance.

The regulations further reproduce problematic neoliberal-neoclassical assumptions about financial markets in their focus on problematic individuals or types of market participant. As Arnsperger and Varoufakis have argued, a hallmark of neoclassical economic theory is methodological individualism. The neoclassicist ‘follows the watchmaker’s method’ — like the watchmaker’s cogs and wheels, individual agents continue to be studied independently of the social whole which their

actions help bring about.<sup>115</sup> The exigent regulatory project of delineating between problematic ‘speculators’ and beneficial ‘hedgers’ repeats this trend and treats practices of speculation and hedging as distinct, when market practice demonstrates they are inextricably linked. As discussed in Chapter Two, the motivations of both financials and commercial hedgers are porous, with large agricultural conglomerates uniquely placed to play both sides of the market. The regulatory frameworks, which are intent on painstakingly carving out categories and exemptions for these types of market actor, neglect critical changes in how these actors engage with markets. Hedgers and speculators continue to be studied in isolation from the changing institutional structures, trading cultures, and market power in which individual traders are able to act as a collective force impacting on food prices. Under the lenses of Dodd-Frank and MiFID II the problem continues to be with ‘irrational’ speculators or criminal manipulators<sup>116</sup> — viewed independently of the broader social conditions which frame their actions — who are guilty of distorting prices away from their ‘true’ values.

The notion of restoring markets to their ‘rational’ state further reinforces the fiction produced by neoclassical economic theory that traders can ‘discover’ the real fundamental values of commodities by analysing forces of supply and demand. As Alessandrini has noted, the regulatory response to perceived speculative excesses ‘remains predicated on a conceptual separation between the real and the financial sphere of the economy which does not attend to the complex value-making processes to which financial derivatives contribute’.<sup>117</sup> A weight of other theory on value formation, including Alessandrini’s own work on the critical contribution of derivatives to this process, rejects the possibility that there are any such things as ‘real’ values for commodities to be restored to. From these perspectives, the prices at

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<sup>115</sup> Arnsperger, Christian, and Yanis Varoufakis, “What Is Neoclassical Economics? The three axioms responsible for its theoretical oeuvre, practical irrelevance and, thus, discursive power,” *Post-autistic economics review* 39 (2006).

<sup>116</sup> As the regulations on HFT technologies have taken shape, they have come to reflect an understanding of price ‘distortions’ occurring as a result of individuals attempting to manipulate markets through ‘spoofing’ – or placing false bids.

<sup>117</sup> Alessandrini, Donatella, “Financial derivatives and the challenge of performance,” in Emile Cloatre and Martyn Pickersgill (Eds), *Knowledge, Technology, and Law*, Routledge, 2015, p. 155.

which food commodities were sold in 2007-08 and 2010-11 could, in fact, be regarded as the only ‘real’ market prices as these prices were accurate reflections of the social values informing the actions of financial traders — prices understood, as per Durkheim, as ‘social facts’.<sup>118</sup>

The regulations also display a substantial neoclassical bias in the assumption that, by ‘fixing’ financial markets, desirable social ends, such as stable commodity prices, will follow. Overwhelmingly, the focus of the Dodd-Frank and MiFID II regimes has centred on tackling systemic risk and restoring stability in financial markets to reassure and attract investors. The goal appears to be that of enabling an ongoing and globally competitive trade in derivatives but within the confines of a systemically secure market framework — an objective that, if attained, it is presumed, will eventually result in the stabilisation of food prices and the attainment of social goals by proxy. This is a hallmark of neoliberal vision of markets. While a political priority at the outset of the regulatory process, concerns about commodity price volatility have been progressively marginalised as the reforms have taken shape. The global food crisis continues to be conceptualised as something separate from the global financial crisis. That is to say, it continues to be conceptualised as something that other agencies, other international institutions, must deal with. The possibility that the conditions of profitability in modern financial markets are dependent upon short-term, index-fund and herding trading strategies, and that it may not be possible to retain these market features and attract investors without putting food prices in jeopardy, doesn’t appear to be acknowledged.

Despite the trumpeting of a transformative overhaul of regulatory structures sounded out in recognition of flaws in the pre-crisis trust in the self-regulatory capacities of financial markets, the new regulations appear nonetheless to be largely attuned to a neoclassical score. Although a return to *conspicuous* state intervention and hands-on market regulation comprises a break with the neoclassical tradition, the regulations are largely constructed on its theoretical foundation. The protagonists are

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<sup>118</sup> Durkheim, Emile, *On the Division of Labour in Society*, Palgrave Macmillan, 1893.

conceived as rational economic actors who, if only shielded from disruptive monopolists, purged of an unruly contingent of ‘irrational’ speculators, and urged towards prudence by conscientious regulators, will transact to restore the market to a state of equilibrium. Rather than questioning the fundamental dynamics of financial markets and the social impact that they are producing, regulators have become ‘mired in the sea of small fixes to the system’.<sup>119</sup> As the counterproductive tendencies registered above would attest, attempting to ‘repair and re-create the pre-crisis system by fixing the obvious defects’,<sup>120</sup> the Dodd-Frank and EMIR-MiFID II reforms largely serve to transpose the pre-crisis market dynamics into new structures. The logic of speculation endures.

## ii. Reintroducing outdated regulations

Neoliberal-neoclassical assumptions about the operation of financial markets are not the only aspect of the Dodd-Frank and EMIR-MiFID II regulations that is familiar. Those provisions that are concerned with commodity markets effectively reinstate regulatory measures adopted in the 1930s in response to concerns about excessive speculation and commodity price volatility. Position limits, classifications that distinguish ‘financial’ ‘speculators’ from ‘commercial’ hedgers, and the requirement that all derivatives be traded on regulated exchanges are all throw-backs to the English and American common law restrictions on ‘purely’ speculative trading,<sup>121</sup> many of which were formalised as part of the Grain Futures Act of 1922 in the US, and later re-enacted in 1936 as the CEA. While these provisions did help to curb the speculative trade in ‘off-exchange’ commodity futures during much of the 20<sup>th</sup> century, reinstating them now fundamentally fails to account for the fact that these markets, the global economy, and the world at large, have changed in the interim.

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<sup>119</sup> Omarova, Saule T., “License To Deal: Mandatory Approval Of Complex Financial Products,” *Wash. UL Rev.* 90 (2012): 63.

<sup>120</sup> Macdonald, Kate, Shelley Marshall, and Sanjay Pinto, *New Visions for Market Governance: Crisis and Renewal*, Routledge, 2012, p. 21.

<sup>121</sup> Stout, Lynn A., “Derivatives and the Legal Origin of the 2008 Credit Crisis,” *Harv. Bus. L. Rev.* 1 (2011), p. 11.

a. Old rules, new markets

As discussed at the end of Chapter Two, there has been a profound shift in global economic structures since the ascendancy of finance in the 1980s. New markets, a new financial services industry, new instruments, and new practices have been brought into being. The monumental size of the OTC derivatives market is routinely emphasised in the literature on derivatives and their regulation. Most commonly expressed in statistical terms — ‘[n]otional amounts of all types of OTC contracts stood at \$683.7 trillion at the end of June 2008’<sup>122</sup> — commonly underweighted are the more material dimensions of this market. Expressing the volume of OTC contracts by the trillion fails to convey the real world implications of this trade. The OTC market is not just a web of contracts or a statistic. It comprises the creation of new companies and jobs, new relationships with clients, new offices built and new computers bought, new software programmes developed and patented, new legal departments set up and staffed. All of this and more besides has been brought into being to facilitate the market in OTC derivatives and to make it operate effectively. This comprises a huge amount of investment in the operation of OTC markets in general, and a further specialised industry in commodity derivatives, by a huge web of investors that extends far beyond the traders carrying out the trade. Whilst some of these relationships, spaces, and innovations can be adapted and put to other uses, this still comprises a hefty constituency with a very strong interest in keeping the speculative trade in OTC derivatives in business.

Also underweighted by regulators attempting to apply old rules to this new market is the structural shift from production toward finance as the main engine of accumulation in the UK and US.<sup>123</sup> The US economy and, even more so, the UK economy are now heavily dependent for revenue on financial services, and derivatives

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<sup>122</sup> “OTC derivatives market activity in the first half of 2008,” Bank for International Settlements, Basel, Switzerland, November 2008, p. 1.

<sup>123</sup> Foster, John Bellamy, “The financialization of capitalism,” *Monthly Review* 58, no. 11 (2007): 1-14, p. 1.

form a significant part of this industry.<sup>124</sup> While more traditional and productive investment strategies are positioned as alternatives to the casino capitalism of the 1980s, effecting such investments on the domestic front is less straightforward than might be imagined. Overwhelmingly, manufacturing and retailing operations have moved abroad since the 1970s and 1980s, meaning that it is no longer so easy for financial investors to channel capital into production, at least domestically. Other economies — India, China, Brazil — are now serious rivals in the fields of information technology, manufacturing, and agricultural production.<sup>125</sup> Critics of neoliberalism, of its manifestation in Thatcherism in the UK, and of the discourse of ‘comparative advantage’, have condemned the outsourcing of manufacturing to less regulated zones and the devastating social impact that shifts towards a services economy conditioned, both at home and abroad.<sup>126</sup> Before the global financial and food crises, what appears not to have been contemplated is the flip-side of that coin — that governments in the UK, US, and in other prosperous nations might be inclined to return to earlier modes of production only to find themselves stuck. As well as facing competition from other emerging economies, moving away from speculative finance towards productive forms of financial investment requires contending with the forces of liquefied, previously immobile, capital wrought by liberalisation, securitisation, and other changes that have enabled it to circulate faster.<sup>127</sup> If derivatives are the solution to this financial risk, and derivative markets rely on speculative financial investment to provide liquidity, how can productive investments be made without speculative activity?

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<sup>124</sup> In 2011-12, finance and insurance represented 7.9 percent (or \$1.24 trillion) of US gross domestic product (see “The financial services industry in the United States,” <http://selectusa.commerce.gov/industry-snapshots/financial-services-industry-united-states> Last accessed 18<sup>th</sup> March 2014). It accounted for 9.4 percent (or £125.4 billion) of UK GDP (see “Financial Services: contribution to the UK economy,” House of Commons Library, SN/EP/06193, 21<sup>st</sup> August 2012). Besides a substantial source of tax revenue, the financial services industry in both the US and the UK employs a significant proportion of the population: 22 percent of the UK labour force was employed in finance in 2008, and the role of financial analyst is one of the fastest growing employment sectors. (see “Occupational Outlook Handbook,” Bureau of Labor Statistics, <http://www.bls.gov/ooh/business-and-financial/financial-analysts.htm> Last accessed 18<sup>th</sup> March 2014).

<sup>125</sup> Cheng, Hui Fang, et al, “A future global economy to be built by BRICs,” *Global Finance Journal* 18, no. 2 (2007): 143-156.

<sup>126</sup> Macgregor, Susanne, “Poverty, the poll tax and thatcherite welfare policy,” *The Political Quarterly* 63, no. 1 (1992): 57-67.

<sup>127</sup> Sassen, Saskia, *Expulsions*, Harvard University Press, 2014, p. 25.

## b. New mentalities

As discussed in Chapter Two, what has also altered over the past decades of neoliberal governance and processes of financialisation is the mindset of market actors, both within financial markets, and more broadly. Increasingly, market actors have been structured into a mode of speculative engagement that, as well as predisposing them towards certain economic strategies, produces a particular response to regulation. This speculative rationale and this drive to create more efficient pathways for realising profit were a key force conditioning the development of the market in OTC derivatives. Under the logic of speculation, imbued with a drive to seek efficient means of ‘profiting without producing’, procedural and regulatory requirements for trade are an impediment to be avoided. The logic of speculation can be understood to produce a necessary response to regulation, that of regulatory evasion. The rational response under extant logics of market operation is to engage in a calculative appraisal of the regulations and to respond in a manner that is least detrimental to efficiency and profitability. If it is more cost effective to devise a new instrument, cut a regulatory corner, or invest overseas, this is likely to determine the trader’s response.

All of these arguments can be read as an endorsement for the ongoing operation of OTC derivative markets and seen as support for neoclassical complaints of clumsy attempts at government regulation of markets. That is not my aim here. What I am seeking to expose are the serious limitations of the current reforms which — indulging in a little cynicism — could be said to amount to little more than providing an instruction manual, a higher premium for use, and a few ‘safety’ checks for what Warren Buffet described in 2003 as ‘financial weapons of mass destruction’.<sup>128</sup>

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<sup>128</sup> “Buffett warns on investment ‘time bomb’,” *BBC News*, 4<sup>th</sup> March 2003, <http://news.bbc.co.uk/1/hi/2817995.stm> Last accessed 26<sup>th</sup> February 2015.

## V. LIMITS OF FINANCIAL REGULATION

Limits to the ability of centralised regulators to regulate the financial system, or the state to regulate the economy, are typically pointed out by those with a preference for economic laissez-faire and the promotion of self-regulating markets. In support of their complaint, such critics have pointed to the inefficacy of regulators, the tendency to get caught up in games of ‘regulatory cat-and-mouse’, and the phenomenon of regulatory capture — propagated by George Stigler in the 1970s.<sup>129</sup> Similar suggestions have been made in the context of the recent reforms by commentators, suggesting that they underweight the fact that regulators will be ‘out-smarted by smarter and better-paid practitioners’.<sup>130</sup> What I wish to suggest here is that those who are not generally inclined towards this view — those on the political left who are opposed to economic laissez-faire and the promotion of self-regulating markets — may have to concede that, in current conditions, many of these critiques of centralised regulation are well-founded. This is not to suggest, of course, that critics of neoliberalism must give up on their political convictions, but it is to argue that it might be more effective for them to direct their critical energies towards thinking more creatively and finding alternative ways — including uses of law — through which economic behaviours can be altered.

Beyond the instant regulations just discussed, I want to suggest that financial regulation in general has notable limitations as an apparatus of reform. First, however, it is vital to acknowledge that financial regulation comprises a diverse set of practices and cannot accurately be conceptualised as one thing. This is evident from an extensive literature debating the merits of different types of financial regulation from more rigid ‘rules-based’ regulation to the ‘art’ of flexible, ‘principles-based’ regulation, and further what have been termed ‘new governance’ techniques such as

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<sup>129</sup> Stigler, George J., “The Theory of Economic Regulation,” *The Bell Journal of Economics and Management Science* 2, no. 1 (1971): 3-21.

<sup>130</sup> Halligan, Liam, “History's lesson is that investment and retail banking must be separate,” *The Telegraph*, 12<sup>th</sup> March 2011.



‘risk-based regulation, reliance on internal management and controls, and market-based regulation’.<sup>131</sup> These different approaches manifest in a plurality of different regulatory forms: prudential regulation, capital adequacy requirements, investment guidelines or restrictions, and risk management procedures being just a few. Indeed, derivatives themselves are a form of regulation (I will address the significance of this in the next chapter). Nevertheless, all of these regulatory tools share a common goal — that of making financial markets work ‘more efficiently’. Relatedly, they all continue to presuppose the existence of financial markets and are, to a significant extent, designed to preserve their current scheme of functions: raising and allocating capital, enabling risk management via the use of derivatives, and facilitating price discovery. What this fundamentally fails to account for, I argue, are the implications when financial markets worldwide are increasingly becoming the dominant engine of economic growth for national economies. This would surely imply that making financial markets work efficiently and preserving their scheme of functions involves safeguarding those financial practices — speculative trading, derivatives, index funds — that make this economic motor profitable.

As intimated by its etymology, the meaning of the verb ‘to regulate’ is to ‘to govern by restriction’.<sup>132</sup> This, I suggest, makes the suitability of financial regulation as a tool to tackle speculatively-conditioned food price volatility vulnerable to two further critiques. Firstly, by regulating to restrict ‘excessive’ volumes of speculation — or by regulating the trade in derivatives at all — reforms can operate to legitimate that proportion of speculation permitted and the ongoing trade in these instruments. Second, common to the spectrum of financial regulation practices is a pervasive failure to reckon with the tendency for regulation to make things worse, channelling problematic behaviours into more diverse structures and operating to incentivise even

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<sup>131</sup> For an overview of this literature, see Black, Julia, “The Rise, Fall and Fate of Principles Based Regulation,” LSE Law, Society and Economy Working Papers 17/2010, [http://eprints.lse.ac.uk/32892/1/WPS2010-17\\_Black.pdf](http://eprints.lse.ac.uk/32892/1/WPS2010-17_Black.pdf) Last accessed 18<sup>th</sup> June 2015.

<sup>132</sup> ‘Regulate’, Online Etymology dictionary, <http://www.etymonline.com/index.php?term=regulate> Last accessed 18<sup>th</sup> June 2015.

more ‘socially suboptimal over-innovation’.<sup>133</sup> These dynamics of complexity, regulation and innovation are being explored by Dan Awrey, who has offered a detailed analysis of how more complex products such as synthetic exchange-traded funds (ETFs) and collateral swaps were developed by the financial industry for precisely this motive.<sup>134</sup> Already today, one can invest in weather derivatives, freight derivatives, emissions derivatives, inflation derivatives, catastrophe derivatives, and election derivatives.<sup>135</sup> This garners a sense of what has already become not just commoditised, but financialised in economies in which finance is an important engine of economic growth. Where is all of this speculative capital going to go if — through whatever form of regulation — it is restricted and lesser volumes of it invested in OTC commodity derivatives?

As I made clear in the Introduction, this thesis does not seek to provide solutions to the problems that my analysis uncovers. Whatever solutions are pursued, however, this discussion in this chapter leaves little doubt that, if any change in the operative logic of financial markets is to come about, it can only come about through a prior shift in the broader political consciousness. To be sure, some proposals of a regulatory character, such as a ‘Tobin Tax’ on short-term financial transactions, might potentially be more effective in shifting financial motives and changing the logic of these markets.<sup>136</sup> Debate over the possibilities of such a measure — and, critically, the rate of the tax to be imposed — is ongoing. Were such a tax to be implemented, quite considerable changes in the operations of the financial services industry might follow. Yet this would not solely accrue from the impact of the regulation itself. Rather, the

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<sup>133</sup> Awrey, Dan, “Complexity, Innovation and The Regulation Of Modern Financial Markets,” *Harv. Bus. L. Rev.* 2 (2012): 235.

<sup>134</sup> *Ibid.*

<sup>135</sup> Lynch, Timothy E., “Derivatives: A Twenty-First Century Understanding,” *Loyola University Chicago Law Journal* 43 (2011), p. 26, at footnote 91.

<sup>136</sup> A tax on short-term financial transactions was first proposed by James Tobin in 1972. Tobin suggested that a tax on all spot conversions of one currency into another, proportional to the size of the transaction, could serve to curb levels of volatility in currency trading. Interviewed in 2001, he suggested it might be levied at 0.5% (see “They are misusing my name,” English Summaries [of quotes in Spiegel Online], Spiegel Online International, 9<sup>th</sup> March 2011). A coalition of 11 European Union states has recently agreed to impose a ‘financial transactions tax’ of between 0.01%-0.1% on trades in stocks, bonds and derivatives (see Fullerton, John, “High-frequency trading is a blight on markets that the Tobin tax can cure,” *The Guardian*, 4<sup>th</sup> April 2014, <http://www.theguardian.com/business/economics-blog/2014/apr/04/high-frequency-trading-markets-tobin-tax-financial-transactions-algorithms> Last accessed 18<sup>th</sup> June 2015).

fact that such a tax had been agreed upon and successfully implemented in the first place would betoken a shift in the political wind away from the market values propagated under neoliberalism.

Overall, my argument is that altering the logic of speculation cannot be effected by regulatory initiatives alone. Additional measures are needed that reorient the political economy in which financial markets are embedded in order to recover the opportunity to profit *from producing*, or indeed in order to allow another mode of production to arise. Position limits — held up as a regulatory success from the 1930s — were not the only factor behind the stabilisation of food prices during that era. Other measures that actively stabilised food prices through legislation were introduced, a significant example being the holding of public stocks. Persuasive arguments about the vital need for combining ‘financial’ regulations with changes in the ‘productive matrix’ of the region have been advanced by Donatella Alessandrini, among others.<sup>137</sup> In focusing on the market (and market failure), neoclassical economics conditions a false perspective in which, as Ha-Joon Chang has also argued, we ‘lose sight of a large chunk of the economic system and concentrate on one, albeit important, part only’.<sup>138</sup> The very premise of financial regulation — rules to govern but one part of the broader economy in isolation from the rest — repeats this tendency.

## CONCLUSION

In this chapter I have argued that the regulatory initiatives that campaigners hope will tackle the problem of speculatively-conditioned food price volatility are inadequate. Not only do they replicate a problematic ‘neoliberal-neoclassical’ understanding of how financial markets function, but the regulations largely attempt to

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<sup>137</sup> Alessandrini, Donatella, “Regulating Financial Derivatives? Risks, Contested Values, and Uncertain Futures,” *Social & Legal Studies* 20, no. 4 (2011): 441-462, p. 443.

<sup>138</sup> Chang, Ha-Joon, “Breaking the mould,” p. 546.

reinstate old regulatory measures that don't account for fundamental changes effected under the neoliberal policy agenda over the last three decades. In order to be effective, regulatory measures would have to be accompanied by wider changes in the political stance towards markets by governments, and complemented with policy shifts relating to political economy. All in all, I would suggest, those who continue to focus their energies and place their hopes in financial regulation as the solution to these dilemmas fall foul of a predisposition common to those concerned to affect social change — a tendency explored by Susan Marks in her work on the perils of what she terms 'false contingency'.<sup>139</sup> Ambitions for change can be impeded, Marks suggests, by a tendency to critically underweight the extent to which that change has to unfold within a context that includes systematic constraints and pressures.<sup>140</sup>

Moving away from a focus on law as the *solution* — on the 'regulatory' arm of the law — I now want to focus on law as enabler of speculative behaviour, as constituter of the market in OTC derivatives.

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<sup>139</sup> Marks, Susan, "False Contingency," *Current Legal Problems* 62, no. 1 (2009): 1-21.

<sup>140</sup> *Ibid*, p. 2.

## Chapter Four

# **‘OTC’, ‘Financial’ Innovation, and Food Commodity Speculation**

Overwhelmingly, the growth of the over-the-counter (OTC) derivatives market and the speculative behaviour that has flourished in these spaces is understood to have taken place outside of the purview of law and regulation. The OTC market is frequently portrayed as a ‘regulatory void’,<sup>1</sup> or a ‘legal vacuum’,<sup>2</sup> in which, prior to the introduction of new regulations in 2010, ‘almost no law applied’.<sup>3</sup> It is conceptualised as an environment in which speculators were able to ‘run wild’,<sup>4</sup> reaping enormous profits from a trade in ‘financial weapons of mass destruction’<sup>5</sup> to the detriment of financial and food price stability. This leads to the assumption that improvements in regulation, and particularly the introduction of internationally harmonised provisions, are the solution to these market woes. Yet, as discussed in Chapter Three, new regulations devised for this market not only fail to address the threat that speculative activity poses for food price stability; they may also serve to drive speculative practices into more diverse structures aggravating trends towards product innovation and financial complexity.

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<sup>1</sup> Greenberger, Michael, “Overwhelming a Financial Regulatory Black Hole with Legislative Sunlight: Dodd-Frank’s Attack on Systemic Economic Destabilization Caused by an Unregulated Multi-Trillion Dollar Derivatives Market,” *Journal of Business and Technology Law* 6, no. 1 (2011): 127.

<sup>2</sup> Hackmann, Rolf, *Wealth by Stealth: America’s Trojan Horse*, Bloomington IN: Trafford Publishing, 2013, p. 296.

<sup>3</sup> Somanathan, T. V., and V. Anantha Nageswaran, *The Economics of Derivatives*, Cambridge: Cambridge University Press, 2015, p. 203.

<sup>4</sup> Mander, Jerry, *The Case Against the Global Economy: And for a Turn Towards Localization*, London: Routledge, 2014, p. 59.

<sup>5</sup> “Buffett warns on investment ‘time bomb’,” BBC News, 4<sup>th</sup> March 2003, <http://news.bbc.co.uk/1/hi/2817995.stm> Last accessed 26<sup>th</sup> February 2015.

Shifting the focus away from the remedies law might extend in terms of fixing financial markets and constraining speculation, this chapter will approach the significance of law in this context from an alternative perspective. Taking issue with the popular presentation of the OTC market, I will argue that this ‘regulatory vacuum’ is, in fact, a legally constituted arena. ‘OTC’, I will demonstrate, functions as a legal fiction that obscures the nature of the role that law and the state play in relation to this market. Moving on to take a closer look at derivative instruments themselves, I will suggest that the dominant conception of these products as ‘financial’ technologies is equally misleading. I will argue that these instruments must also be understood as legal technologies — their social destructiveness as much a consequence of legal, as of financial innovations. Contrary to widespread belief, law isn’t lagging behind the financial curve, so to speak. As this chapter will seek to demonstrate, more often than not, it has been one step ahead.

In Part I, I will explore how the arguments of those who view the OTC market as the paradigmatic self-regulating marketplace and those concerned to subject it to centralised regulation have coalesced to portray it as a regulatory void. Challenging those who present its emergence as spontaneous, or attribute it to legislative acts of deregulation, in Part II I will argue that the origins of the OTC market lie with a legal device known as ‘offshore’ finance. Extrapolating from this argument, in Part III I will suggest that not only can the origins of OTC derivatives be traced to this legal fiction, but that the label ‘OTC’ functions in a similar vein. Drawing on the work of scholars including Annelise Riles<sup>6</sup> and Rachel Harvey,<sup>7</sup> I will demonstrate that the unregulated — or self-regulating — quality of the OTC marketplace is a work of legal construction. In Part IV I will move on to challenge the dominant characterisation of the products traded within this market as ‘financial’ innovations. I will argue that modern day derivatives should be more accurately conceptualised as

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<sup>6</sup> Riles, Annelise, *Collateral knowledge: Legal reasoning in the global financial markets*, Chicago and London: The University of Chicago Press, 2011.

<sup>7</sup> Harvey, Rachel, “The legal construction of the global foreign exchange market,” *Journal of Comparative Economics* 41 (2013): 343-354.

*legal* technologies — as complex assemblages of neoclassical assumption and legal fiction — that, by creating a permissive legal environment for speculation, have produced a market that privileges the needs of financial investors over wider society when it comes to food.

## I. ‘REGULATORY VOID’?

The majority of legal academics writing about OTC instruments are grappling with the question of how best to regulate them. In these scholar’s accounts, and within the broader literature on the recent global food and financial crises, law only enters the picture in the search for solutions. It is the remedial tool used to fix financial markets; it is regulation. Where law is deemed relevant to events within financial markets prior to 2007, its significance is predominantly conceptualised in terms of its absence. It is common to read descriptions of the OTC markets containing ‘a host of exotic unregulated “invisible” financial instruments’,<sup>8</sup> or to read of the ‘regulatory stasis’ that accompanied the precipitous growth and proliferation of OTC derivatives.<sup>9</sup> Michael Greenberger exemplifies this interpretation in his article ‘Overwhelming a Financial Regulatory Black Hole with Legislative Sunlight’.<sup>10</sup> Whilst Greenberger’s article makes the most explicit use of this trope, the image of a regulatory black hole or a legal void resonates in much of the press coverage and academic writing on this subject.<sup>11</sup>

This is reinforced by a broader discourse on the relationship between law and the development of the global economy and global financial markets in particular. As political leaders have lamented, ‘our 21<sup>st</sup> century global economy remains regulated

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<sup>8</sup> Baker, Colleen M., “Regulating the Invisible: The Case of Over-the-Counter Derivatives,” *Notre Dame Law Review* 85 (2009): 1287.

<sup>9</sup> Awrey, Dan, “The FSA, Integrated Regulation, and the Curious Case of OTC Derivatives,” *University of Pennsylvania Journal of Business Law* 13 (2010).

<sup>10</sup> Greenberger, Michael, “Overwhelming a Financial Regulatory Black Hole”.

<sup>11</sup> See further: D’Souza, et al, “Illuminating the Need for Regulation in Dark Markets: Proposed Regulation of the OTC Derivatives Market,” *University of Pennsylvania Journal of Business Law* 12 (2009): 473.

largely by outdated 20<sup>th</sup> century laws'.<sup>12</sup> Along with technological innovation, jurisdictional challenges are frequently invoked to explain the failure of law to control the unruly antics of global market actors. As David Gerber argues, global markets are 'managed ineffectively, from the margins' by regimes of national laws that do not always converge.<sup>13</sup> When it comes to derivatives, one is given to understand, the law hasn't caught up yet. These descriptions, along with other adjectives repeatedly deployed to characterise the OTC markets — 'dark', 'private', 'opaque', 'complex', 'anarchic' — condition a particular and now widely prevalent understanding about how these markets emerged, how they operate on a day-to-day basis, and how speculative practices have flourished within them. This commonplace conception of OTC markets will now be elaborated in greater detail.

i. OTC impressions

For many within the financial sector, the OTC arena is the paradigmatic self-regulating market place. It emerged spontaneously as a response to the evolution of the global economy to service businesses that required protection from the forces of globalisation.<sup>14</sup> As bespoke instruments tailored to particular risk-mitigation needs, OTC instruments represent the natural evolution of derivatives from less flexible exchange-traded futures. These instruments are regarded as a technology of risk management that enable the financial sector to self-regulate. While they may be used in service of it, OTC derivatives are said to be predominantly traded between sophisticated financial actors and bear little relation to the underlying productive economy. They are the preserve of financial professionals — an informed trading elite. Critically, from this 'pro-self-regulatory' perspective, as I shall call it, speculative activity is the expression of natural human appetites for maximising self-

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<sup>12</sup> Bush, George W., "Address to the Nation on the National Economy," *Weekly Compilation of Presidential Documents* 44 (24<sup>th</sup> September 2008): 1251, 1254.

<sup>13</sup> Gerber, David J., *Global Competition: Law, Markets, and Globalization*, Oxford: Oxford University Press, 2012, Introduction.

<sup>14</sup> See, for example, Melamed, Leo, "Evolution of the International Monetary Market," *Cato Journal* 8, (1988): 393.



interest. Taken altogether, on this view, the social consequences of the market in OTC instruments and practices of speculation are a function of economic necessity.

In contrast to this is the view of what I will call the ‘pro-centralised-regulatory camp’. In their efforts to make the case for reform, campaigning groups such as Global Justice Now, Oxfam, and SOMO have been key players in conjuring this image of the OTC space as a regulatory void.<sup>15</sup> They have sought to present the OTC market as an unregulated, anarchic trading arena in which greedy speculators have taken on extraordinary levels of risk, exploiting loopholes in the law. Academics and journalists writing on the need for regulatory reform have made similar gestures.<sup>16</sup> Steve Suppan at the Institute for Agriculture and Trade Policy (IATP) has described OTC instruments as ‘transactions between private individuals’ over which governments ‘had, and still have, no authority, or even verified information’.<sup>17</sup> In terms of the emergence of the market, the pro-centralised-regulatory camp tends to either follow a pro-self-regulatory line of the ‘evolution’ of the OTC market — the critical difference being that this is seen as a negative thing — or to argue that the OTC arena was created through acts of deregulation. Nonetheless, an element of spontaneity does tend to be evoked owing to a tendency to leave the ‘forces’ that gave rise to the derivatives industry in the first place un-interrogated and the suggestion that, with the legislative decision to deregulate, the OTC market is spontaneously expanded into a monumental global market. Arguing in this vein, these NGOs and academics have inadvertently run some of the same arguments as the pro-self-regulatory camp.

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<sup>15</sup> See Oxfam referring to ‘deregulated and secretive agricultural commodity derivatives markets’ <http://www.oxfam.org/en/research/not-game-speculation-vs-food-security> Last accessed 10<sup>th</sup> December 2014; SOMO referring to the ‘now wholly unregulated OTC derivatives markets’ <http://somo.nl/dossiers-en/sectors/financieel/eu-financieel-reformen/nieuwsbrief-items/issue-3-oktober-2010/first-steps-in-eu-regulation-against-derivative-speculation> Last accessed 10<sup>th</sup> December 2014.

<sup>16</sup> Greenberger, Michael, “Overwhelming a Financial Regulatory Black Hole,”; D’Souza, et al, “Illuminating the Need for Regulation in Dark Markets,”.

<sup>17</sup> Suppan, Steve, “Commodities Market Speculation: The Risk to Food Security and Agriculture,” IATP, 2008, <http://www.veterinariossinfronteras.org/mm/especulacion%20en%20las%20bolsas%20de%20materias%20primas.pdf> Last accessed 18<sup>th</sup> June 2015.

While many of their claims coincide, there are nonetheless critical differences of opinion informing the pro-self-regulatory and pro-centralised-regulatory perspectives. Most significantly, from pro-centralised regulatory perspectives, the OTC market has emerged primarily to service not the underlying economy, but the needs of financial investors — often designated ‘speculators’. While likely to agree that the OTC arena operates at a distance from the underlying economy, the central concern of anti-speculation groups is that the distance between these fields of economic activity is *illusory*. In fact, it is this condition of illusory autonomy that they regard as so problematic — financial traders are seen to be transacting in ignorance of both market fundamentals and the actual impact that their activities have on underlying markets, with disastrous social consequences.

It is as a result of the co-constitutive claims of these different contingents that the image of the OTC market as a regulatory void has solidified in the media and within academic scholarship on this subject. As well as serving to enhance its ‘unregulated’ quality, both accounts also coalesce in presenting the OTC market as one that is global, private, and hence stateless. My argument in this chapter is that this presentation is fundamentally inaccurate and operates to misrepresent the true character of these markets and their relationship to national legal and political institutions. To begin this work, it is first necessary to flesh out precisely how pro-self-regulatory and pro-centralised-regulatory perspectives on the OTC market understand its relationship with law and the state.

## ii. OTC, law, and the state

In the accounts of pro-self-regulatory conceptions of the OTC market, law is understood to be an intrinsic part of the market mechanism. However, the law that is visible in these accounts is private law that serves as the enabler of market activity. It oils the wheels of the market mechanism allowing market actors to follow their instincts to ‘truck and barter’ and transact in service of their own self-interest. Thus,

while such accounts of the markets recognise that property law, contract law, and a host of other facilitative legal regimes and devices such as insolvency law, money, and payments systems, are integral to the functioning of the market, they are seen to be neutral.<sup>18</sup> This is also the case with regards to private international law, which fulfils this function on a global level. What is not ‘there’, under this conception, is the state. Neoliberal-neoclassical conceptions regard the OTC arena as the paradigmatic self-regulating market place. Instead of clumsy state regulations, the OTC space is deemed to operate through a far more sophisticated, less bureaucratic, self-regulatory system of risk management — of which derivatives form a central component. Contrasting this with pro-centralised-regulatory accounts, the focus is overwhelmingly on the law around the market mechanism. Often, the law within it is not really seen to be there in any significant sense — hence the portrayal of this arena as a regulatory void or legal vacuum. Law, under this lens, is public law — it is state regulation, or global regulatory initiatives, that act as a break on the mechanisms of the market, controlling ‘excessive’ speculation. Pro-centralised-regulatory accounts coincide with the pro-self-regulatory accounts in presenting this as arena in which the state is largely absent. The critical difference is that the former argue that it should be brought back in.

I take issue with both of these presentations. Both of these narratives perpetuate outdated notions of what states are and what they do, and what regulation is, and what it does. In both accounts, whether by virtue of a tendency to focus on the law around the mechanism, ignoring the law within it, or owing to an assumption that the private law within the mechanism is neutral, the law within the OTC arena is often rendered invisible. When it is seen to be there, it isn’t seen to be doing anything. This leads to a tendency to focus the search for solutions on regulation of the market, rather than looking at which laws are making the market operate as it does, and how those laws might be changed in order to effect change. Bringing this law into focus, I will argue that the law within the mechanism is neither ‘neutral’, nor ‘private’. Instead, I will

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<sup>18</sup> Trubek, David, and Alvaro Santos (Eds), *The New Law and Economic Development. A Critical Appraisal*, Cambridge: Cambridge University Press, 2006, p. 14.

suggest, it fulfils a number of critical functions, the cumulative effect of which is to absolve states from responsibility for socially-corrosive activity within the OTC market while simultaneously empowering speculative agencies, helping to structure the market logic of speculation I identified in Chapter Two.

Before focusing on the role of law in the operation of the OTC arena, it is first necessary consider, or re-consider, its role in the emergence of this market.

## II. 'OFFSHORE' ORIGINS

Countering the suggestion that the OTC market evolved spontaneously is not especially challenging. As already discussed in Chapter Two, the *expansion* of the OTC market place was quite incontestably occasioned as a consequence of legislative acts of deregulation. The Financial Services Act (FSA) 1986<sup>19</sup> in the UK and the Commodity Futures Modernization Act (CFMA) 2000<sup>20</sup> in the US dismantled statutory and common law rules put into place expressly to prevent the speculative trade in 'off-exchange' futures instruments<sup>21</sup> — rules that were put in place owing to concern that speculation in commodity futures could lead to price spikes.<sup>22</sup> Focusing principally on the US, a number of scholars and journalists including Bruce

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<sup>19</sup> Under Section 63, FSA 1986 offered OTC trading an enforceability guarantee in the UK. See Biggins, John, "Targeted Touchdown and Partial Liftoff: Post-Crisis Dispute Resolution in the OTC Derivatives Markets and the Challenge for ISDA," *German Law Journal* 13 (2012), p. 1305.

<sup>20</sup> In addition to providing OTC derivatives trading with an enforceability guarantee, CFMA essentially prohibited direct intervention by the federal regulatory agencies in OTC derivatives trading between 'sophisticated market participants', aside from issues such as fraud and market manipulation. *Ibid*, p. 1306.

<sup>21</sup> These rules were the common law 'rule against difference contracts', the requirement of an 'insurable interest' to trade futures outside of regulated exchanges, anti-bucket-shop legislation, a ban on options trading, and the legislative confirmation of these restrictions in the form on the Commodity Exchange Act of 1936 (CEA) P.L. 74-765, 49 Stat. 149.

<sup>22</sup> In 1882, for example, a federal district court judge in Iowa condemned difference contracts for 'agitat[ing] the markets,' observing that 'sudden fluctuations in values are [the] illegitimate progeny' of speculative trading (*Melchert v. Am. Union Tel. Co.*, 11 F. 193, 195 (C.C.D. Iowa 1882)), quoted in Stout, Lynn A., "Uncertainty, Dangerous Optimism, And Speculation: An Inquiry Into Some Limits Of Democratic Governance," *Cornell Law Review* 97 (2011) p. 1202.

Carruthers,<sup>23</sup> Lynn Stout<sup>24</sup> and Gillian Tett<sup>25</sup> have chronicled the decade-long tussle between the financial services industry and state regulatory agencies over the legal status of OTC contracts. Carruthers illustrates how the financial services industry made use of the spectre of legal uncertainty to argue for legislation permitting a trade in OTC instruments.<sup>26</sup> Stout demonstrates how the industry engaged judges in a project of differentiating derivatives from contracts for difference, eventually procuring blanket permission for OTC derivatives under the CFMA.<sup>27</sup> Tett focuses on the personalities and politics involved, foregrounding the practices of the financial services industry in designing internal rules to demonstrate that they were managing risk themselves and didn't require centralised supervision.<sup>28</sup> Stout is the most explicit in her argument about the role that law played in the emergence of the OTC market. She concludes that the global financial crisis was 'the direct and foreseeable ... consequence of the CFMA's sudden and wholesale removal of centuries-old legal constraints on speculative trading in over-the-counter derivatives'.<sup>29</sup>

This argument is extremely important. Not only does Stout draw attention to critical causal linkages between neoliberal policy making, the rise of speculation in derivatives, and the global financial crisis, she challenges the notion that the crisis was due to 'innovations' in the markets or 'the legal system's failure to "keep pace" with finance'.<sup>30</sup> As she goes on to reinforce, '[t]he crisis was caused, first and foremost, by

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<sup>23</sup> Carruthers, B.G., "Diverging derivatives: Law, governance and modern financial markets," <http://blogs.law.columbia.edu/glawfin/files/2013/10/09-Diverging-Derivatives.-Law-Governance-and-Modern-Financial-Markets-by-Bruce-G.-Carruthers.pdf> Last accessed 17<sup>th</sup> July 2015.

<sup>24</sup> Stout, Lynn A., "Derivatives and the Legal Origin of the 2008 Credit Crisis," *Harvard Business Law Review* 1 (2011), p. 12.

<sup>25</sup> Tett, Gillian, *Fool's Gold: How Unrestrained Greed Corrupted a Dream, Shattered Global Markets and Unleashed a Catastrophe*, London: Abacus, 2010.

<sup>26</sup> '[A]ny whiff of uncertainty about the decision not to regulate OTC would be enough, they contended, to undermine the market systemic risk. These uncertainties had to be resolved decisively, they insisted.' in Carruthers, B.G., "Diverging derivatives," p. 5.

<sup>27</sup> The most famous argument to the effect that credit derivatives do not legally constitute insurance is known as the 'Potts opinion'. Sponsored by the International Swaps and Derivatives Association (ISDA), Mr Robin Potts QC wrote an opinion in 1997 which concluded that credit derivatives should not be characterised as contracts of insurance, because they are structured to pay out on the occurrence of a default or other credit event, irrespective of whether the buyer suffers a loss (opinion prepared for the ISDA by Robin Potts QC, *Erskine Chambers*, 24<sup>th</sup> June 1997).

<sup>28</sup> Tett, Gillian, *Fool's Gold*, pp. 26-47.

<sup>29</sup> Stout, Lynn A, "Derivatives and the Legal Origin of the 2008 Credit Crisis," p. 4.

<sup>30</sup> *Ibid*, p. 12.

*changes in the law*'.<sup>31</sup> While of critical significance in terms of foregrounding the role of law not as a remedy to crisis-conditioning speculative practices but as their *enabler*, the focus on deregulation as the watershed moment of the OTC market is misleading. It coincides with the problematic presentation of the OTC market as an 'unregulated' trading arena — albeit one that was created, as opposed to evolving naturally. What is more, this line of argument leads into the trap of calling for re-regulation as the solution to these problems, the drawbacks of which I outlined in Chapter Three.

The market in OTC derivatives pre-dates both the FSA and the CFMA. The first such transaction occurred in 1981, when Salomon Brothers arranged a currency swap between IBM and the World Bank.<sup>32</sup> It was in order to protect the pre-existing investments in OTC instruments that the derivatives industry, represented by the International Swaps and Derivatives Association (ISDA), clamoured for blanket deregulation.<sup>33</sup> Neither Tett nor Stout claims that the CFMA *created* the market in OTC instruments. Both, along with Carruthers, demonstrate that processes of deregulation were more incremental, beginning with the Treasury Amendment of 1974, which protected certain futures and swaps from the CFTC's regulatory oversight, and the CFTC's own relaxing of position limits.<sup>34</sup> However, their emphasis on legislative acts of deregulation critically under-estimates both earlier and later legal developments in the market in OTC instruments. I will now bring these other legal developments into focus.

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<sup>31</sup> *Ibid*, p. 31.

<sup>32</sup> Flavell, Richard, *Swaps and Other Derivatives*, New York: Wiley, 2010, pp. 5-6.

<sup>33</sup> Biggins, John, and Colin Scott, "Public-Private Relations in a Transnational Private Regulatory Regime: ISDA, the State and OTC Derivatives Market Reform," *European Business Organization Law Review* 13, no. 3 (2012): 309-346, p. 318.

<sup>34</sup> In 1989, the US Commodity Futures Trading Commission (CFTC) provided a "safe harbour" from regulation for most OTC swaps (Policy Statement Concerning Swap Transactions, 54 Fed. Reg. 30,694, 30,694-95 (21<sup>st</sup> July 1989)). In 1992, Congress followed suit and gave the CFTC general exemptive power over swaps (Futures Trading Practices Act of 1992, Pub. L. No. 102-546, 5 502, 106 Stat. 3590 (1992)).

i. Liberalisation before deregulation

Before the trade in financial derivatives could be deregulated by the FSA and the CFMA, it had to exist. Today it is difficult to imagine a global economy not characterised by price volatility in which values are constantly shifting in response to flows of financial capital. Consequently, it is difficult to imagine a global economy not serviced by a market in financial instruments managing the risks that arise from such market movements. Prior to the 1970s, however, the character of the global economy was quite different. Market movements were not so erratic, and ‘financial risk’, particularly emanating from fluctuating exchange rates, was not yet something from which commercial enterprises commonly required protection. Under the international gold standard, states committed to fix the prices of their domestic currencies to a specified amount of gold.<sup>35</sup> Capital could move across borders, but its movement didn’t present the same spectrum of risks (and opportunities) as in contemporary global markets. It was not until the US suspended gold convertibility of the dollar in 1971 that fixed foreign exchange rates became a thing of the past, and a new market climate of instability and uncertainty — to which derivatives were positioned as the solution — emerged. If there was a watershed moment in the creation of the OTC derivatives market, I would argue this was it. The abandoning of the Bretton Woods system gave force to a new species of risk which the financial services industry is now dedicated to managing. The liberalisation moment thereby created an apparently legitimate economic role for speculation to service this new industry in risk management — one that was later leveraged by the financial services industry to bring about the deregulatory moment.

Financial liberalisation was effected through legislative decisions on a multitude of levels. In leading Western states, it was largely negotiated through international institutions.<sup>36</sup> The OECD Code of Liberalization of Capital Movements

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<sup>35</sup> Bordo, Michael D., “Gold Standard,” *The Concise Encyclopedia of Economics*, <http://www.econlib.org/library/Enc/GoldStandard.html> Last accessed 24<sup>th</sup> November 2014.

<sup>36</sup> Chwieroth, Jeffrey M., *Capital ideas: the IMF and the rise of financial liberalization*, Princeton: Princeton University Press, 2010.

agreed in 1961 stipulates a number of legally binding rules relating to the progressive and non-discriminatory liberalisation of capital movements.<sup>37</sup> Commitments to the progressive liberalisation of financial services were also included in the General Agreement on Trade in Services (GATS), entering into force in January 1995 as a result of the Uruguay Round negotiations.<sup>38</sup> In the case of developing countries, liberalisation policies were pushed through via processes of structural adjustment.<sup>39</sup> The significance of these developments in conditioning a shift towards a more financialised and volatile economic order has generated a substantial literature.<sup>40</sup> The factors precipitating it are, however, subject to dispute. Many narratives attribute the fall of the Bretton Woods architecture to the ‘forces’ of globalisation, and technological innovation in particular.<sup>41</sup> Few have challenged the argument that derivatives were a timely development on the part of the financial services industry to respond to the challenges and needs of a liberalised global economy. I will now seek to do precisely this.

## ii. The Euromarkets, ‘Offshore’, and the origins of ‘OTC’

During the post-war period, a strict regime of capital controls that effectively ‘caged’ international capital was implemented as part of the Bretton Woods consensus.<sup>42</sup> This ensured that financial activity was largely conducted on a domestic

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<sup>37</sup> “OECD Codes of Liberalisation of Capital Movements and of Current Invisible Operations,” <http://www.oecd.org/investment/investment-policy/codes.htm> Last accessed 17<sup>th</sup> April 2015.

<sup>38</sup> General Agreement on Trade in Services, 15<sup>th</sup> April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, The Legal Texts: The Results Of The Uruguay Round Of Multilateral Trade Negotiations 284 (1999), 1869 U.N.T.S. 183, 33 I.L.M. 1167 (1994).

<sup>39</sup> Collier, Paul, and Jan Willem Gunning, “The IMF’s Role in Structural Adjustment,” *The Economic Journal* 109, no. 459 (1999), pp. 634-651; Greenaway, David, and Oliver Morrissey, “Structural adjustment and liberalisation in developing countries: what lessons have we learned?” *Kyklos* 46, no. 2 (1993): 241-261.

<sup>40</sup> Singh, Kavaljit, *Taming global financial flows: challenges and alternatives in the era of financial globalization: a citizen’s guide*, London: Zed Books, 2000; Stiglitz, Joseph E., “Capital-market liberalization, globalization, and the IMF,” *Oxford Review of Economic Policy* 20, no. 1 (2004): 57-71; Strange, Susan, *Casino capitalism*, Manchester: Manchester University Press, 1997.

<sup>41</sup> Cerny, Philip G., “The dynamics of financial globalization: technology, market structure, and polity response,” *Policy Sciences* 27 (1994): 319-342; Wriston, Walter B., “Bits, bytes, and diplomacy,” *Foreign Affairs* 76 (1997): 172-182.

<sup>42</sup> Ocampo, José Antonio, and Joseph E. Stiglitz, *Capital Market Liberalization and Development*, Oxford: Oxford University Press, 2008, p. 49.



basis, and that capital flows into other countries were conducted, in the main, through official state channels. It was not possible, for example, for a British investor to buy American stocks and bonds.<sup>43</sup> It was in this climate, over the course of the 1950s and 1960s, that the ‘Euromarkets’ emerged. Financial institutions in Europe, principally in London, began processing transactions that enabled financial institutions in other jurisdictions to deposit funds in their home currency denominations — often US dollars (‘Eurodollars’) — and thereby circumnavigate restrictions on capital flows.<sup>44</sup> These offshore financial centres became marketplaces for new financial products and techniques.<sup>45</sup>

Contemplating the role of law in this context, what leaps out initially is the familiar pattern exposed in Chapter Three — acts of regulation produce a corresponding act of evasion. However, the critical point to impress is that these acts of evasion were also constituted by law and encouraged by governments. As Eric Helleiner has underlined, despite claims to the contrary, the Euromarket was not a stateless market.<sup>46</sup> Its existence was heavily dependent from the outset on state support, particularly from the UK and the US. The British Government solicited the market's growth on British soil through various regulatory and tax changes.<sup>47</sup> Under the 1947 Exchange Control Act, some British banks were granted special permission to deal in foreign currency.<sup>48</sup> In terms of the US, although it had the power to do so, it chose not to prevent its financiers from participating in the market. In fact, by the mid-

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<sup>43</sup> Singh, Kavaljit, *Taming global financial flows*, p. 26.

<sup>44</sup> As Brett Christophers has emphasised, the ‘Euro’ prefix is really a misnomer as there is nothing necessarily European about these markets, apart from their emergence in Europe. ‘Offshore’, is, he argues, a better descriptor (Christophers, Brett, *Banking Across Boundaries: Placing Finance in Capitalism*, John Wiley & Sons, 2013, Google eBook).

<sup>45</sup> Picciotto, Sol, and Jason Haines, “Regulating Global Financial Markets,” *Journal of Law & Society* 26, no. 3 (1999): 351-68.

<sup>46</sup> Helleiner, Eric, *States and the Emergence of Global Finance: from Bretton Woods to the 1990s*, Cornell University Press, 1996.

<sup>47</sup> de Escobar, Janet Kelly, *Bankers and borders: The case of American banks in Britain*, Ballinger Pub. Co., 1977.

<sup>48</sup> Palan, Ronen, “Offshore and the Structural Enablement of Sovereignty,” in Mark Hampton and Jason Abbott (Eds), *Offshore Finance Centers and Tax Havens: The Rise of Global Capital*, West Lafayette IN: Purdue University Press, 1999, p. 32.

1960s, US officials were in fact actively encouraging US banks and corporations to move their operations to the offshore London market.<sup>49</sup>

Often identified as the predecessors to other ‘stateless’ markets like the OTC derivatives market, these early ‘offshore’ financial centres were, territorial speaking, ‘very much onshore’.<sup>50</sup> Offshore finance, as Ronan Palan has argued, ‘is essentially a legal device’ — the notion of ‘offshore’ is ‘a ‘fictional’ or purely ‘juridical space’.<sup>51</sup> The Euromarket achieved its offshore status because the state on whose territory it was originally located, the UK, ‘accepted, or even produced, an interpretation of its own laws that permitted the fiction that certain types of financial transaction did not take place within that territory’.<sup>52</sup> It was in this arena of regulatory exception that international banking ceased to be solely ancillary to trade and investment, and began to ‘develop its own dynamic’.<sup>53</sup> As Colin Read has highlighted, the 1960s saw the emergence of finance as a discipline of its own, out of the shadow of economics.<sup>54</sup> Crucial to this shift was the innovation of a new science of financial risk management that brought in an era of models, formulas, quantifiable methodologies, and sophisticated financial products, such as derivatives. As Helleiner has argued, it was the creation of the Euromarkets and the growth of ‘private’ international financial activity within these ‘offshore’ centres that motivated the facilitative technological developments and increasingly speculative behaviours that proved disruptive of the Bretton Woods fixed exchange rate system.<sup>55</sup> While the International Monetary Market of the Chicago Mercantile Exchange (CME), the first futures exchange expressly created for the trading of financial markets, was not officially launched until

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<sup>49</sup> *Ibid.*

<sup>50</sup> *Ibid.*, p. 21.

<sup>51</sup> *Ibid.* pp. 21 and 23.

<sup>52</sup> Palan, Ronan, *The offshore world: sovereign markets, virtual places, and nomad millionaires*, Ithica NY: Cornell University Press, 2006, p. 32.

<sup>53</sup> Tickell, Adam, “Dangerous derivatives: controlling and creating risks in international money,” *Geoforum* 31, no. 1 (2000): 87-99, p. 91.

<sup>54</sup> Read, Colin, *The Rise of the Quants: Marschak, Sharpe, Black, Scholes and Merton*, Basingstoke: Palgrave Macmillan, 2012, p. 179.

<sup>55</sup> Helleiner, Eric, “Explaining the globalization of financial markets: Bringing states back in,” *Review of International Political Economy* 2, no. 2 (1995): 315-341, p. 322.

some months after the US ‘went off gold’,<sup>56</sup> the development of financial techniques to protect commerce clearly predates the taking of that decision.<sup>57</sup>

As well as obfuscating the role that the pre-configured ‘solution’ of derivatives played in enabling this policy decision, what also slides from view is the role of the state in these processes. All that is visible is the law around the mechanism — the regulatory arm of the state intervening first to remove capital controls, and, later, to deregulate — and the state’s role in that. The fact that the actions of the UK and the US set it all in motion, kicking off a new dynamic in financial activity that developed on the margins of the existing regulatory order, but came eventually to overtake it, is no longer visible. Critically, this also upsets the portrayal of the OTC space as a regulatory void. While deregulation did remove regulation in the form of existing centralised controls, this depended on trust in the ability of the financial services industry to manage risk and ‘self-regulate’. In the post-crisis era, these instruments are overwhelmingly discussed as the object of regulation. What this elides is that derivatives are themselves regulatory instruments; they were part of a new order of ‘self-’ or ‘private-’ regulation that established the modern global financial system. As the forthcoming analysis will demonstrate, however, the ability of the financial services industry to ‘self-regulate’ via the management of risk is a mirage, constituted, operated, and at the same time obscured, through the proliferation of a legal fiction: OTC.

Having traced the origins of the OTC market to the use of a legal device, ‘offshore’, to create a separate realm in which derivatives were developed, I am going

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<sup>56</sup> “Honoring Financial Innovation,” Press Release regarding the CME Fred Arditti Innovation Award: Creative Ideas in Financial Services, Leo Melamed, Chairman Emeritus, CME, <https://www.cmegroup.com/company/center.../melamedadvertorial.pdf> Last accessed 9<sup>th</sup> December 2014.

<sup>57</sup> In a position paper commissioned by the Chicago Mercantile Exchange (CME) published in December 1971, Milton Friedman made the following prognosis: ‘changes in the international financial structure will create a great expansion in the demand for foreign cover. It is highly desirable that this demand be met by as broad, as deep, as resilient a futures market in foreign currencies as possible’. After paying him \$5,000, Leo Melamed used Friedman’s paper to gain support from then-Fed Chairman Arthur Burns and US Treasury Secretary George Schultz, and to blaze the trail for the creation of the International Monetary Market (IMM) of CME. It was Friedman who then urged President Nixon to abandon the Gold Standard on 15<sup>th</sup> August 1971 (see Melamed, Leo, “Evolution of the International Monetary Market,” *Cato Journal* 8 (1988), p. 398).

to argue that OTC is a legal device that functions in a very similar vein. The first step is to explain the meaning of ‘offshore’ and how it functions as a legal ‘device’ — or what others have called legal ‘fiction’ — in more detail.

### III. ‘OTC’ AS LEGAL DEVICE / LEGAL ‘FICTION’

In the context of financial activity, ‘offshore’ is commonly associated with tax havens — also designated ‘offshore financial centres’ — such as Liechtenstein and the Cayman Islands. Deposits are made in banks that are located in a different jurisdiction. However, large volumes of ‘offshore’ financial transactions are actually transacted onshore in the very same financial centres that handle domestic transactions. As with the Euromarkets, what the label really connotes is a position of differentiation within the realm of the state — a legal ‘device’, in Palan’s terms — or a ‘realm of regulatory exception’, materially supported and legally capacitated by state institutions.<sup>58</sup>

While Palan chooses to designate offshore as a legal ‘device’, we might equally use the label legal ‘fiction’. This concept was perhaps most famously elaborated by Lon Fuller.<sup>59</sup> He used it to explore how judges and courts make use of certain ‘false statements’, ‘makeshifts’ or ‘false assumptions’ that, while understood to be inadequate, or even amounting to a ‘partial untruth’, have a certain utility.<sup>60</sup> Many scholars have been influenced by his work. In her book, *Collateral Knowledge*, Riles tears apart the operation of collateral, typically seen as a technical matter of arcane property law, demonstrating how it functions as a ‘private technology of regulation’.<sup>61</sup> I will explore the significance of this argument shortly. For now, I want to focus on her designation of collateral as a legal fiction — or a series of legal fictions — by which the courts choose to act ‘as if’ the rights of the parties over the payment of

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<sup>58</sup> Palan, Ronen, *The offshore world: sovereign markets*, p. 23.

<sup>59</sup> Fuller, Lon L., “Legal Fictions,” *Illinois Law Review* 25, no. 4 (1967): 363-399, p. 364.

<sup>60</sup> *Ibid* p. 368.

<sup>61</sup> Riles, Annelise, *Collateral knowledge*, p. 4.

collateral were well defined. Though a legal fiction as elaborated by Fuller typically takes the form of a statement made by a legal official, Riles's work suggests that a legal fiction can also be tool or a technique. For her, a legal fiction is not just a statement — it can be a thing, or a set of things. As she contends, '[C]ollateral is not just one thing. It takes several different forms — material documents, legal reform projects, legal theories, legal doctrines, mathematical calculations, and more'.<sup>62</sup> Applying the label 'legal fiction' to the OTC market is a little more challenging. The term 'over-the-counter' is used to differentiate one class of derivatives from another — those traded bilaterally, as opposed to those traded on regulated futures exchanges. As a description of these instruments, this is factual. However, I want to argue that, when used to describe *the market* in these instruments, the label 'OTC', as with the label 'offshore', creates a false image of the operation of these markets. Specifically, it has conditioned a legal approach to the OTC market that involves acting, albeit with a degree of awareness of the partial inaccuracy of this, 'as if' it is an unregulated, private, global market.<sup>63</sup> It is my contention that, over time, this fictional legal understanding of OTC markets has crystallised to make the label 'OTC' itself function as a legal fiction.

In spite of the many parallels between the OTC market and 'offshore' finance, advancing this argument for the OTC market is vulnerable to a critical objection. Owing to its size, complexity, and virtuality, the OTC market is regarded by many as a 'truly' global market place<sup>64</sup> — as well as one that is both private and self-regulating. In previous chapters of this thesis I have stressed the dangers of underweighting the drastic changes that have taken place under processes of financialisation. Just as the modern financialised OTC market is not the same as the futures markets that pre-dated it, so too, it would follow, it is not the same as the 'offshore' Euromarket or other offshore transactions. In order to make my counter-

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<sup>62</sup> *Ibid*, p. 59.

<sup>63</sup> Lang, Andrew T. F., "Governing 'As If': Global Subsidies Regulation and the Benchmark Problem," LSE Legal Studies Working Paper No. 12/2014, 2014.

<sup>64</sup> "The Global Derivatives Market: An Introduction," Deutsche Börse AG, White Paper, April 2008, [http://www.math.nyu.edu/faculty/avellane/global\\_derivatives\\_market.pdf](http://www.math.nyu.edu/faculty/avellane/global_derivatives_market.pdf) Last accessed 28<sup>th</sup> February 2015.

argument persuasive, it is necessary to acknowledge those characteristics of the OTC market place that could be said to make it the real deal.

i. OTC fact

OTC derivative markets are currently headquartered in banks and financial institutions in New York and London. They are nonetheless very much global markets in terms of the participants engaged in them. OTC transactions are not only made bilaterally, between two private parties, but increasingly they are made virtually. Investopedia describes OTC markets as ‘a decentralized market, without a central physical location, where market participants trade with one another through various communication modes such as the telephone, email and proprietary electronic trading systems’.<sup>65</sup> Since they were deregulated, the trade in these instruments was removed from direct supervision by centralised regulatory agencies. In the place of the rules elaborated by these agencies, the techniques and formulas informing risk management through derivatives and the calculation of their pricing formulas have been translated into internal regulatory mechanisms. During the 1990s, ‘Value at Risk’ (VaR), a method of determining how to work out how much money the bank could expect to lose on a given day, was translated into a new regulatory practice introduced at large banks, such as at JP Morgan, known as the ‘4-15’ report.<sup>66</sup> So named as it was to be placed on the Chairman’s desk at 4.15 pm each day, this calculation was used to generate a figure expressing the bank’s total exposure measured from across the bank’s entire trading portfolio.<sup>67</sup> In doing so, it was argued, senior management at the bank were able to gain understanding of the risks at stake, and to facilitate the better allocation of capital.<sup>68</sup> Through such practices, as Tett has chronicled, the financial services industry was able to claim that it was ‘self-regulating’.<sup>69</sup>

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<sup>65</sup> Definition of ‘Over-The-Counter Market,’ <http://www.investopedia.com/terms/o/over-the-countermarket.asp> Last accessed 17<sup>th</sup> July 2015.

<sup>66</sup> Tett, Gillian, *Fool's Gold*, p. 38

<sup>67</sup> Hull, John C., *Risk Management and Financial Institutions*, New York: John Wiley & Sons, 2012, p. 184.

<sup>68</sup> *Ibid.*

<sup>69</sup> Tett, Gillian, *Fool's Gold*.

What is rendered visible appears to be a market in which private actors transact with one another via contract, understood as a private law discipline, relying on internally developed systems of regulation based on the management of risk that are increasingly articulated at the global level. In the case of OTC derivatives, self-regulatory measures have been developed by the ISDA and other industry groups such as the Futures Industry Association and the Derivatives Policy Group.<sup>70</sup> The ISDA system has been described as a ‘highly developed standard-setting regime’.<sup>71</sup> ISDA publishes user’s guides and best practice manuals<sup>72</sup> that disseminate advice and set standards for industry self-regulation. It has also collaborated with other financial market trade associations, such as the International Islamic Financial Market (IIFM) to facilitate Shari’ah law compliant derivatives.<sup>73</sup> Not only supplementing the development of self-regulatory standards and mechanisms, ISDA has developed a standard form contract — the ISDA ‘Master Agreement’ — that is used in an estimated 90 per cent of all OTC derivatives. First developed in 1987 and revised in 1992 and 2002,<sup>74</sup> these standard documents have been called a ‘modern international law merchant’,<sup>75</sup> and ‘a kind of global law by contract’.<sup>76</sup> The template functions to set out in detail the ongoing legal and credit relationships between the parties, also defining how each transaction entered into by the parties is to be governed, and incorporating provisions that deal with how the rights of the parties are to be treated in the event of a default. ISDA's process of updating and implementing these documents is seen to have numerous regulatory characteristics. It employs about 3,000 people in

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<sup>70</sup> Pagliari, Stefano, “Who Governs Finance? The Shifting Public-Private Divide in the Regulation of Derivatives, Rating Agencies and Hedge Funds,” *European Law Journal* 18, no. 1 (2012): 44-61, p. 51.

<sup>71</sup> Biggins, John, and Colin Scott, “Public-Private Relations in a Transnational Private Regulatory Regime: ISDA, the State and OTC Derivatives Market Reform,” *European Business Organization Law Review* 13, no. 3 (2012): 309-346 p. 327.

<sup>72</sup> ISDA, Settlements Best Practice, <http://www2.isda.org/functional-areas/market-infrastructure/settlements>

<sup>73</sup> ISDA and International Islamic Financial Markets, “IIFM and ISDA Launch Tahawuut (Hedging) Master Agreement,” 1<sup>st</sup> March 2010, <http://www.isda.org/media/press/2010/press030110.html> Last accessed 18th August 2015.

<sup>74</sup> Biggins, John, and Colin Scott, “Public-Private Relations in a Transnational Private Regulatory Regime,” p. 323.

<sup>75</sup> Frankel, Tamar, “Cross-border securitization: Without law, but not lawless,” *Duke Journal of Comparative and International Law*. 8 (1997): 255.

<sup>76</sup> Golden, Jeffrey B., “The courts, the financial crisis and systemic risk,” *Capital Markets Law Journal* 4, no. suppl 1 (2009): S141-S149, p. S144.

its documentation committee,<sup>77</sup> which reacts quickly to modify the contracts — striking and redefining terms — to remain efficient as legal and economic circumstances change.<sup>78</sup>

As well as regulatory principles and boilerplate contracts, ISDA has played a leading role in developing a number of legal techniques that manage the risks of one of the parties failing to meet their obligations. The most important of these are netting and collateral. In the event of a default, or one party going bankrupt, netting means that the outstanding obligations between the parties are tidied into one settlement figure, as opposed to leaving a mass of unresolved transactions.<sup>79</sup> Parties that have ‘netted out’ their transactions in this way are able to occupy a privileged position in the event of bankruptcy, and are treated in law as secured creditors.<sup>80</sup> ISDA has developed a model ‘netting act’ that is offered to national legislators as a means of ensuring that netting is legitimated in the formal legal code of a country.<sup>81</sup> The positing of collateral (otherwise termed ‘margin payments’) is a means of countering the risk associated with transacting OTC derivatives. Collateral operates as a kind of deposit that insures the parties against the risk of default. Greater collateralization of swap transactions is explicitly viewed as the private market-based alternative to greater governmental regulation. ISDA has also developed a legal framework for collateral, and has commissioned legal opinions to confirm the suitability of this technique as a means of legitimate risk management.<sup>82</sup> As ISDA reports, ‘[t]he Association’s work in this area has resulted in a series of laws being passed in various countries that ensure legal certainty in those nations’.<sup>83</sup> Hence, ISDA activity extends

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<sup>77</sup> Gelpert, Anna, Commentary, Contracts as Organisations, 51 *Arizona Law Review* 57, 63-64 (2009), citing ISDA Staff Information, ISDA, <http://isda.org/www/staff.html> Last accessed 5<sup>th</sup> February 2009.

<sup>78</sup> Choi, Stephen J., and G. Mitu Gulati, “Contract as Statute,” *Michigan Law Review* (2006): 1129-1173.

<sup>79</sup> Moran, Glen, “The case of OTC derivatives: Market formation and governance in international financial markets,” *Human Relations* 61 (2008), p. 647.

<sup>80</sup> As Moran argues, ‘[W]ithout netting, the counter-party to the contract would have to wait in line with all the other creditors according to the laws and regulations of the particular context in which the counterparty was registered.’ See Moran, Glen, “The case of OTC derivatives,” p. 648.

<sup>81</sup> ISDA, “Memorandum on the Implementation of Netting Legislation: A Guide for Legislators and Other Policy-Makers,” 2006, <https://www2.isda.org/attachment/...=/Memo-Model-Netting-Act.pdf> Last accessed 17<sup>th</sup> July 2015.

<sup>82</sup> *Ibid*, p. 653.

<sup>83</sup> ISDA website, <http://www.isda.org/> Last accessed 1<sup>st</sup> of March 2015.



beyond producing boilerplate contracts to also offering boilerplate legislative provisions relating to aspects of the Master Agreement for national legislatures to adopt as they see fit.<sup>84</sup>

A number of scholars have suggested that via its standardised documentation, ISDA has created the ‘global rules’ of the OTC derivative markets. As Choi and Gulati argue, ‘[a]s a global private actor, ISDA has replicated in varying degrees the basic jurisdictional powers — prescriptive, adjudicatory, and enforcement wise — of government actors.’<sup>85</sup> ISDA has increasingly begun to seek public incorporation of private norms within national legislation from the outset. This strategy ‘enrols’ the legislative capacity of national governments to extend the reach of otherwise voluntary contractual rules.<sup>86</sup> In doing so, ISDA is seen to have reversed traditional law-making and regulatory functions, developing norms itself to which states merely accede. As well as apparently leapfrogging the legislative capacities of the state, ISDA is developing new global adjudicative mechanisms — ostensibly to obviate the need for reliance on its judicial functions and forums. ISDA has founded five ‘Credit Derivative Determination Committees’ each having ‘jurisdiction’ over a specific region of the world (the Americas, Asia excluding Japan, Australia/New Zealand, Europe, the Middle East and Africa (EMEA), and Japan). The committees make official, binding determinations regarding the existence of ‘credit events’,<sup>87</sup> and may trigger obligations under OTC derivatives contracts.<sup>88</sup> In March 2012 for example, ISDA issued a statement declaring that Greece, through passing legislation that forces losses on all its private creditors, had triggered payment on default insurance

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<sup>84</sup> Biggins, John, and Colin Scott, “Public-Private Relations in a Transnational Private Regulatory Regime,” p. 328.

<sup>85</sup> Basedow, Jürgen, and Toshiyuki Kono, *An economic analysis of private international law*, Vol. 46, Mohr Siebeck, 2006, pp. 22-28.

<sup>86</sup> Black, J., “Enrolling Actors in Regulatory Processes: Examples from UK Financial Services Regulation,” *Public Law* (2003) p. 62.

<sup>87</sup> A credit event is said to occur when a person or organisation defaults on a significant transaction. Because the marketplace recognizes such events as related to one's credit worthiness, credit events can trigger specific protections provided by credit derivatives.

<sup>88</sup> Witschen, Eric, “The CDS Revamp,” *Bloomberg Markets*, May 2010, pp. 115-116.

contracts, thus instigating a credit event that entitled holders of affected instruments to receive payment.<sup>89</sup>

The common term used to designate the kind of rule-making employed by ISDA is ‘Transnational Private Regulation’ or ‘TPR’. Janet Koven Levit has called this ‘[b]ottom-up lawmaking... [which does] not feature state policymakers but rather the very practitioners — both public and private — who must roll up their sleeves and grapple with the day-to-day technicalities of their trade’.<sup>90</sup> Emphasising the regulatory nature of these types of law-making, she argues that a process can become functionally regulated even where no sovereign authoritatively imposes the norms and practices.<sup>91</sup> Other scholarly work that has been widely acclaimed supplements this analysis. Gunther Teubner has argued that a global law beyond the state has emerged, in which decentred law-making process has come into existence not by formal acts of nation states but by strange paradoxical acts of self-validation.<sup>92</sup> He argues that other types of social rule production produced in the periphery of the legal system are increasingly recognised as law production, and that these regimes ‘break the frame’ of national laws.<sup>93</sup> What emerges, he contends, is ‘global law without a state’, in which other social systems challenge the supremacy of state-based legal systems.

While what is conjured, reading this scholarship, is the image of a private, self-regulating global marketplace, I will now seek to demonstrate that this understanding of ‘OTC’ markets is, nonetheless, a mirage.

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<sup>89</sup> “ISDA declares Greek credit event; CDS payments triggered,” Reuters, 9<sup>th</sup> March 2012.

<sup>90</sup> Levit, Janet Koven, “Bottom-up Approach to International Lawmaking: The Tale of Three Trade Finance Instruments, A,” *Yale J. Int’l L.* 30 (2005): 125.

<sup>91</sup> Rauterberg, Gabriel, and Andrew Verstein, “Assessing Transnational Private Regulation of the OTC Derivatives Market: ISDA, the BBA, and the Future of Financial Reform,” *Virginia Journal of International Law* 54 (2013), p. 19.

<sup>92</sup> Teubner, Gunther, *Global law without a state (Studies in modern law and policy)*, Dartmouth Publishing Co Ltd, 1997.

<sup>93</sup> Teubner, Gunther, “Breaking frames: the global interplay of legal and social systems,” (1997): 149-169.

ii. OTC fiction

OTC derivatives are traded globally. However, as with earlier offshore financial transactions in the Euromarkets, these transactions are also carried out very much onshore. The financial institutions that deal in OTC derivatives are, to paraphrase Edelman and Suchman, ‘immersed in a sea of law’.<sup>94</sup> The law that they are immersed in, while much of it is now paralleled in international legal systems, is largely domestic. Banks and hedge funds are born through the legal act of incorporation, and they die through the legal act of bankruptcy.<sup>95</sup> This is affected through domestic regimes of company and insolvency law. In between, they raise capital under domestic securities law, hire employees under domestic labour law, exchange goods and services under domestic contract law, develop public identities under domestic trademark law, innovate under domestic patent and copyright law, and engage in production under domestic environmental, and health and safety law, and — at least some of the time — pay taxes according to domestic tax law.<sup>96</sup> The operations and activities of financial traders and banks that trade in derivative instruments are all intrinsically dependent on this web of facilitative legal protections and permissions that lie with the state, its domestic legislation, and its judicial systems of enforcement. While some of these regimes are typically understood as private law, notably contract law, labour law and corporate law, many have questioned the cogency of the distinction between public and private.<sup>97</sup> Others, like environmental and tax laws, are clearly public in character.

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<sup>94</sup> Edelman, Lauren B., and Mark C. Suchman, “The Legal Environments Of Organizations,” *Annual Review of Sociology* 23 (1997): 479-515, p. 480.

<sup>95</sup> Edelman, Lauren B., “The Legal Lives of Private Organizations,” *The Blackwell Companion to Law and Society* (2004): 231.

<sup>96</sup> Edelman, Lauren B., and Mark C. Suchman, “The Legal Environments Of Organizations,” *Annual Review of Sociology* 23 (1997): 479-515, p. 480.

<sup>97</sup> Balbus, Isaac, “Commodity Form and Legal Form: An Essay on the ‘Relative Autonomy’ of the Law,” *Law & Society Review* 11 (1977): 571-588, p. 571; Kennedy, Duncan, “The Stages of the Decline of the Public/Private Distinction,” *University of Pennsylvania Law Review* 130 (1982): 1349; Klare, Karl E., “The Public/Private Distinction in Labor Law,” *University of Pennsylvania Law Review* 130, no. 6 (1982): 1358-1422.

Likewise, while the instruments that are traded in OTC markets, derivatives ‘contracts’, are understood to be private law instruments, numerous scholars have demonstrated that they are nonetheless dependent on domestic public legal institutions for vindication.<sup>98</sup> Drawing on disciplines including economics, sociology, anthropology, and financial regulation, Katharina Pistor,<sup>99</sup> Karin Knorr Cetina,<sup>100</sup> Annelise Riles,<sup>101</sup> Bruce Carruthers,<sup>102</sup> Rachel Harvey,<sup>103</sup> and Julia Black<sup>104</sup> have all demonstrated that, as bundles of legal rights and obligations — synthetic legal constructions that have no independent existence outside of their contractual form<sup>105</sup> — derivatives are reliant on state enforcement. Legal institutions have to be used to create rights of some kind, contractual or proprietary or some form of sui generis right with respect to that newly created product.<sup>106</sup> Locations for exchange have to be constructed, even if only virtually as computer platforms. Rules of exchange need to be devised, and institutional structures put in place for their enforcement.<sup>107</sup> As well as vindicating these financial instruments, as Black is keen to impress, law constitutes these instruments.<sup>108</sup> This point will be elaborated in Part IV on derivatives as legal innovation. For now, I want to echo Morris Cohen, and ‘generations of legal theorists’ before him, in reinforcing that private law, like the private image of the OTC market, isn’t really private.<sup>109</sup> At some point, all private laws interact with other regimes of national law and depend on national institutions for enforcement. Private rules only exist as a delegation of state power or legal authority.

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<sup>98</sup> Pistor, Katharina, “A Legal Theory of Finance,” *Journal of Comparative Economics* 41, no. 2 (2013): 315-330, p. 318.

<sup>99</sup> *Ibid.*

<sup>100</sup> Knorr Cetina, Karin, and Alex Preda, *The sociology of financial markets*, Oxford University Press, 2004.

<sup>101</sup> Riles, Annelise, *Collateral knowledge*.

<sup>102</sup> Carruthers, Bruce G., *City of capital: Politics and markets in the English financial revolution*, Princeton University Press, 1999.

<sup>103</sup> Harvey, Rachel, “The legal construction of the global foreign exchange market”.

<sup>104</sup> Black, Julia, “Seeing, Knowing, and Regulating Financial Markets: Moving the Cognitive Framework from the Economic to the Social,” LSE Law, Society and Economy Working Papers 24/2011.

<sup>105</sup> Stout, Lynn A., et al, “Regulate OTC derivatives by deregulating them,” *Regulation* 32, no. 3 (2009): 30-41.

<sup>106</sup> Pistor, Katharina, “A Legal Theory of Finance”.

<sup>107</sup> *Ibid.*

<sup>108</sup> Black, Julia, “Seeing, Knowing, and Regulating Financial Markets,” p. 20.

<sup>109</sup> Cohen, Morris R., “Property and sovereignty,” *Cornell Law Quarterly* 13 (1927): 8.

A counter-argument to this is that the law-making practices of ISDA have altered this traditional dependency. This could explain why the insights of generations of legal theorists have been forgotten — allowing the legal fiction of OTC to permeate. I acknowledge that it very much looks as though ISDA is ‘making law’ — that it has surpassed the state with its model laws and standardised global contracts. However, upon closer inspection, it becomes clear that this privatised global law making is nonetheless tethered to the state. The ISDA Master Agreement has to be ‘customised’ and requires parties using it to make certain elections. One of these, in the Schedule to the agreement, is the choice of law.<sup>110</sup> While ostensibly free to choose, the parties cannot put ‘global law’ in this box. They must select a jurisdiction. In practice, ISDA stipulates that the parties have a choice between the law of the UK and the law of the State of New York.<sup>111</sup> This use of ‘touchdown points’, in which reliance on domestic law is required to back up transnational law making, has been described by Robert Wai.<sup>112</sup> Biggins, drawing on Wai, has noted that the so-called transnational or global law making of ISDA never entirely ‘takes-off’, relying on what he terms “‘targeted touchdown” in “derivatives friendly” jurisdictions’.<sup>113</sup>

Typically, the reliance of these norms and standards of private governance on domestic law only emerge in the trading of OTC derivatives when something goes wrong. As Joanna Braithwaite emphasises, the ISDA’s Master Agreement does not provide for private dispute resolution; rather, both the 1992 and 2002 versions provide for the jurisdiction of the courts of England and Wales or New York depending on the parties’ choice of governing law in the Schedule to the agreement.<sup>114</sup> This purportedly paradigmatic example of ‘privatised private law’ appoints the national courts, rather

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<sup>110</sup> Braithwaite, Joanne P., “Standard Form Contracts as Transnational Law: Evidence from the Derivatives Markets,” *The Modern Law Review* 75, no. 5 (2012): 779-805, p. 787.

<sup>111</sup> *Ibid*, p. 786.

<sup>112</sup> Wai, Robert, “Transnational Liftoff and Juridicial Touchdown: The Regulatory Function of Private International Law in an Era of Globalization,” *Columbia Journal of Transnational Law* 40 (2001): 209.

<sup>113</sup> Biggins, John, “‘Targeted Touchdown’ and ‘Partial Liftoff’: Post-Crisis Dispute Resolution in the OTC Derivatives Markets and the Challenge for ISDA,” *German Law Journal* 13 (2012), p. 1298.

<sup>114</sup> “Schedule to the 2002 ISDA Master Agreement,” ISDA, 2002, <http://www.isda.org/publications/isdamasteragrmnt.aspx> Last accessed 2<sup>nd</sup> March 2015.

than opting for private alternatives.<sup>115</sup> What is more, as both Riles and Moran have explored, the ostensibly ‘private’ legal techniques of netting and collateral pivotal to the claim that OTC markets are self-regulating are also bound up with public law and dependent on recognition by the state. As Moran notes, the effect of netting law is to subordinate general creditors’ rights in cases of bankruptcy to the rights of counterparties to swap agreements.<sup>116</sup> This so-called private risk regulation has, therefore, a very public impact. In the case of collateral, parties have to be sure that it will be recognised in local jurisdictions.<sup>117</sup> In sum, as Rachel Harvey argues, state enforcement should not be regarded as ‘ancillary to these contracts or a factor that only became important after they were widely used in markets’.<sup>118</sup> Like Black, who argues that law must be understood to constitute financial instruments, not merely to vindicate them, she emphasises that the *use* of these contracts is dependent upon their state-based enforcement.<sup>119</sup> In her exploration of these markets, Saskia Sassen makes the same diagnosis: ‘[T]he state remains the ultimate guarantor and enforcer of economic rights’.<sup>120</sup> Her arguments echo earlier scholarship, notably by Max Weber, and Robert Hale who drew on Weber, to argue that, since each contracting party seeks to invoke the state’s coercive force in defence of their own interests, contracts cannot be regarded as wholly private affairs separate from public policy.<sup>121</sup>

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<sup>115</sup> An important development that suggests that this is changing is the development of the Credit Determination Committees (DCs). As Colleen Baker suggests, ‘these nascent DCs could conceivably be the nascent beginning of cross-border specialist financial courts’. (Baker, Colleen M. "Regulating the invisible: the case of over-the-counter derivatives." *Notre Dame Law Review* 85 (2009): 1287, p. 1362) At the present juncture, however, the operation of these entities remains relatively restricted and parties continue to exhibit a preference for domestic court. While the development of this adjudicatory mechanisms would undoubtedly further the perception of the OTC market as a global, private trading arena, it would, nonetheless, continue to reflect a political stance to the market taken by the state, as I argue below.

<sup>116</sup> Riles, A., “The transnational appeal of formalism: The case of Japan’s Netting Law,” Stanford/Yale Junior Faculty Forum Research Paper 00-03, 2000, p. 23 (available from Social Science Research Network Electronic Paper Collection).

<sup>117</sup> Moran, Glen, “The case of OTC derivatives: Market formation and governance in international financial markets,” *Human Relations* 61, no. 5 (2008): 637-660, p. 653.

<sup>118</sup> Harvey Rachel, “The legal construction of the global foreign exchange market,” p. 352.

<sup>119</sup> Black, Julia, “Seeing, Knowing, and Regulating”.

<sup>120</sup> Sassen, Saskia, *Territory, Authority, Rights: From Medieval to Global Assemblages*, Princeton: Princeton University Press, 2006.

<sup>121</sup> Hale, Robert L., “Coercion and distribution in a supposedly non-coercive state,” *Political Science Quarterly* 38 (1923): 470-494.

While my own analysis and the scholarship referenced thus far focuses principally on the role of national courts in making OTC derivative markets functional, there are two other important aspects of domestic public involvement that challenge the conception of this market as ‘self-regulating’. First, the claim of the financial services industry to be able to self-regulate through risk management did not inspire a complete withdrawal of centralised regulatory supervision. Contrary to the narrative of deregulation and the emergence of a ‘regulatory black hole’, this claim simply inspired an alternative regulatory approach. Market-based measures of value and risk were ‘hard-wired’ into regulatory policies to replace standardised regulatory requirements in financial governance.<sup>122</sup> It was via ‘self’-regulatory mechanisms such as VaR that firms and banks satisfied international regulatory bodies such as the Basel Committee on capital adequacy measures.<sup>123</sup> So long as their VaR was reasonably low, the amount of money they had to set aside to cover risks could also be low.<sup>124</sup> Secondly, the claim of the financial services industry to have mastered risk was proved spectacularly wrong by the events of the global financial crisis — and, as I have argued, the related global food crisis. The bailout of the banks by domestic governments using public money is perhaps the most convincing illustration that the operations of ‘global’ finance cannot adequately be described as ‘private’, and that the ‘self-regulation’ of this global enterprise is illusory.

Finally, to debunk the notion of the OTC trading space as a global market, I would like to refer to the anthropological insights of Riles in her ten-year study on the functioning of collateral in the Japanese financial markets. In her words, ‘[g]lobal private law is not private, nor is it global’; rather, the ‘technical fantasy’ of global private law is a fiction: ‘the preprinted material form of the ISDA documents, drafted by American and British lawyers, written in English, and laden with assumptions about market practices in the American and British markets, was literally nonsensical

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<sup>122</sup> Pagliari, Stefano, “Who Governs Finance? The Shifting Public-Private Divide in the Regulation of Derivatives, Rating Agencies and Hedge Funds,” *European Law Journal* 18, no. 1 (2012): 44-61, p. 48.

<sup>123</sup> Nocera, Joe, “Risk Mismanagement,” *New York Times Magazine*, 2<sup>nd</sup> January 2009, [http://www.nytimes.com/2009/01/04/magazine/04risk-t.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2009/01/04/magazine/04risk-t.html?pagewanted=all&_r=0) Last accessed 28<sup>th</sup> February 2015.

<sup>124</sup> *Ibid.*

in the Japanese market'.<sup>125</sup> OTC derivatives markets inspire global participation. There are also undoubtedly processes at work on the international level *developing* law on OTC derivatives which exert significant influence on government policy and on domestic law-making. Nevertheless, the trade in derivatives is concentrated in just two cities: London and New York. The standard form contracts of ISDA are heavily shaped by the laws of these two states, and 'global' derivatives transactions are dependent for their enforcement on domestic courts in these jurisdictions. Characterising these markets as 'global', 'virtual', or 'offshore' elides the extent to which the operations of these markets occur within a few square miles — in particular territories, firmly within the jurisdictional reach of particular governments and particular courts.

### iii. Half-truth – legal fiction

Commonplace conceptions that are read into the description of the market in over-the-counter derivatives as 'OTC' — namely that it is a global, private, and unregulated market — have all been shown to be highly contestable. This global market is, as David Gerber has argued, managed from the margins by regimes of national laws that do not always converge, but this management is certainly not 'ineffective'.<sup>126</sup> As Benjamin and Rouch have underlined, international financial institutions open their doors every morning to do business in this 'fragmented' legal and regulatory environment.<sup>127</sup> The prevalent tendency to portray this market as 'stateless' is misleading. It perpetuates an outdated notion of the state and its function with respect to the market. Reifying the state in this way obscures the more persuasive account of these developments, which is that the role of the state has been reconditioned with the rise of financial markets and as a result of a neoliberal policy agenda. Palan, Sassen, and Wai all suggest that states play a dual role in modern

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<sup>125</sup> Riles, Annelise, *Collateral Knowledge*, p. 62.

<sup>126</sup> Gerber, David J., *Global Competition: Law, Markets, and Globalization*, Introduction.

<sup>127</sup> Benjamin, Johanna, and David Rouch, "The international financial markets as a source of global law: the privatisation of rule-making?" *Law and Financial Markets Review*, March 2008, p. 79.



markets, both enabling and constraining the operations of finance. Sassen has argued that that globalisation has entailed a ‘partial denationalizing of national territory and a partial shift of state sovereignty to other institutions, from supranational entities to the global capital market’.<sup>128</sup> Palan has advanced a similar argument regarding the operations of offshore finance.<sup>129</sup> Wai describes this as the ‘inter-legality’ of transnational private law.<sup>130</sup> While arguments by Teubner and others regarding the self-regulatory and norm-creating characteristics of global actors are an accurate description of law-making *processes* at the global level, their accounts underweight the extent to which these developments are a product of a stance taken by the state towards the markets at the national level — a political stance.

Thinking of the OTC arena as a ‘public-private’ collaborative initiative draws parallels that reinforce that these developments are a result of neoliberal political policies. Far from being something that is unusual, or a feature of global markets, similar initiatives proliferate at the domestic level. The use of public-private finance — entailing private sector equity underwritten by public debt — to deliver public services has led to significant levels of privatisation within public institutions, such as health services and prisons. The effect is in some ways the opposite to that of the OTC arena by allowing a privately run service to maintain the appearance of a public one, as opposed to making a publically constituted market look like a private one. However, the ways and means are much the same. State practice in both areas has shifted from active public control and regulation of markets and institutions to the effort to harness the ‘invisible hand’ of the market and align it with the goals of regulation. The result, as Riles notes, is that private legal technique becomes a tool of public governance.<sup>131</sup>

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<sup>128</sup> Sassen, Saskia, *Losing Control? Sovereignty In An Age Of Globalization*, 1996, Chapter One: ‘The State and the New Geography of Power’.

<sup>129</sup> Palan, Ronen, “Offshore and the Structural Enablement of Sovereignty,” in Mark Hampton and Jason Abbott (Eds), *Offshore Finance Centers and Tax Havens: The Rise of Global Capital*, 1999, p. 369.

<sup>130</sup> Wai, Robert, “The Interlegality of Transnational Private Law,” *Law and Contemporary Problems* 71 (2008): 107-127.

<sup>131</sup> Riles, Annelise, *Collateral knowledge*, pp. 178-181.

iv. A ‘certain utility’

Having explored how the expedient but misleading label of ‘OTC’ operates to propagate a fictional account of the relationship between this market, law and the state, it is now time to consider the second element of such a fiction as identified by Fuller — its utility. What does the propagation of this legal fiction concerning the derivatives market do and whose interests does it serve?

In the first instance, I would suggest, the effect of the ‘OTC’ label is to distance the operations of this market from the ordinary operations of law and the state, thereby enabling the evasion of responsibility for activities carried out within it. Via the legal fiction of OTC, speculative behaviours are seen to be taking place in a self-regulating economic realm in which libertine speculators have transposed natural human inclinations for the pursuit of profit into developments in financial technology. Governments — notably in the US and in Europe — are able to simultaneously profit from the activities in the OTC arena but to claim a critical distance, all the while condemning those who are visibly profiting: the much maligned financial speculators. What this also conspires to produce, evidenced in the last chapter, is to focus critical energies on seeking to tame this ‘unregulated’, ‘private’, ‘global’ market through state regulation. It conditions a propensity to try and curb excessive volumes of speculative activity, rather than trying to think more critically about *why* such a broad spectrum of market actors have been speculating and driving prices away from ‘fundamental’ values. Following the arguments made by Riles and Harvey, I would argue another critical function of the ‘OTC’ label is that it generates the image of a self-regulating market.<sup>132</sup> It disguises the fact that it is via the very same technical apparatus of the ‘clumsy’ interventionist state so disdained by advocates of free markets that a market sphere of apparent autonomy is carved out and made operational.<sup>133</sup> The central claim of advocates of free markets — that markets can take care of production, distribution, and social regulation better than governments — is shown to be false. The two spheres

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<sup>132</sup> Harvey, Rachel, “The legal construction of the global foreign exchange market,” *Journal of Comparative Economics* 41 (2013): 343-354, p. 348.

<sup>133</sup> Riles, Annelise, *Collateral knowledge*, p. 9.

— economic and political — are mutually-dependent. Who, then, benefits from disguising this?

An important class of beneficiaries are those who argue that markets can self-regulate. Seen as the paradigmatic self-regulating market, the OTC market would appear to testify to the possibility of this as a governance strategy. The events of the global financial crisis, of course, make advancing this argument successfully more difficult. Perhaps, then, the greater significance of the positioning of this market conjured by ‘OTC’ is that it elides the fact that what goes on in the economic realm is constituted and shaped by choices made in the political realm. It enables behaviours in the economic realm — the pursuit of self-interest, profit, and, in recent years, a more speculative market logic — to be presented as natural human behaviours. This corroborates the argument of advocates of self-regulating markets that these human tendencies will win out, and will always conspire to out-smart centralised regulations. It helps to make the case that the *smarter regulatory approach* is to incentivise and manage these behaviours in a way that will ultimately procure the social good, rather than devising regulatory codes that do this directly. What I have sought to expose in this thesis — identifying the role of neoliberal politics in conditioning a more speculative mode of market engagement in Chapter Two, and exploring scholarship on the shaping of *homo economicus* in Chapter Three — is that these behaviours are not accurately conceptualised as entirely natural human traits. As I will go on to argue, the law in the OTC market helps to structure a certain type of economic agency. It is a contributing factor in conditioning the shift to a more speculative mode of market engagement — the producer of speculative market logic.

In a final argument that would, at the outset, appear to contradict the one that I have just made, I would also suggest that what the ‘OTC’ label also does is contribute to the phenomenon, referred to in Chapter Three, that Susan Marks has called ‘false contingency’.<sup>134</sup> Seeking to caution against a tendency in deconstructive work to do precisely what I have tried to do above — where I sought to challenge the assumption

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<sup>134</sup> Marks, Susan, “False Contingency,” *Current Legal Problems* 62, no. 1 (2009): 1-21.

of certain economic behaviours as natural and necessary — Marks warns of the danger in placing too great an emphasis on the contingencies which conspire to produce such naturalising assumptions. Doing so, she suggests, risks underweighting the extent to which present social arrangements — while not actually natural or necessary — do, nonetheless, *tend towards the necessary*. What Marks is concerned to emphasise is that agencies seeking change can only operate within a context that ‘includes systematic constraints and pressures’.<sup>135</sup> As well as naturalising certain assumptions, the legal fiction of ‘OTC’ also lends an aura of contingency or randomness to the ‘market chaos’ of 2007-08, placing responsibility on the impersonal ‘forces’ of globalisation and technology. There is the suggestion, in other words, that these markets are something novel and exceptional. Critical scholars who have written on the active decision to deregulate these markets — Tett, Carruthers and Stout, as examples — collude in this. The work of many of these analysts — and also my own work — focuses significantly on the contribution of neoliberal politics to the creation of the OTC arena and the structuring of a speculative market logic. What Marks’s work helps to remind us of is that these developments have their roots in deeper material structures — longer-standing logics. Applied to the case of the OTC derivatives market it serves to recall that, in maintaining a false separation between the political and economic realms, the legal fiction of OTC is not just an aide to neoliberalism, it is an aid to capitalism. After all, that is a system which depends on this same separation between the political and economic spheres.<sup>136</sup>

Taken together, the legal fiction of ‘OTC’ may exemplify what Saskia Sassen has described as the ‘enormous technical and legal complexities’ deployed, in the contemporary period, to execute ‘elementary extractions’.<sup>137</sup> In this market, seemingly distanced from the state, and rendered a ‘self-regulating’ law unto itself — and

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<sup>135</sup> *Ibid* p. 2.

<sup>136</sup> The continuities between capitalist modes of production and developments in financial capitalism, including derivatives, are discussed by John Bellamy Foster and Fred Magdoff. See Foster, John Bellamy, “The financialization of capitalism,” *Monthly Review* 58, no. 11 (2007): 1-14; Foster, John Bellamy, and Fred Magdoff, *The great financial crisis: Causes and consequences*, New York: NYU Press, 2009.

<sup>137</sup> Sassen, Saskia, *Expulsions*, Cambridge Mass: Harvard University Press, 2014, pp. 14-15.

pervasively understood as novel and exceptional, what is also happening is the elementary extraction of profit for the benefit of the few at the expense of the many.

#### IV. 'FINANCIAL' INNOVATIONS

Now that it has been established that the OTC arena is not a regulatory void but is, to borrow a formulation used by Fleur Johns in another context, 'full to the brim with legal expertise, scrutiny and analysis',<sup>138</sup> I want to move on to the question of what some of the constitutive law within the OTC market — law that is often rendered invisible and nearly always seen as neutral — actually does. Using commodity derivatives as a case in point, I will argue that these instruments must also be understood as innovative legal technologies. Far from being neutral implements of speculative agency, they have helped to condition that speculative agency. I will further suggest that this legal structuring is a critical part of the mechanism whereby speculative practices in commodity derivative markets have been able to impact on underlying food prices.

##### i. Depiction of derivatives

Within the financial sector derivatives are regarded as 'natural economic products circulating according to a universal and transparent logic of efficiency and profitability'.<sup>139</sup> The problem with derivatives in the post-crisis context — insofar as there is acknowledged to be one — is seen to lie with the 'financial wizardry' that has engaged complex mathematics in a project of devising formulas to calculate risk.<sup>140</sup> In

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<sup>138</sup> Johns, Fleur, "Guantanamo Bay and the Annihilation of the Exception," *European Journal of International Law* 16, no. 4 (2005): 613-635, p. 618.

<sup>139</sup> LiPuma, Edward, and Benjamin Lee, *Financial derivatives and the globalization of risk*, Duke University Press, 2004, p. 62.

<sup>140</sup> See Jan Nederveen-Pieterse describing derivative markets as 'the gigantic sink hole of financial wizardry' (Nederveen-Pieterse, Jan, "New Trends in Global Political Economy," in Berch Berberoglu, *Globalization in the 21<sup>st</sup> Century: Labor, Capital, and the State on a World Scale*, Palgrave Macmillan, 2010, p. 28.)

recent years, the assumptions upon which formulas such as the Black and Scholes Option pricing formula are based have been subject to challenge.<sup>141</sup> This criticism is reinforced by broader claims about the ‘blind trust’ of financial industry management in ‘quants’,<sup>142</sup> and the assessments of Lord Turner and Julia Black, who have also been critical of the deference to neoclassical economic theory.<sup>143</sup> Derivatives have been described as ‘financial weapons of mass destruction’<sup>144</sup> and the ‘wild beast’ of finance.<sup>145</sup> The use of these ‘exotic’ instruments is widely seen to have gotten ‘out of control’.<sup>146</sup>

As with the claim about the impact of practices of commodity speculation on underlying food prices, there is considerable ambiguity concerning how derivatives have effected mass destruction. A common claim is that they have enabled traders to take on excessive levels of risk. Others have focused on how these instruments distribute that risk within the financial system. Those concerned about food price volatility and bubbles in markets for other commodities, such as oil, suggest that these instruments have caused shifts in market pricing structures. Perhaps an overarching concern is that the proliferation of derivatives has served to produce incentives to speculate on fluctuating values rather than to invest more ‘productively’, thereby producing ‘intrinsic value’, as suggested by John Bogle.<sup>147</sup> The prevailing tendency is to associate these socially concerning developments primarily — and, in some cases, entirely — with financial innovations. Although derivatives are widely acknowledged to be legal instruments — contracts — these contracts are conceptualised as neutral vehicles that merely facilitate the pre-existing preferences of those seeking to use

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<sup>141</sup> Haug, Espen Gaarder, and Nassim Nicholas Taleb, “Why We Have Never Used the Black-Scholes-Merton Option Pricing Formula,” *Journal of Economic Behavior and Organization* 77, no. 2 (2009).

<sup>142</sup> Reir, Sharon, “Financial engineers thrive despite the subprime mess,” *The New York Times*, [http://www.nytimes.com/2008/08/01/business/worldbusiness/01iht-wbquants.1.14939908.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2008/08/01/business/worldbusiness/01iht-wbquants.1.14939908.html?pagewanted=all&_r=0) Last accessed 4<sup>th</sup> March 2015.

<sup>143</sup> Black, Julia, “Seeing, Knowing, and Regulating,” p. 5; Turner, Lord, “Reforming Finance: Are We Being Radical Enough?” Clare Distinguished Lecture in Economics and Public Policy, 18<sup>th</sup> February 2011.

<sup>144</sup> “Buffett warns on investment ‘time bomb’,” BBC News, 4<sup>th</sup> March 2003.

<sup>145</sup> Steinherr, Alfred, *Derivatives the wild beast of finance: a path to effective globalisation*, Wiley, 2000.

<sup>146</sup> Andrews, Edmund L., “Greenspan Concedes Error on Regulation,” *The New York Times*, 23<sup>rd</sup> October 2008.

<sup>147</sup> Bogle, John, *Enough*, New Jersey: John Wiley and Sons, pp. 49-50.

them in making transactions.<sup>148</sup> Their ostensibly neutral character is reinforced by a prevalent discourse that focuses on how these instruments can be a tool for hedging or for speculation.

A financial formula alone does not a derivative instrument make. In order for anyone to speculate or to hedge risk by trading a derivative, financial formulas must first be transposed into tradeable commodity derivatives contracts. The legal innovations required for this transposition to take place have been subject to remarkably little scrutiny.<sup>149</sup> Before taking steps to remedy this scholarly neglect, it is first necessary to elaborate a little on the significance of financial innovations foregrounded in so much of the literature on derivatives. While not the whole story when it comes to these instruments, they are nonetheless an important part of it.

## ii. Innovative finance

As Arnoldi has argued, the financial technology of derivatives is based on new probabilistic and non-linear forms of scientific knowledge that make it possible to envisage and meaningfully ‘model’ the future.<sup>150</sup> The development of this knowledge is thought to have begun in the 1950s with Henry Markowitz who, using a marriage of statistical protocols and linear programming, argued that it was possible to quantify

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<sup>148</sup> Fleur Johns has noted that this trend is ubiquitous in private law, which is largely seen to be determined by the spontaneous, personal preferences of non-governmental legal or natural persons (which states are called upon to implement or temper. See Johns, Fleur, *Non-legality in international law: unruly law*, Cambridge: Cambridge University Press, 2013, p. 6.

<sup>149</sup> As far as I am aware, some work has been carried out on securitisation and separating ownership from control, but nothing has been written on innovations in property and contractual rights in commodity derivatives. Two scholars that have begun to explore legal innovations in the context of derivatives — albeit not commodity derivatives — are Tamar Frankel and Andrew Abraham. See: Frankel, Tamar, “The New Financial Assets: Separating Ownership from Control,” *Seattle University Law Review* 33 (2010): 931-940; Abraham, Andrew, “Deconstructing Derivatives Transactions: Has Contract Law Become Destabilised?” *Hong Kong Law Journal* 32 (2002): 549.

<sup>150</sup> Arnoldi, Jacob, “Derivatives Virtual Values and Real Risks,” *Theory, Culture & Society* 21, no. 6 (2004): 23-42, p. 24.

risk.<sup>151</sup> This was developed into modern portfolio theory, which conceptualises risk as the variance of return on a given asset — its volatility, in other words, or the magnitude of swings in a price in relation to its mean price.<sup>152</sup> Building on this, Fischer Black and Myron Scholes, later developed what become known as the Black and Scholes Options Pricing Formula.<sup>153</sup> This equation is seen to have opened up the world of derivatives by developing a model to calculate the rate at which the value of such instruments would change over time, thereby facilitating speculation on shifts in market value.<sup>154</sup> This breakthrough, or so it is told, allowed ‘relational objects to be translated into individual concrete units’,<sup>155</sup> so that ‘risks become “things” like commodities — tradable at any moment at the right price’.<sup>156</sup> The result, according to LiPuma and Lee, has been the elaboration of financial formulas that have detached value, cost, and price from the fundamentals of the economy, particularly the needs of production, the social welfare of the producers, and the political needs of citizens.<sup>157</sup>

Although undoubtedly highly significant, the pervasive attribution of the socially destructive character of derivatives to such innovations is incomplete. The basis for the claim can be gleaned from a few indications suggesting that financial innovations were not necessarily the most important in terms of fostering speculative trading and in conditioning undesirable social effects. First of all, the focus on the contribution of finance fails to account for earlier incidences of speculative bubbles occurring in stock markets, such as the South Sea Bubble in 1720, and in grain markets in the 1930s — widely attributed to financial speculators investing in commodity futures markets. Second, while financial innovation is supposed to enable the calculation of risks and asset prices with unprecedented accuracy and precision, as Brian and Rafferty have emphasised, derivatives trade ‘exactly on the contestability of

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<sup>151</sup> Markowitz, Harry, “Harry M. Markowitz,” Portfolio selection, *Journal of Finance* 7, no. 1 (1952): 77-91.

<sup>152</sup> LiPuma, Edward, and Benjamin Lee, *Financial derivatives and the globalization of risk*, p. 77.

<sup>153</sup> Black, Fischer and Myron Scholes, “The Pricing of Options and Corporate Liabilities,” *Journal of Political Economy* 81 (1973): 637-654.

<sup>154</sup> LiPuma, Edward, and Benjamin Lee, *Financial derivatives and the globalization of risk*, Chapter Two: Derivatives, Risk, and Speculative Capital.

<sup>155</sup> Wigan, Duncan, “Financialisation and Derivatives: Constructing an Artifice of Indifference,” *Competition & Change* 13, no. 2 (2009): 157-172, p. 161.

<sup>156</sup> LiPuma, Edward, and Benjamin Lee, *Financial derivatives and the globalization of risk*, p. 81.

<sup>157</sup> *Ibid.*



such values'.<sup>158</sup> For a derivative transaction to take place, two parties must contract with one another based on a *difference in opinion on the future value* of an underlying asset or commodity. A third indication extends from an observation by Mirowski and Nik-Khah pointing out that neoclassical orthodoxy has 'flipped' at least three times with regard to its core price theory: from Marshallian supply & demand to Walrasian general equilibrium, and then to the Nash non-cooperative equilibrium.<sup>159</sup> The persistence of what continues to be conceptualised as its core price theory, they suggest, is 'thanks not to anything particularly conceptual that the economists have said or done; it is rather more directly attributable to more durable structures like the nation-state, the corporation and the military'.<sup>160</sup>

All of this suggests the role of other 'durable' structures in producing socially destructive derivative instruments. One of those, I will argue, is law. Derivatives are not just legal vehicles that incorporate innovative financial calculations. They are also innovative assemblages of rights and obligations. These legal innovations operate to alienate, interlink, and liquidate legal rights and obligations in a way that causes changes in the motivations of their owners. As I will now seek to explore, this may be just as relevant to how derivatives instruments are priced and valued, and to how they produce prices and values, as the financial calculations that they embody.

### iii. Legal innovations

I will now explore the significance of law in contributing to the construction of speculative market logic. First I will consider the role that law has played in facilitating separation of rights and interests in food that conditions the dissociated mode of trading characteristic of speculative market logic. I will then foreground a

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<sup>158</sup> Dick, Bryan, and Michael Rafferty, *Capitalism with derivatives: A political economy of financial derivatives, capital and class*, Palgrave Macmillan, 2005, p. 37.

<sup>159</sup> Mirowski, P., and E. Nik-Khah, "Markets made flesh: performativity and a problem in science studies, augmented with the consideration of the FCC auctions," in D. MacKenzie, F. Muniesa and L. Siu (Eds), *Do Economists Make Markets? On the Performativity of Economics*, Princeton University Press, 2007, p. 216

<sup>160</sup> *Ibid.*

number of significant innovations that have helped to condition the propensity to pursue profit by speculating on future shifts in value. Next I will seek to demonstrate that derivatives operate as legal — and not just financial — technologies, focusing on just how innovative the law facilitating speculation actually is. Finally, I will examine the contribution of law in the production of the speculative effect on food prices.

a. Dissociative trading

Joanna Benjamin has argued that derivatives are part of ‘a new order of disassociation between rights and interest’.<sup>161</sup> Of course, the disassociation of rights and interest is not, in reality, all that new. The work of writers as diverse as Karl Marx,<sup>162</sup> Karl Polanyi,<sup>163</sup> and most recently, Michel Callon,<sup>164</sup> has shown how, through processes of commodification, private property rights are established over things in which all humans have an interest — land, food, water — causing such a dissociation. In order for anything to become a commodity, it has to be disentangled from a web of other social relationships and interests, and the right to own and trade it has to be established. What Marx calls the ‘fetishism of commodities’ depends on relationships between people coming to be seen as relationships between things.<sup>165</sup> As the legal market of a commodity<sup>166</sup> property — a thing, and the legal marker of a commodity — blocks out all of the other human interests, associations, and values that attach to it. Long before there were financial calculations that enabled relational phenomena to be disaggregated into concrete units and resold as ‘risk’ in financial derivatives commodification was sealed in law. The societal effects, as recounted by

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<sup>161</sup> Benjamin, Joanna, “The Narratives of Financial Law,” *Oxford Journal of Legal Studies* 30, no. 4 (2010): 787-814, p. 812.

<sup>162</sup> Marx, Karl, *Capital: A Critique of Political Economy*, Volume 1, Digireads.com Publishing, 2004;

Marx, Karl, “The Fetishism of the Commodity and its Secret,” in *Capital: A Critique of Political Economy*.

<sup>163</sup> Polanyi, Karl, *The great transformation: The political and economic origins of our time*, Beacon Press, 1944.

<sup>164</sup> Callon, Michel, (Ed), *The laws of the markets*, Volume 6, Oxford: Blackwell, 1998; Callon, Michel, “An essay on framing and overflowing: economic externalities revisited by sociology,” *The Sociological Review* 46, no. S1 (1998): 244-269.

<sup>165</sup> Marx, Karl, “The Fetishism of the Commodity and its Secret,” in *Capital: A Critique of Political Economy*.

<sup>166</sup> Ford, Cristie, and Carol Liaott, “Power Without Property, Still: Unger, Berle, and the Derivatives Revolution,” *Seattle U. L. Rev.* 33 (2009-2010), p. 891.

Polanyi, were highly destructive.<sup>167</sup> If derivatives were to become financial weapons of mass destruction, property rights wreaked their own mass destruction. They were used to expel people from their land, notably via the Enclosures in Britain and during the period of European colonialism. They were also fundamental to the transformation of food into a commodity, and to the denial that non-private interests in food have validity at law.

Two important points extend from this analysis. First, well before financial derivatives were even invented, legal norms of property and contract were dissociating and privileging the exercise of rights by a select group of people — those with private property rights over land and resources — from the interests of a broader array of people with respect to that same land and those same resources. The owner of a field of wheat is legally entitled to harvest and sell that wheat on conditions that suit him. He need not have any regard for how his terms of sale will impact on the welfare of local people who may want to eat the wheat, and nor is he obliged to pay wages to the labourers who do or help with the cultivating that fairly reflect the price it is able to command on the market. Second, the ability to exercise proprietary and contractual rights has to be understood as having both a social effect and an effect on the mind-set of the rights holder. Scholars across a range of disciplines, including Robert Hale, Joseph Singer, and Jennifer Nedelsky have all in their different ways shown that property rights have an exclusionary effect.<sup>168</sup> Furthermore, as Trubek and Santos have underlined, background norms of contract and property structure behavioural incentives and play a key role in the distribution of economic resources and power in society.<sup>169</sup> Via the creation of entitlements that empower individuals to access resources and to exclude others from accessing them, property rights are deeply implicated in the entrenchment of what are now taken to be natural human traits — the pursuit of self-interest and the maximisation of one's own utility. Looked at from

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<sup>167</sup> Polanyi, Karl, *The Great Transformation*.

<sup>168</sup> Coase, Ronald, "The Problem of Social Cost," *Journal of Law and Economics* 3 (1960); Nedelsky, Jennifer, *Law's Relations: A Relational Theory of Self, Autonomy, and Law*, New York: Oxford University Press, 2012; Singer, Joseph, "How property norms construct externalities of ownership," in Gregory Alexander and Eduardo Peñalver, *Property and Community*, New York: Oxford University Press, 2010.

<sup>169</sup> Trubek, David, and Alvaro Santos (Eds), *The New Law and Economic Development: A Critical Appraisal*, Cambridge: Cambridge University Press, 2006, p. 15.

this perspective, it is not just economic doctrine, but also legal doctrines that tend to assume a certain kind of market actor. Property rights anticipate and empower an acquisitive individualistic agency.

Property law and contract law facilitate dissociation between legal rights to own and trade food on the one hand and the interests of other people attaching to that food on the other; in Marxist terms they facilitate a separation between the exchange value of food and its use value. Subsequent innovations in these schemes of right and entitlement have functioned to detach the legal rights to own and trade a commodity derivatives contract from awareness that what is being traded *is connected to food at all*. First of all, the interplay of rights and interests associated with food commodities was fundamentally altered by the standardisation of traditional forwards to create exchange-trade futures contracts. This conditioned critical changes in the motives of parties trading futures contracts, which, as detailed in Chapter Two, gave rise to a spate of speculation and grain price volatility that prompted a legislative clampdown in the 1930s. Standardisation interposed another layer of self-interested-socially-dissociated entitlement between those exercising rights over forwards contracts and the broader class of interests in the use of underlying commodity as food. With the introduction of OTC financial derivatives, the balance of rights and interests arising out of these instruments underwent further revolutions. As LiPuma and Lee have suggested, the fact that exchange-traded futures contracts continued to stipulate the delivery of the agricultural commodity in question maintained a connection between trading and agricultural production.<sup>170</sup> Where the contract remains one for the transference of property in foodstuffs, this can help to promote the convergence of cash and spot prices for commodities.<sup>171</sup> The introduction of OTC instruments such as commodity options, swaps and index funds depended on innovations in the understanding of entitlement that formed the basis of new constellations of ownership — such as rights to income streams from swaps transactions and index funds.<sup>172</sup> As

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<sup>170</sup> LiPuma, Edward, and Benjamin Lee, *Financial derivatives and the globalization of risk*, p. 97.

<sup>171</sup> *Ibid*, p. 99.

<sup>172</sup> As Benjamin has argued, the normal rules of contract and property law are modified in the financial markets, in a way that enables parties to renounce property rights in the financial positions credited to their

Roy Goode has described them, derivatives comprise ‘a wondrous array of contractual and securitisation devices which enable market participants to package financial assets, loans and investments in whatever way best suits their needs’.<sup>173</sup> This wondrous array of legal innovations also removes the the underlying foodstuff from the equation. With exchange-traded futures, parties were still contacting for a given quantity of a specified harvest of a particular crop — ‘July 2012 contract for Chicago SRW Wheat’. Now many investors purchase a ‘long only position’ in an ‘index’ such as the ‘S&P GSCI’.

It is not just financial innovations, then, that have ‘detached value, cost, and price from the fundamentals of the economy’ or segregated the trade in derivatives from the needs of production or social welfare.<sup>174</sup> Legal innovations have also been deeply implicated in these processes.

#### b. Speculative shifts

While the establishment of a new order of dissociation of rights and interests has been central to the rise of a speculative trade in commodity futures contracts, other legal innovations have also been important. Among these is the invention of commodity ‘options’. Described as ‘among the most important inventions of contemporary finance’, an option contract eliminates the need for a contracting party to commit to deliver or pay for a particular good at a particular future date.<sup>175</sup> The buyer of an option contract gives the holder the right, but not the obligation, to buy or sell the good.<sup>176</sup> No longer having to go through the rigmarole of ‘offsetting’ futures contracts to avoid physical delivery, options enabled parties to transact more cheaply and with less commitment. As a result of a wave of speculation in commodity prices

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names in the accounts of financial intermediaries, and to accept instead mere contractual rights of repayment or redelivery, with the associated intermediary credit risk (Benjamin, Joanna, “The Narratives of Financial Law,” *Oxford Journal of Legal Studies* 30, no. 4 (2010): 787-814).

<sup>173</sup> Goode, R., *Commercial Law in the Next Millennium*, London: Sweet & Maxwell, 1998, p. 11.

<sup>174</sup> LiPuma, Edward, and Benjamin Lee, *Financial derivatives and the globalization of risk*.

<sup>175</sup> Millman, Gregory J., “Futures and Options Markets,” *The Concise Encyclopedia of Economics*, <http://www.econlib.org/library/Enc/FuturesandOptionsMarkets.html> Last accessed 19<sup>th</sup> June 2015.

<sup>176</sup> *Ibid.*

in the 1930s, options were banned by the US legislature precisely in recognition of this fact. Today, the ‘dangerous lure’ of options continues to attract would-be speculators.<sup>177</sup> As Jay Kaepfel has observed, ‘[t]hanks to the (relatively) low cost of entry when considering many trades, individuals often flock to the option market to attempt to take advantage of a particular market opinion’.<sup>178</sup> Equally significant has been the elaboration of alternative contractual structures facilitating longer-term and passive forms of investment in commodities. Commodity indices are advertised as an asset class that can ‘deliver “equity-like returns” while reducing overall portfolio risk’.<sup>179</sup> Such instruments offer investors ‘a broadly diversified, long-only passive investment’ that gives a steady rate of return.<sup>180</sup> ‘Structured’ products — Commodity-linked Notes, Commodity Exchange Traded Notes (ETNs), and Collateralised Commodity Obligations (CCOs)<sup>181</sup> — trade like stocks, and allow investors to gain exposure to fluctuating commodity prices without investing directly in futures contracts.<sup>182</sup> These instruments are marketed as ‘an easy way to participate in the price fluctuation of a commodity or basket of commodities’.<sup>183</sup> As well as making it cheaper and easier to speculate, instruments such as index funds, swaps, commodity ETNs and CCOs also make speculative trading less risky. The elaboration of legal instruments tailored to the need of different types of investor enrolls a broader array of market actors — those who are not financial traders by profession — in the speculative trade in commodity futures.

A further set of innovations that has fostered an increased propensity to speculate is the various legal techniques for making capital more liquid. As Riles

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<sup>177</sup> Kaepfel, Jay, “The Dangerous Lure Of Cheap Out-Of-The-Money Options,” Investopedia, <http://www.investopedia.com/articles/optioninvestor/10/lure-of-cheap-options.asp> Last accessed 26<sup>th</sup> June 2015.

<sup>178</sup> *Ibid.*

<sup>179</sup> Masters, Michael W., and Adam K. White, “How Institutional Investors Are Driving Up Food And Energy Prices,” in Ben Lilliston and Andrew Ranallo (Eds), *Excessive Speculation in Agriculture Commodities: Selected Writings From 2008-2011*, Institute for Agriculture and Trade Policy, April 2011, <http://www10.iadb.org/intal/intalcdi/PE/2011/08247.pdf> Last accessed 13<sup>th</sup> June 2015, p. 12.

<sup>180</sup> *Ibid.*

<sup>181</sup> *Ibid.*, p. 4.

<sup>182</sup> Devcic, John, “How to invest in commodities,”

<http://www.investopedia.com/articles/optioninvestor/08/invest-in-commodities.asp> Last accessed 26<sup>th</sup> June 2015.

<sup>183</sup> *Ibid.*

argues, collateral functions to tie up a financial trader's resources, holding it as a deposit for a given trade. However, the development of techniques such as netting and rehypothecation permits traders to shift the obligations and rights over the collateral, enabling the capital deposited as security or collateral for one transaction to be liquidated and used for another. Netting is a contractual arrangement between two parties who each owe the other a monetary debt.<sup>184</sup> When transactions are netted out, it means that the parties have agreed that there will be just one amount — a single monetary claim being owed by one party to the other at any point in time throughout the contract.<sup>185</sup> As well as conferring parties with the status of a securitised creditor for bankruptcy purposes — discussed above — netting frees up substantial volumes of capital to enable parties to enter into further transactions. Rehypothecation operates to a similar effect by creating a contractual arrangement whereby financial institutions can reuse collateral posted by their clients to enter into further transactions.<sup>186</sup> The concept was alien to English law, but was formally introduced in 2003 by the adoption of the EU Financial Collateral Directive.<sup>187</sup>

Before derivatives could have any effect as an innovative financial technology, they had to take effect as an innovative legal technology and specifically, in Joanna Benjamin's words, as an 'innovative contractual technology'.<sup>188</sup> Considering the classical principles and doctrines of English contract law — the need to act in good faith, the requirement of consideration, misrepresentation as a ground of voidability — one gets a sense of just how far from such principles and doctrines, and hence just how innovative, the various techniques just considered are. As Johnson and Hazen have argued, what makes futures trading one of humanity's 'more impenetrable'

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<sup>184</sup> For a detailed overview of the netting process see "Set-off and netting—overview," Lexis®PSL Banking & Finance website, <https://www.lexisnexis.com/uk/lexispsl/bankingandfinance/document/391289/55KB-65S1-F185-X13T-00000-00/Set-off%20and%20netting%E2%80%94overview> Last accessed 20<sup>th</sup> July 2015.

<sup>185</sup> *Ibid.*

<sup>186</sup> For a discussion of the different legal rights arising out of rehypothecation and other schemes for the reuse of collateral see: International Capital Market Association (ICMA), "What is 'rehypothecation' of collateral?" ICMA website, <http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/short-term-markets/Repo-Markets/frequently-asked-questions-on-repo/10-what-is-rehypothecation-of-collateral/> Last accessed 20<sup>th</sup> July 2015.

<sup>187</sup> *Ibid.*

<sup>188</sup> Benjamin, Joanna, "The Narratives of Financial Law," p. 810.

concepts is that it ‘involves selling what one does not own and, as a rule, buying what one does not want. It is shrouded in terminology that conceals its meaning’.<sup>189</sup> A great deal of legal work has had to go into changing accepted rules of contract law, so that offering to buy a bushel of wheat and then failing to pay for it, or offering to sell a bushel of corn, and then failing to deliver it, is no longer considered a breach of contract.

### c. Legal technologies

Technology is commonly understood to mean the practical application of knowledge for a particular end, or a manner of accomplishing a task especially using technical processes, methods or knowledge.<sup>190</sup> As discussed in Chapter Three, financial formulas are predicated on neoclassical assumptions about how people behave in markets. In derivative instruments, this claim to knowledge is not interrogated. Financial formulas are treated in law as outcome-determining, price-producing truths; they are the very motor powering the derivative and determining the obligations of the parties throughout the life cycle of the contract. Yet, the tasks purportedly performed by derivatives — that of calculating and pricing risk, ‘discovering’ prices, and providing market liquidity — are not accomplished through the industrious application of mathematical knowledge alone. As Riles has explored in detail, there is a whole industry based on *developing and applying legal knowledge* about the governance of collateral that is essential to the trade in financial derivatives. What her analysis uncovers, however, is that collateral operates as a legal fiction — a decision to act ‘as if’ the rights of the parties over collateral are well defined, when, in fact, they are not.<sup>191</sup> There is, she argues, no such property that the parties can claim to have rights over. Nevertheless, it is via the pretence of rights over an imagined property that the financial services industry has developed a tool through which it is able to claim to be managing risk; or, in other words, to create the fantasy of a

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<sup>189</sup> Johnson, Philip, and Thomas Lee Hazen, *Derivatives Regulation*, Aspen Publishers, 2004, p. 1397.

<sup>190</sup> Definition of ‘technology’ in the Merriam Webster dictionary, <http://www.merriam-webster.com/dictionary/technology> Last accessed 17th August 2015.

<sup>191</sup> Riles, Annelise, *Collateral knowledge*, p. 172.



privately regulated global market.<sup>192</sup> Glitches in the operations of global markets that would impede the management of risk, the pricing of underlying assets, or the movement of capital are smoothed over by the application of legal techniques for practical ends.

Applied legal knowledge is not just critical for the day-to-day functioning of derivatives markets. The application of legal knowledge is a precursor to the very existence of these markets. The role of legal opinions such as the Potts Opinion, which concluded that credit derivatives should not be characterised as contracts of insurance, and the significance of legislative acts of deregulation legitimating the expansion of the OTC derivatives market are widely recognised. However, the extent to which the development of this market has been dependent on the continual elaboration of the legal rights and obligations structuring derivative instruments is less frequently acknowledged. All of these innovative financial products, while having a vital calculative component, could not be traded without changes in the original contractual model of the futures contract to determine the entitlements and liabilities arising out of the contract. As the Hedge Funds Consistency Index cautions, ‘the legal nature of these products is very different’.<sup>193</sup> One scholar who has emphasised the contribution of lawyers in this regard is Julia Black. She highlights the way ‘the “law merchants” of the legal profession...give material form to these synthetic constructs in legal opinions, standard form precedents and bespoke contracts which provide innovative ways in which to allocate rights and risks and exert a considerable influence in shaping market practice’.<sup>194</sup> A similar observation is made by Alisdair Hudson, author of the leading textbook on the law of derivatives, who notes that every financial intermediary wanting to issue a new financial instrument employs lawyers to ensure that it is compliant with relevant laws and regulations.<sup>195</sup> I have already emphasised that the notion that what emerges is a regulatory void or legal black hole cannot be accepted. Indeed, it seems that the more risky, innovative, and exceptional an

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<sup>192</sup> *Ibid*, p. 172.

<sup>193</sup> “Derivatives,” Hedge Funds Consistency Index, [http://www.hedgefund-index.com/d\\_derivatives.asp](http://www.hedgefund-index.com/d_derivatives.asp) Last accessed 26<sup>th</sup> June 2015.

<sup>194</sup> Black, Julia, “Seeing, Knowing, and Regulating,” p. 20.

<sup>195</sup> Pistor, Katharina, “A Legal Theory of Finance,” p. 321.

instrument or behaviour is, the more it is perceived to depend on a watertight framework of contractual rules, netting laws, standard-form documents, expert legal opinions, and specialised tribunals to ensure their effective operation. A final point to note about this regimes is that is is filled with ‘repeat players’. As Riles observes, it is through the mundane activity of ‘insiders’ that such legal regimes are consolidated and reproduced.<sup>196</sup>

We might think of derivatives as a marriage of convenience between neoclassical economic theory and positivist legal theory with its investment in legal ‘fictions’. Quoting Riles again, ‘[t]he As Ifs of law and the As Ifs of the market become a kind of virtual context each for the other that substantiate and sustain one another’.<sup>197</sup> The pivotal legal innovations that have enabled this market to evolve have been widely neglected. The real gap here would thus appear to be the failure of legal scholarship attending to the ‘technical’, constitutive law that has replaced centralised regulation and made possible the emergence of new markets in ‘exotic’ financial products. For Duncan Kennedy, this body of law is the ‘Black hole of legal theory’.<sup>198</sup>

#### d. Speculative effects

Drawing together these insights, norms of property and contract have, through the application of legal techniques, developments in contractual form and function, and the ongoing efforts of creative legal agents, been critical to the development of a speculative trade in commodity derivatives. Far from coming to these transactions fully formed as speculatively inclined economic humans, traders are anticipated, empowered, and, over time, institutionalised as speculative market actors. What results is a collective of empowered economic agents, formatted in the market ‘field’,<sup>199</sup> entering into thousands of contracts for the same imagined commodity (say a given quantity of wheat). Importantly, they are assumed by both legal and economic

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<sup>196</sup> Galanter, Marc, “Why the ‘haves’ come out ahead: Speculations on the limits of legal change,” *Law and society review* (1974): 95-160.

<sup>197</sup> Riles, Annelise, *Collateral knowledge*, p. 198.

<sup>198</sup> Duncan Kennedy has put it referring to the technicalities over Conflict of Laws see reference *Ibid*, p. 67.

<sup>199</sup> Bourdieu, Pierre, *The Field of Cultural Production*, Cambridge, UK: Polity Press, 1993.

theory to do so in a manner that is not exclusionary. Their actions are not thought to have any impact whatsoever on the underlying price of tangible wheat. Lawyers developing derivatives assign new claims over underlying assets based on the assumption that each individual claim is separate and distinct. It is assumed by the law governing the transactions of Party A and Party B that the outcome of their exchange is only of relevance to them. One will win and one will lose, depending on how the market moves. As LiPuma and Lee emphasise, ‘agents can buy and sell derivatives as though their only social aspect were the execution of the contract’.<sup>200</sup> However, it is precisely through the repetitive processes of enshrining the formulas of finance in legal instruments that asset prices are ‘discovered’, or rather produced. This serves as a pricing signal that economically engages, entangles, and impacts upon a far broader range of people: farmers, merchants, supermarkets, consumers. Parties are trading ‘as if’ it were only their rights and interests that were relevant; they are acting as if the market in commodity derivatives and the market for underlying commodities were unconnected. Yet, as the events of the Global Food Crisis clearly attest, unconnected is precisely what these two markets are not.

## CONCLUSION

Taking issue with the prevalent portrayal of the OTC trading space as a legal vacuum or regulatory void, I have demonstrated that this market is, in fact, full of law. Beyond this, I have exposed the fictitious character of the label ‘OTC’ and how it operates to produce a misleading perception of the trade in off-exchange derivative contracts. ‘OTC’ enables the state to distance itself and elide responsibility for the socially damaging practices carried out within this trading space. Via the operations of this legal fiction, the market appears to ‘self-regulate’, lending credence to the political preferences of those who argue for market freedom. Finally, OTC garners the impression of exceptionality. It distracts from the continuities of capitalism, in which the extraction of profit is made possible by the labours of the many for the benefit of

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<sup>200</sup> LiPuma, Edward, and Benjamin Lee, *Financial derivatives and the globalization of risk*, p. 122.

the few. Far from being neutral vehicles that libertine speculators have co-opted for their own selfish ends, derivative instruments have brought with them a radically speculative and socially destructive market logic. Norms of property and contract have provided a basis for disregarding the social significance and value of food. Legal innovations have detached financial actors from any sense that what is being traded has implications for the satisfaction of nutritional needs. I will now explore the role of law in the functioning of another international market — the market in physical food commodities — and the erection of the global food system. I will again be contesting the portrayal of aspects of these markets and their functioning as natural or inevitable — as challenges to which law simply responds.

## Chapter Five

# **The ‘Global’ Food Crisis, the Global Food System, and (International) Law**

Paralleling the efforts to regulate financial markets in the aftermath of the global financial crisis, law is also being positioned as the solution to the global food crisis. A UN High-Level Task Force on the Global Food Security Crisis (HLTF) was established in April 2008 to coordinate responses to the challenge of food insecurity. Via its Comprehensive Framework for Action, the HLTF recommends a plethora of reforms to improve the structure and functioning of food systems.<sup>1</sup> National authorities are advised to implement regulatory measures to improve the functioning of markets on a domestic level. Equally important are reforms designed to improve the performance of international commodity markets in line with the needs of low-income countries in the Global South. Beyond regulations to carry out market reform, there is a broad consensus that food insecurity can be tackled via the legal empowerment of vulnerable groups. Strengthening the rule of law, the fulfilment of human rights commitments on the domestic level, and instilling the hierarchical superiority of human rights norms in trade negotiations, are all key ambitions for lawyers in the post-crisis context.

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<sup>1</sup> HLTF on the Global Food Security Crisis, “Updated Comprehensive Framework for Action,” September 2010, [http://un-foodsecurity.org/sites/default/files/UCFA\\_English.pdf](http://un-foodsecurity.org/sites/default/files/UCFA_English.pdf) Last accessed 27<sup>th</sup> June 2015, p. 2: “Structural factors and market failures”.

Such recommendations for reform might appear to evidence recognition that the global food system as it is currently configured contributes — as I argued at the end of Chapter One — to the production of hunger and deprivation for a large percentage of the global population. On closer inspection, however, the particular vulnerability of affected communities remains under-interrogated in much of the literature on the global food crisis. A familiar constellation of ahistorical, apolitical misfortunes tends to be offered as explanations for the precarious position of the food insecure: under-investment in agriculture, erratic climates, poor transport links, and inequitable land ownership.<sup>2</sup> Furthermore, responsibility for the pernicious impact of price volatility is seen to lie with incompetence and failure on the part of domestic governments. Food insecurity and food price volatility are pervasively naturalised within discourse on the global food crisis, and law is habitually positioned as a tool to manage these ‘challenges’.

Aspects of international law are recognised in this literature as playing a role in enabling the operation of international commodity markets in a general sense. In the main, however, particular negative features of these markets — inequalities between developed and developing countries, prejudicial food import dependence, the power of global agribusiness, and grain price volatility — are seen to have very little to do with (international) law. More generally, while law is not treated as absent in the global food system, it is largely seen to be *innocent* with respect to any prejudicial impacts that vulnerable groups might be experiencing within it. I will contest this view by examining the constitutive role of law in international commodity markets. Drawing on the insights of dependency theorists,<sup>3</sup> critical work on international development,<sup>4</sup> Third World

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<sup>2</sup> *Ibid.*

<sup>3</sup> Frank, Andre Gunder, *The development of underdevelopment*, Boston, MA: New England Free Press, 1966.

<sup>4</sup> Rist, Gilbert, *The history of development: from western origins to global faith*, London: Zed Books, 2002; Cypher, James M., and James L. Dietz, *The process of economic development*, London: Routledge, 2008; Fine, Ben, Costas Lapavistas and Jonathan Pincus (Eds), *Development policy in the twenty-first century: beyond the post-Washington consensus*, London: Routledge, 2003.

Approaches to International Law (TWAIL),<sup>5</sup> and critical scholarship on international law and development,<sup>6</sup> I will demonstrate that both food insecurity and food price volatility are produced and sustained, in part, by an international legal order that systematically disadvantages vulnerable populations in the Global South with respect to their ability to command access to food.

Part I will begin by foregrounding the differentiated impact of the global food crisis. After examining competing explanations of this impact, I will explore prevalent perceptions of the role of international law in this context. In Part II, I will locate the origins of the contemporary global food system in the period of European colonialism and will explore the place of law in creating conditions of food insecurity through the establishment of new market relations between colonial powers and colonised peoples. I will then turn in Part III to the critical significance of public international law in enabling the perpetuation of these market structures since decolonisation, through neo-colonial practices of economic ‘development’. My particular focus will be on how post-war international law and institutions relate to conditions of food insecurity in the Global South, as well as on food price volatility. In Part IV, I will move on to scrutinise the international legal solutions posited as responses to these ‘challenges’ [from roughly the 1990s onwards]. There are, I will suggest, significant limitations to the viability of these instruments as a response to contemporary manifestations of hunger.

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<sup>5</sup> TWAIL, or Third World Approaches to International Law scholars. See generally: Anghie, Antony, Bhupinder Chimni, Karin Mickelson and Obiora Chinedu Okafor (Eds.), *The Third World and International Order: Law, Politics and Globalization*, Leiden: Brill Academic Publishers, 2003.

<sup>6</sup> Pahuja, Sundhya, *Decolonising International Law*, Cambridge: Cambridge University Press, 2011; Trubek, David, and Alvaro Santos (Eds), *The New Law and Economic Development: A Critical Appraisal*, Cambridge: Cambridge University Press, 2006.

## I. THE ‘GLOBAL’ FOOD CRISIS AND INTERNATIONAL LEGAL RESPONSES

### i. Local food crises

The highly differentiated impact of the global food crisis was first related in Chapter One. Whether in terms of domestic food price inflation, increased poverty and malnutrition, or the duration of the impact, people living in low-income countries in the Global South have been overwhelmingly worst affected by this crisis.<sup>7</sup> Food price inflation was particularly high in Central America, in parts of South Asia, and in Sub-Saharan Africa, and food prices have remained elevated across these regions.<sup>8</sup> In 22 of the 37 countries categorised as ‘developing’, price rises in staple foods were over 20 per cent.<sup>9</sup> In nine countries of those countries, they were over 50 per cent.<sup>10</sup> While significant impacts amongst the urban poor had been anticipated, many of those who have suffered most acutely have been those actually involved in the production of the affected commodities themselves. The worst- affected groups have been casual wage labourers (both rural and urban), land- poor farmers, petty traders, and producers of commodities — notably pastoralists in Kenya, cotton farmers in Benin and tea workers in Bangladesh.<sup>11</sup>

The figures typically used to illustrate the volatility of the prices of staple grains are the prices listed on international commodity markets. But changes in world prices affect different domestic markets differently. While the price of maize increased by 87 per cent in Mozambique, for example, it increased by 157 per cent in Malawi during the

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<sup>7</sup> Keats, Sharada, et al, “Food price transmission: rising international cereals prices and domestic markets,” ODI Project Briefing no.48, October 2010.

<sup>8</sup> *Ibid.*

<sup>9</sup> Data based on nominal food prices of main dietary staples in late 2008 until mid-2009 compared to the previous five-year average, weighted by their contribution to the national diet, World Food Programme data, reported in Compton, Julia, Steve Wiggins, and Sharada Keats, “Impact of the global food crisis on the poor: what is the evidence,” ODI Report, 2010, p. 4.

<sup>10</sup> *Ibid.*

<sup>11</sup> *Ibid.*, p. iii.



same period.<sup>12</sup> A host of factors including exchange rates, border measures, transport costs, and domestic food policies can all affect the transmission of international commodity prices into local food prices.<sup>13</sup> Also of relevance is the countries' position with respect to the trade in the grains in question: maize, rice, and wheat. Many countries in the Global South, particularly in Africa, are net importers of these grains.<sup>14</sup> This left them with high exposure to the price swings. Some low-income net-exporting countries were also seriously affected because the prices of imported food grains rose far more dramatically than the price of the commodities that many of these countries export: coffee, cocoa, cotton, and tropical fruits.<sup>15</sup> A number of high-income developed countries, such as Japan, are also net importers of grain, and others, notably the US, play a prominent role in exporting it.<sup>16</sup> However, these stronger economies were better able to cope with the price volatility.<sup>17</sup> On the domestic level, producers of commodities suffered acutely because their terms of trade declined significantly against food grains.<sup>18</sup> In the case of the urban poor, their wages were insufficient to enable them to purchase sufficient grain.<sup>19</sup>

For all the insights that this sort of analysis offers, what is missing is any comprehensive attempt to explain how some countries became over-reliant on imported

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<sup>12</sup> Demeke, M., G. Pangrazio, and M. Maetz, "Country responses to the food security crisis: Nature and preliminary implications of the policies pursued," FAO Report, 2008, [http://www.fao.org/fileadmin/user\\_upload/ISFP/pdf\\_for\\_site/Country\\_Response\\_to\\_the\\_Food\\_Security.pdf](http://www.fao.org/fileadmin/user_upload/ISFP/pdf_for_site/Country_Response_to_the_Food_Security.pdf) Last accessed 6<sup>th</sup> August 2015.

<sup>13</sup> Keats, Sharada, et al, "Food price transmission," p. 1.

<sup>14</sup> FAO, "Agricultural trade: entering a new era?" FAO Corporate Document Repository, <http://www.fao.org/docrep/v6800e/v6800E0i.htm> Last accessed 6<sup>th</sup> August 2015.

<sup>15</sup> FAO, "The State of Agricultural Commodity Markets: High food prices and the food crisis – experiences and lessons learned," FAO Report, 2009, <http://www.fao.org/3/a-i0854e.pdf> p. 10.

<sup>16</sup> Agriculture and Horticulture Development Board (AHDB), "MI Prospects," Market News, AHDB Website, 28<sup>th</sup> October 2014, <http://www.hgca.com/markets/market-news/2014/october/28/prospects-global-grain-exports-to-decline-in-201415.aspx> Last accessed 6<sup>th</sup> August 2015.

<sup>17</sup> Valdés, Alberto, and William Foster, "Net Food-Importing Developing Countries: Who They Are, and Policy Options for Global Price Volatility," International Centre for Trade and Sustainable Development, Issue Paper no. 43, August 2012, <http://www.ictsd.org/downloads/2012/08/net-food-importing-developing-countries-who-they-are-and-policy-options-for-global-price-volatility.pdf> Last accessed 18<sup>th</sup> August 2015, p. 1.

<sup>18</sup> Compton, Julia, Steve Wiggins, and Sharada Keats, "Impact of the global food crisis on the poor," p. 17.

<sup>19</sup> *Ibid*, p. 19.

grain — or on revenue from tropical exports — in the first place. Similarly, while the factors impinging on the ability of poor people within such countries to access sufficient food are often identified, they are rarely, if ever, explained. It is widely acknowledged, for example, that ‘[m]any of the rural poor face constraints on land, labour or water which make it difficult for them to produce a surplus’.<sup>20</sup> Few studies, however, deem it necessary to elaborate on the form of these constraints, or how they came to affect rural communities in the first instance. Paralleling the taken-as-given vulnerability of the food insecure is the taken-as-given volatility of the grain prices to which they are vulnerable. Aspects of the cycle of production, the potential for crop failures, the ‘inelastic’ character of agricultural prices, and substantial historical precedent would all seem to support the argument that agricultural prices are ‘inherently’ volatile.<sup>21</sup> Yet, the relationship between these ‘features’ of grain prices and the system of production in which they have been embedded for well over a century of human history, however, is rarely questioned.

## ii. Locating responsibility

Those accounts which do attempt to probe more deeply into the unfavourable circumstances of the food insecure tend to offer repeated references to ‘Africa’s poor track record’ in agricultural production,<sup>22</sup> and often point the finger at domestic governments. Attention has been drawn to under-investment in agriculture, a lack of social safety nets, and the inequitable structure of land ownership across many countries in this region.<sup>23</sup> As analysts at the Overseas Development Institute observe, ‘[m]ost poor households were left to cope on their own with high price rises’, with very few afflicted

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<sup>20</sup> *Ibid*, p. iv.

<sup>21</sup> See for example Homi Kharas describing food prices as ‘so inherently volatile’ in Kharas, Homi, “Making Sense of Food Price Volatility,” Brookings Institution, 3<sup>rd</sup> March 2011, <http://www.brookings.edu/research/opinions/2011/03/03-food-prices-kharas> Last accessed 29<sup>th</sup> June 2015.

<sup>22</sup> Heady, Derek, and Shenggen Fan, “Reflections on the Global Food Crisis: How Did It Happen? How Has It Hurt? And How Can We Prevent the Next One?” IFPRI Research Monograph no. 65, Washington: IFPRI, 2010, p. 2.

<sup>23</sup> HLTf on the Global Food Security Crisis, “Updated Comprehensive Framework for Action,” p. 2.

populations interviewed in 2008 reporting having received any assistance from the state or NGOs.<sup>24</sup> By contrast, governments of countries in the Global North, even those that export large volumes of the grains at the centre of the global food crisis, such as the US, rarely figure at all. To the extent that these governments are mentioned in accounts of the global food crisis, it is in their role as leading members of the ‘international community’. This international community appears principally in an ameliorative capacity — it provides food aid, carries out research, and communicates the catastrophe to the rest of the world.<sup>25</sup> Food insecurity is presented as a ‘challenge’ in response to which developed states must mobilise the resources of international institutions, NGOs, and civil society.<sup>26</sup> Furthermore, when the international community does appear in the events leading up to the crisis, it is sometimes suggested that more could have been done. The failure to establish global grain reserves — which many argue could have helped to mitigate the impact of the volatility — is frequently invoked.<sup>27</sup>

### iii. Rethinking responsibility

The pervasive attribution of responsibility for food insecurity to domestic governments in the South is contested by a substantial body of critical work arguing that explanations for poverty and food insecurity in countries in this region must take into account the important impact of international policymaking. Dependency theorists<sup>28</sup> and the proponents of world systems theory<sup>29</sup> argue that the precarious position of food

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<sup>24</sup> Compton, Julia, Steve Wiggins, and Sharada Keats, “Impact of the global food crisis on the poor,” p. iv.

<sup>25</sup> *Ibid.*

<sup>26</sup> De Schutter, Olivier, “Final report: The transformative potential of the right to food,” Report of the Special Rapporteur on the Right to Food, A/HRC/25/57, January 2014, pp. 10-11.

<sup>27</sup> *Ibid.*, p. 2.

<sup>28</sup> Cardoso, Fernando Henrique, and Enzo Faletto, *Dependency and development in Latin America*, Oakland CA: University of California Press, 1979; Amin, Samir, *Unequal development: An essay on the social formations of peripheral capitalism*, New York and London: Monthly Review Press, 1976; Frank, Andre Gunder, *The development of underdevelopment*.

<sup>29</sup> Wallerstein, Immanuel, *The Modern World-System I: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*, New York: Academic Press, 1974.

insecure populations can only be understood by examining the structures of the global food system. From their perspective, the vulnerability of Southern populations is a product of a disadvantageous relationship with countries in the Global North. Imagining the global economy to be constituted of a core and a periphery, dependency theorists have argued that peripheral countries are prevented from developing — or at least impeded in their development — along the lines recommended by dominant doctrines of international development.<sup>30</sup> Scholars in these traditions tend to reject the vocabulary of food insecurity and instead talk in terms of structured vulnerability, powerlessness in relation to the international food order,<sup>31</sup> or, in more recent work, deprivation of food sovereignty.<sup>32</sup> As Watts and Bohle have argued, vulnerability is ‘a structural-historical space which is shaped by the effects of commercialization, proletarianization and marginalization’.<sup>33</sup> Countering the ahistorical and apolitical discourse of food insecurity, this scholarship foregrounds the role of imperialism, colonialism, neo-colonial development practices, and the policies of countries in the Global North in conditioning the ‘insecurity’ from which populations in the South are seen to suffer. Viewed through this lens, food insecurity and even agricultural price volatility do not appear as inevitable facts of natural conditions or even modernity, but instead come to be seen as socially produced phenomena with an identifiable historical origin. They are the product of politics. As Bill Winders emphasises, the ebb and flow of food prices and the degree to which prices are volatile are functions of changes in global food regimes, which are in turn shaped by national policies and agrarian politics.<sup>34</sup>

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<sup>30</sup> Rist, Gilbert, *The history of development: from western origins to global faith*, p. 118.

<sup>31</sup> Friedmann, Harriet, “The Origins of Third World Food Dependence,” in Henry Bernstein, Maureen Mackintosh, and Charlotte Martin (Eds.), *The Food Question: Profits Versus People*, London: Routledge, 1990, pp. 13-31.

<sup>32</sup> Patel, Raj, “Food sovereignty,” *The Journal of Peasant Studies* 36, no. 3 (2009): 663-706.

<sup>33</sup> Watts, Michael J., and Hans G. Bohle, “Hunger, Famine and the Space of Vulnerability,” *GeoJournal* 30, no. 2 (1993): 117-125, p. 121.

<sup>34</sup> Winders, Bill, “The Food Crisis and the Deregulation of Agriculture,” *Brown Journal of World Affairs* 18 (2011) p. 86; See further: Friedmann, Harriet, “The Political Economy of Food: A Global Crisis,” *New Left Review* 197 (1993): 29-57.

This scholarship is a vital corrective to the analysis that characterises much of the literature on food insecurity and the global food crisis. Nonetheless, even within this literature the focus of analysis tends to be on policy actualised as institutional practice. The significance of *law* in these dynamics is not typically elaborated. In fact, faith in international legal solutions to the (produced) vulnerability of the ‘food insecure’ is common to both mainstream and critical accounts.

#### iv. Perceptions of (international) law

‘End hunger by law’ is the slogan on a website that describes and promotes a proposal for an International Food Security Treaty (IFST) which aims to place the human right of freedom from hunger under the protection of enforceable international law.<sup>35</sup> The development of a binding set of legal norms as envisaged by the proponents of the IFST has yet to be realised. However, international institutions continue to elaborate soft-law regulatory principles, guidelines, and recommendations for the achievement of global food security. The Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security, for example, predate the global food crisis, and were elaborated in 2004.<sup>36</sup> Another set of guidelines on the responsible governance of tenure of land, fisheries and forests were agreed by Committee on World Food Security (CFS) in May 2012.<sup>37</sup> In their totality, these regulatory recommendations for improvements in labour markets and for better market access for land, resources, food commodities and credit are as complex and detailed as the Dodd-Frank or EMIR-MiFID II reforms for financial markets considered in Chapter Three.

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<sup>35</sup> “International Food Security Treaty,” <http://www.treaty.org/> Last accessed 5<sup>th</sup> August 2015.

<sup>36</sup> FAO, “Voluntary Guidelines to support the progressive realization of the right to adequate food in the context of national food security,” Rome: FAO, 2005, <http://www.fao.org/docrep/009/y7937e/y7937e00.htm> Last accessed 6<sup>th</sup> August 2015.

<sup>37</sup> CFS, “Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security,” Rome: FAO, 2012, <http://www.fao.org/docrep/016/i2801e/i2801e.pdf> Last accessed 6<sup>th</sup> August 2015.

Alongside the elaboration of regulatory guidelines, enforceable legal protections to empower the food insecure are being pursued under the rubric of the promotion of the rule of law,<sup>38</sup> the fulfilment of human rights commitments on the domestic level,<sup>39</sup> and the fostering of a new legal culture at the international level founded on the hierarchical superiority of human rights norms.<sup>40</sup> These aims are being advanced and advocated by a diverse range of actors including the Office of the High Commissioner on Human Rights,<sup>41</sup> the FAO, World Bank, NGOs, and lawyers' associations such as the World Justice Project.<sup>42</sup> Overwhelmingly, where law is mentioned in debates on food insecurity and the recent events of the global food crisis, it is offered as a remedial instrument. Either it is a regulatory tool to fix malfunctioning commodity markets, or it is a device to empower the vulnerable and to strong-arm governments to make good on their human rights commitments.

In the main, critical work on the global food system focuses on the policies of Northern states, practices of development agencies, and the prescriptions of the IMF, World Bank, and World Trade Organisation (WTO). Reference might be made to particular regimes of international law, such as the trade regime; however, there is a widespread tendency — identified by Martti Koskenniemi and Marja Lehto — to 'dismiss law as a passive reflexion of economic and political forces'.<sup>43</sup> Within legal academia, some scholars have written extensively on the role of international economic law in prejudicing the position of countries in the Global South. Carmen Gonzales is one

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<sup>38</sup> Gonzalez, Carmen G., "The Global Food Crisis: Law, Policy, and the Elusive Quest for Justice," *Yale Human Rights and Development Law Journal* 13 (2010), p. 476.

<sup>39</sup> De Schutter, Olivier, "Final report: The transformative potential of the right to food".

<sup>40</sup> Gonzalez, Carmen G., "The Global Food Crisis," p. 475.

<sup>41</sup> Office of the High Commissioner for Human Rights (OHCHR), "Human rights in the trade arena," <http://www.ohchr.org/EN/NewsEvents/Pages/HRInTheTradeArena.aspx> Last accessed 1<sup>st</sup> of July 2015.

<sup>42</sup> See World Justice Project website, <http://worldjusticeproject.org/rule-of-law-index> Last accessed 6<sup>th</sup> August 2015.

<sup>43</sup> Koskenniemi, Martti, and Marja Lehto, "The Privilege of Universality: International Law, Economic Ideology and Seabed Resources," *Nordic Journal of International Law* 65 (1996): 533-555, p. 533.

<sup>43</sup> Gonzalez, Carmen G., "The Global Food Crisis," p. 464.

of the few legal scholars to explicitly link the events of the global food crisis with international trade law.<sup>44</sup> Yet, Gonzales continues to offer international law as the primary solution to these problems. The international community must, she argues, promote food security through international law and regulation.<sup>45</sup>

Scholars associated with TWAIL, most famously Antony Anghie,<sup>46</sup> have sought to challenge this faith in international law. Anghie's work and more recent work by Sundhya Pahuja<sup>47</sup> demonstrate that international law was not epiphenomenal to the subjugation of developing country populations during the colonial era, but was and remains a crucial part of the power complex under which countries in the South are systematically disadvantaged. I will use these insights to explore the role of international law in the production of food price volatility and conditions of food insecurity via the construction of the global food system. I will also reflect on the relationships between public international law, international legal regimes for trade and investment, and domestic law in the constitution of markets within developing countries. While both Anghie and Pahuja touch on this, their focus is on the meta-narratives of international law and how governments in the South have been persuaded to engage with it. Recent critical work on law and development focuses more concretely on the use of law as a tool by development agencies to erect a constitutive body of law for the market.<sup>48</sup> However, these scholars rarely speak to the significance of public international law in the development context. I hope to take steps towards bridging this gap.

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<sup>44</sup> Gonzalez, Carmen G., "Trade liberalization, food security and the environment: the neoliberal threat to sustainable rural development," *Transnational Law and Contemporary Problems* 14 (2004), p. 431.

<sup>44</sup> Gonzalez, Carmen G., "The Global Food Crisis"; Gonzalez, Carmen G., "Deconstructing the Mythology of Free Trade: Critical Reflections on Comparative Advantage," *Berkeley La Raza Law Journal* 17, no. 65 (2006).

<sup>45</sup> Gonzalez, Carmen G., "The Global Food Crisis," p. 464.

<sup>46</sup> Anghie, Antony, *Imperialism, sovereignty and the making of international law*, Cambridge; New York: Cambridge University Press, 2004.

<sup>47</sup> Pahuja, Sundhya, *Decolonising International Law*.

<sup>48</sup> Trubek, David, and Alvaro Santos (Eds), *The New Law and Economic Development*, p. 2.

## v. Caveats

Before embarking on this analysis, it is first necessary to acknowledge its limitations. The economies, geographies, political cultures, and peoples living in countries the Global South are, of course, extremely diverse, complex, and rich in particularity. I don't wish to fall into the trap of homogenising the 'developing world'.<sup>49</sup> It is particularly important to highlight that not all of the people living in countries colonised by Europeans or subject to development practices have been made worse off as a result. In fact, some, what might be termed 'domestic elites' benefited greatly. A second caveat is that the global food crisis has also had a detrimental impact on poor consumers in the Global North. Hunger is also on the rise across Europe and in the US with growing numbers turning to food banks and other assistance programs.<sup>50</sup> While a country-to-country analysis suggests that wealthier countries — the 'core' — have benefited from their exploitation of the 'periphery', these benefits have tended to accrue to 'elites' in richer countries, and not to the general populous.<sup>51</sup> Finally, neither European colonialism, nor forms of 'developmentalism' or international law itself can accurately be conceptualised as unitary phenomena. They have to be understood as complex relations of ideology and practice, shifting over time. As the work of scholars including Duncan Kennedy,<sup>52</sup> Andrew Lang,<sup>53</sup> and Michel Fakhri<sup>54</sup> evidences, even discrete regimes within

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<sup>49</sup> This, as Gilbert Rist has argued, was a critical failing of some of the more radical dependency theorists who, in making the centre totally responsible for processes of 'development/underdevelopment', converted the peripheral countries into passive victims of the developed countries. See Rist, Gilbert, *The history of development: from western origins to global faith*, p. 119.

<sup>50</sup> Monroe, Jack, "Crisis? What crisis? How politicians ignore the existence of food banks," *The Guardian*, 22<sup>nd</sup> April 2015; "Feeding America Highlights Findings from Hunger in America 2014 Report," Feeding America website, 20<sup>th</sup> January 2015, <http://www.feedingamerica.org/hunger-in-america/news-and-updates/press-room/press-releases/feeding-america-highlights-state-of-hunger.html> Last accessed 6<sup>th</sup> August 2015.

<sup>51</sup> As Susan George has argued, there is continuity between both countries in Global North and those of the South in that, in both parts of the planet, 'rich people eat first'. See George, Susan, *How the other half dies: The real reasons for world hunger*, Lanham Md: Rowman & Littlefield Publishers, 1989, p. 3.

<sup>52</sup> Kennedy, Duncan, "Three Globalizations of Law and Legal Thought," in David Trubek and Alvaro Santos (Eds), *The New Law and Economic Development*.

<sup>53</sup> Lang, Andrew, *World trade law after neoliberalism: Reimagining the global economic order*, Oxford: Oxford University Press, 2011.

<sup>54</sup> Fakhri, Michael, *Sugar and the Making of International Law*, Cambridge: Cambridge University Press, 2014.



international law, from the General Agreement on Tariffs and Trade (GATT) to the regulation of a single commodity, like sugar, have passed through distinct phases and have been influenced by (and have influenced) changing ideas, geo-political events, and policy contexts.

## II. COLONIALISM, NEO-COLONIALISM, AND (INTERNATIONAL) LAW: ORIGINS OF THE GLOBAL FOOD SYSTEM

### i. European colonialism

The role of public international law doctrine in rationalising and legitimating the imperial and colonial practices of European colonists is now well established.<sup>55</sup> As Antony Anghie has argued, colonial practices were justified according to a ‘dynamic of difference’ that reconciled inconsistent and exploitative legal treatment of native populations on the basis that they were ‘uncivilised’ and therefore undeserving of the same rights as ‘civilised’ Europeans.<sup>56</sup> Anghie tells a very different story about public international law than that which it tells about itself. In order to understand what the differential treatment of native populations has produced in terms of hunger and deprivation in the Global South, however, it is necessary to take international law’s colonial narratives seriously.

The civilising mission of nineteenth century international law was centred on the ‘dual mandate’ — the belief that colonialism brought industrial benefit for Europeans, and progress for the native races of the colonies.<sup>57</sup> Natives were to be helped to make

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<sup>55</sup> Anghie, Antony, Bhupinder Chimni, Karin Mickelson and Obiora Chinedu Okafor (Eds.), *The Third World and International Order*.

<sup>56</sup> Anghie, Antony, “Finding the Peripheries: Sovereignty and Colonialism in Nineteenth-Century International Law,” *Harvard International Law Journal* 40 (1999) p. 29.

<sup>57</sup> Lugard, Frederick D., *The Dual Mandate in Tropical Africa*, London: Frank Cass, 1965.

productive use of the abundant raw materials in their territories that lay ‘wasted and ungarnered’ because they ‘did not know their use and value’.<sup>58</sup> Of course, native populations were not ignorant of the uses and value of food *per se*. They were simply unaccustomed to valuing food in the same way as imperial traders and European colonists — primarily by virtue of its exchange value. Operating under the legitimating framework of public international law, European settlers bought up land, displacing native populations and imposed head and hut taxes to force native populations into the workplace.<sup>59</sup> Widespread programmes of plantation agriculture concentrated landholding in the hands of national elites and prevented many indigenous and nomadic groups from accessing resources.<sup>60</sup> These interventions, aimed everywhere at encouraging productive activity in the colonies, made native populations increasingly vulnerable to hunger mediated through the price mechanism.<sup>61</sup>

Domestic restructuring and new modes of agricultural production established by European settlers and administrations laid the foundations for an expanding international trade in food commodities. Under colonial policies, the colonial power was the only foreign buyer, and colonies were forced to use the best farmland to produce what are commonly termed ‘cash crops’, such as sugar, coffee, cotton, bananas, tobacco.<sup>62</sup> Enforced export specialisation meant that large tracts of prime agricultural land in India, Africa, and the Americas were shifted from food production to cash crop production.<sup>63</sup> This increased countries’ reliance on imports for food staples, and particularly grain.<sup>64</sup> The infrastructure that was set up in the colonies was designed to facilitate exports.

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<sup>58</sup> *Ibid.*, p. 615.

<sup>59</sup> Phillips, Anne, *The Enigma of Colonialism: British policy in West Africa*, Indiana: Indiana University Press, 1989, pp. 43 and 56.

<sup>60</sup> Fowler, Cary, and Pat Mooney, *Shattering Live: Food, Politics and the loss Of Genetic Diversity*, Tuscon: University of Arizona Press, 1996, pp. 95-96.

<sup>61</sup> Humphreys, Stephen, *Theatre of the rule of law: transnational legal intervention in theory and practice*, Cambridge: Cambridge University Press, 2010, pp. 17 and 113.

<sup>62</sup> Ewout, Frankema, “The Colonial Origins of Inequality: Exploring the Causes and Consequences of Land Distribution,” in Stephan Klasen and Felicitas Nowak-Lehmann (Eds.), *Poverty, Inequality, and Policy in Latin America*, Cambridge MA: MIT Press, 2008, p. 21.

<sup>63</sup> Gonzalez, Carmen G., “The Global Food Crisis,” p. 435.

<sup>64</sup> *Ibid.*

Railways and roads were built to carry products from the interior to the coast, and not to encourage or facilitate trade within the region.<sup>65</sup> Consequently, many colonies were both physically and economically structured into deepening dependency on international commodity markets for physical and economic access to food. Furthermore, as a result of access to a new abundance of raw materials and cheap imports, the colonial relationship gave the colonising countries a huge economic advantage, enabling them to industrialise and develop their economies.<sup>66</sup> This put former colonies at a structural disadvantage as they were incorporated into the ‘global machinations of things’.<sup>67</sup>

Importantly, while much of the work of TWAIL scholars is centred on public international law, it was also during the colonial period that an international economic law system based on free trade, the gold standard and private international law got underway. As Duncan Kennedy argues, newly independent nations seeking to trade in the global economy had to join this game strictly on the terms proposed, that is, within the structure of legal rules already in place, or ‘starve in the dark’.<sup>68</sup> While the legal status of colonies within the international legal order changed upon decolonisation, many of the terms and conditions of their engagement in global commerce remained in place. Other domestic legal interventions left a lasting legacy. As Kennedy argues, new labour forms were ‘incorporated’ in these territories through the categories of classical legal thought — the sale of labour power and private property.<sup>69</sup> This contributed to the spread of European modes of legal consciousness: a distinction between the private and public

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<sup>65</sup> Robbins, Peter, *Stolen fruit: the tropical commodities disaster*, London: Zed Books, 2003.

<sup>66</sup> Young, Liz, *World Hunger*, London: Routledge, 1997, p. 173.

<sup>67</sup> Fakhri, Michael, *Sugar and the Making of International Law*, p. 30.

<sup>68</sup> Kennedy, Duncan, “Three Globalizations of Law and Legal Thought,” p. 58.

<sup>69</sup> *Ibid*, p. 36. James Gathi has emphasised that this did not always mean doing away with existing power structures but was carried out by ‘transmogrifying’ native power structures based on kinship into new European legal relationships. Using a case study of the Maasai people, Gathi describes how ‘Western bourgeois forms’ — laws of property and contract — appropriated Maasai institutions and regimes of authority and modified them to create the equivalent of a comprador class of Maasai, who in turn served to legitimate the expropriation of Maasai land (see Gathi, James Thuo, “Imperialism, colonialism, and international law,” *Buffalo Law Review* 54 (2006), p. 1023).

realm, individualism, and commitment to interpretive formalism.<sup>70</sup> As a result of this legal inheritance, during decolonisation, many newly independent states simply ratified ‘whatever schemes of economic and social hierarchy emerged out of the play of violence and culture on the ground’.<sup>71</sup> Land ownership in the Global South continues to be skewed in favour of traditional landholding elites and large-scale foreign and domestic agro-export enterprises, many of which effectively obstruct or dilute efforts at land reform.<sup>72</sup>

## ii. (International) Law and Neo-colonialism

The period of decolonisation at the end of the Second World War is typically celebrated by the international community as a transformative moment in the relationship between international law and imperialism.<sup>73</sup> Under the right of nations to self-determination, colonised people were granted the rights to freely determine their political institutions, exploit their economic resources, and decide upon their social and cultural development without interference from outside.<sup>74</sup> Yet, as others have argued, in spite of their new legal status as sovereign nation states, the economic policy of many former colonies continued to be dictated by governments of the Global North acting through newly created international institutions. ‘Neocolonialism’, the umbrella term for such practices, has been analysed from numerous disciplinary perspectives. While much of this work is complementary, important questions on precise mechanisms enabling the continuation of colonial practices remain the subject of debate.

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<sup>70</sup> Kennedy, Duncan, “Three Globalizations of Law and Legal Thought,” pp. 28-29.

<sup>71</sup> *Ibid*, p. 36.

<sup>72</sup> Gonzalez, Carmen G., “Trade liberalization, food security and the environment,” p. 437.

<sup>73</sup> Pahuja, Sundhya, *Decolonising International Law*, pp. 3-4.

<sup>74</sup> Cristescu, Aureliu, “The Right to Self-Determination: Historical and Current Development on the Basis of United Nations Instruments,” Report by the Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities, E/CN.4/Sub.2/404/Rev.1, 1981, p. 43, para. 288(k).

From an international relations perspective, the answer lies primarily in the superior economic and political power of Northern states.<sup>75</sup> Problematising the nature of this power, other scholarship points to the ‘muscular monetarism’ of the Bretton Woods Financial Institutions (BWIs) — practiced through conditionality on loans and reinforced by their position as the gateway to global capital markets.<sup>76</sup> Another body of work is focused on the proliferation of ‘expert’ knowledge practices about ‘development’ as a means by which countries in the South have been induced into implementing economic policies originating in the ‘developed’ world.<sup>77</sup> This scholarship elucidates the coercive power behind the activities of the BWIs, even in the context of their ‘softer’ functions of carrying out research, publishing data, devising ‘recommendations’ and suggesting practices of ‘good governance’. It also helps to explain why many governments in the South implemented many of these policies willingly, believing in the ‘science’ of development. But it does little to clarify the role played by law in this context. Given the centrality of international law in regimes of global governance, not to mention the constitutive conceptual frameworks from which international institutions responsible for development operate, this appears remiss.

Sundhya Pahuja is one scholar who has sought to tackle this oversight head on, arguing that international law has been a critical part of the power complex whereby influence over countries in the South has been maintained.<sup>78</sup> Pahuja builds on Anghie to demonstrate how the concept of ‘development’ replaced that of ‘civilisation’ as an external referent through which the ‘dynamic of difference’ between colonised and coloniser was sustained in international law.<sup>79</sup> She follows Anghie in his argument that

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<sup>75</sup> Wade, Robert Hunter, “US hegemony and the World Bank: the fight over people and ideas,” *Review of International Political Economy* 9, no. 2 (2002): 215-243.

<sup>76</sup> Peet, Richard, *Unholy Trinity: the IMF, World Bank and WTO*, London: Zed Books, 2003; Bello, Walden, Shea Cunningham, and Bill Rau, *Dark Victory: The United States, Structural Adjustment And Global Poverty*, Chicago Ill: Pluto Press, 1999; George, Susan, *A Fate Worse Than Debt*, New York: Grove Weidenfeld, 1990.

<sup>77</sup> Escobar, Arturo, *Encountering development: the making and unmaking of the Third World*, Princeton: Princeton University Press, 2011; Rist, Gilbert, *The history of development*.

<sup>78</sup> Pahuja, Sundhya, *Decolonising International Law*.

<sup>79</sup> *Ibid*, p. 7.

nation-statehood and sovereignty are not neutral legal categories but are shaped by their distinctively European lineage.<sup>80</sup> It was in trying to obtain this political and legal status, she suggests, that former colonies became vulnerable to development doctrine during the process of decolonisation. They positioned themselves in a historical continuum in which European states were to be emulated.<sup>81</sup> The treatment of development as a technical issue under international law disguised the highly political nature of the trespasses made on state sovereignty by international institutions. Via the ‘new neutral scientific spectrum of economic development secured and measured by the “scientific” concept of GDP’, measures to assist these countries could be characterised as ‘technical’ and ‘non-political’.<sup>82</sup> This split between ‘economic’ and ‘political’ governance was institutionalised through the new international legal architecture. The UN and its organs were designated as the site for political debate, meaning that the activities of ‘economic’ institutions set up at Bretton Woods were widely seen to be largely neutral.<sup>83</sup>

The fact that international law has failed to deliver on its post-colonial promise of a truly equal, inclusive and universal world order is self-evident. Pahuja’s contribution has been to demonstrate that international law has been a central mechanism through which neo-colonial power is simultaneously exercised and disguised. Enrolling those seeking reform with its promised universality, Pahuja demonstrates that international law has absorbed and deradicalised movements for social change.<sup>84</sup> It has embroiled them in complex institutional processes in which they are required to articulate their demands through legal argumentation, itself, as Koskenniemi has shown, normatively

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<sup>80</sup> See generally Anghie, Antony, *Imperialism, sovereignty and the making of international law*.

<sup>81</sup> Pahuja, Sundhya, *Decolonising International Law*, p. 45.

<sup>82</sup> *Ibid*, p. 8.

<sup>83</sup> Despite considerable protest over the privilege of Security Council veto, the weighted voting systems of the Bretton Woods Financial Institutions (BWIs), which allowed a much larger say in the affairs of both the World Bank and the IMF for the wealthiest nations, passed with relatively little contestation. *Ibid*, pp. 22-23.

<sup>84</sup> Rajagopal Balakrishnan has also explored this dynamic arguing that the engagement of such movements with international law has served to enhance the legitimacy of international institutions and their development practices since the 1960s. See Balakrishnan, Rajagopal, “From Resistance to Renewal: The Third World, Social Movements, and the Expansion of International Institutions,” *Harvard International Law Journal* 41 (2000), p. 532.

indeterminate.<sup>85</sup> International law has also created and legitimised the practices of specialist institutions in which economics is treated as a science — in which mainstream economic theory is detached from the politics that made it mainstream. This has enabled lawyers, economists and development practitioners working at international economic institutions not only to claim that their developmental prescriptions are technical and non-political, but, in many cases, to believe it themselves.<sup>86</sup> Importantly, it is international law's very claim to be law — to be more than politics — that has enabled the ongoing exercise of power over formally sovereign states. While neo-colonial development practices have not always taken an overtly legal form, they have been extended under the broader structures of international law and its claim to legality.

I will now explore the interplay between norms of public international law, practices of international economic institutions, development discourse, the trade and investment regimes, and domestic law in creating the global food system. My focus will be on how this has served to entrench conditions for food insecurity in the Global South and to exacerbate food price volatility since the post-war period.

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<sup>85</sup> Koskeniemi, Martti, *From apology to utopia: the structure of international legal argument*, Cambridge: Cambridge University Press, 2006.

<sup>86</sup> As Lang and others have explored, lawyers at the World Trade Organisation share certain cognitive biases which contributed to the maintenance of 'a stable elite preference' for policies such as trade liberalisation that become common sense. See Lang, Andrew T.F., "Re-thinking trade and human rights," *Tulane Journal of International & Comparative Law* 15 (2006): 335. Others have explored this in the context of the World Bank and development, see St. Clair, Asunción Lera, "The World Bank as a transnational expertised institution," *Global Governance: A Review of Multilateralism and International Organizations* 12, no. 1 (2006): 77-95.

### III. DEVELOPMENTALISM, ECONOMIC IMPERIALISM, AND (INTERNATIONAL) LAW: THE MAKING OF THE GLOBAL FOOD SYSTEM

Inspired by President Truman and his ‘Four Point Plan’,<sup>87</sup> in the post-war period, officials working at the new institutions of the United Nations embarked on a project of delivering ‘rapid economic progress’ to the ‘less economically accomplished countries of the world’.<sup>88</sup> As a report from the UN Department of Social and Economic Affairs makes apparent, what was required was no less than the complete restructuring of ‘underdeveloped societies’.<sup>89</sup> ‘The outcome was a body of ideas and practices that is widely regarded as ambiguous in its effects on improving living conditions for people in the Global South. Thus, for example, Shattuck and Holt-Giménez have argued that the vulnerability underlying the global food crisis is ‘the product of decades of “development” that privileged industrial production for export over local food production, exacerbated economic inequality, and made poor countries dependent on a volatile global market for their food’.<sup>90</sup> Arturo Escobar’s analysis of the policies and practices of development is equally damning: ‘The fact that most people’s conditions did not improve but deteriorated with the passing of time did not seem to bother most experts’.<sup>91</sup> As a result of these attempts at restructuring, he reinforces, many countries that were self-sufficient in food crops at the end of World War Two became net food importers throughout the development era.<sup>92</sup>

As Gilbert Rist has noted, the main ingredients of development ‘doctrine’ in the post-war period have ‘hardly changed since’.<sup>93</sup> They comprise the promotion of

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<sup>87</sup> Truman, Harry S., *Public Papers of the Presidents of the United States, 1945*, United States Government Printing Office, 1964, pp. 114-115.

<sup>88</sup> Escobar, Arturo, *Encountering development*, pp. 3-4.

<sup>89</sup> United Nations, Department of Social and Economic Affairs, “The Determinants and Consequences of Population Change,” Report, New York: United Nations, 1953.

<sup>90</sup> Shattuck, Annie, and Eric Holt-Giménez, “Moving from Food Crisis to Food Sovereignty,” *Yale Human Rights and Development Law Journal* 13 (2010), p. 425.

<sup>91</sup> Escobar, Arturo, *Encountering development*, p. 5.

<sup>92</sup> *Ibid*, p. 104.

<sup>93</sup> Rist, Gilbert, *The history of development*, p. 113.



economic development by exporting raw materials, the fostering of comparative advantage supposed to benefit all market traders, and making productive use of foreign investment and capital.<sup>94</sup> Yet, while its main hallmarks have remained constant, what has changed significantly since the post-war period are the roles assigned to the state and to law in processes of economic development. I will now trace the changing modes of development practice through two eras: the first beginning in the 1960s and lasting until the late 1970s, the second taking off in the 1980s and lasting — albeit with some important adjustments — until the present day.

i. Development doctrine and the developmental state

During the 1950s and 1960s, development policy focused on the role of the state in managing the economy and transforming traditional societies. As Anne Marie Burley-Slaughter has argued, international economic institutions were instrumental in procuring the projection and proliferation of the particular institutional forms of the liberal welfare state onto developing country economies.<sup>95</sup> The emphasis was thus on public law, active management of the economy, and the erection of regimes of regulatory governance.<sup>96</sup> As the new hegemonic power in the post-war era, the United States became the model for post-war theories of development applied to the ‘Third World’.<sup>97</sup>

In the post-war period, many former colonies embarked on a programme of import substitution industrialisation attempting to replicate the industrialisation model of

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<sup>94</sup> *Ibid.*

<sup>95</sup> Burley-Slaughter, A. M., “Regulating the world: multilateralism, international law, and the projection of the new deal regulatory state,” in J.G. Ruggie (Ed.), *Multilateralism Matters: The Theory and Praxis of an Institutional Form*, New York NY: Columbia University Press, 1993, p. 125.

<sup>96</sup> Trubek, David, and Alvaro Santos (Eds), *The New Law and Economic Development*, p. 5.

<sup>97</sup> Friedmann, H., and P. McMichael, “Agriculture and the state system: The rise and decline of national agricultures, 1870 to the present,” *Sociologia Ruralis* 29, no. 2 (1989): 93-117, p. 111.

developed states.<sup>98</sup> As Herbert Feis has observed, ‘they seem to think that they really cannot be nations unless they make within their own border many of the things which the older industrial nations have in the past supplied’.<sup>99</sup> Following the prescriptions of modernisation theorists like W. Arthur Lewis, who argued that rural areas were unproductive and had an oversupply of labour, many governments in former colonies taxed farmers and rural populations transferring income to urban dwellers.<sup>100</sup> The countryside was exploited for the sake of industrial capital formation in the cities.<sup>101</sup> This impacted dramatically upon the livelihoods of small farmers and resulted in an increased dependence of low-income countries on food imports. Critically, however, developing countries seeking to gain access to still-protected Northern markets were prevented by the operations of the GATT (discussed below). This meant that their efforts at industrialisation not only impoverished rural communities, they also failed to deliver the much sought-after increase in revenue.

The growing reliance of Southern populations on imported food was exacerbated by the aid practices and technological solutions ‘gifted’ to the developing world by countries in the Global North. In the decades following the war, governments in the US and in Europe used tariffs, price supports, and quotas to boost agricultural production in their territories — particularly for the production of grain.<sup>102</sup> This resulted in a continuous oversupply which was then channelled into poor countries as ‘food aid’. As Harriet Friedman observes, many governments welcomed this assistance, conducive as it was to

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<sup>98</sup> Feis, Herbert, “The Geneva Proposal for an International Trade Charter,” *International Organization* 22, no. 1 (1948), p. 47.

<sup>99</sup> *Ibid.*

<sup>100</sup> Lewis, W. Arthur, “Economic development with unlimited supplies of labour,” *The Manchester School* 22, no. 2 (1954): 139-191.

<sup>101</sup> Kennedy, Duncan, “Three Globalizations of Law and Legal Thought,” p. 59.

<sup>102</sup> Ha-Joon Chang has explored the discrepancies between the development policy prescribed by industrialised countries and the policies that they pursued to facilitate their own industrialisation. In his estimation, their success was largely dependent on the same policies, such as infant industry protection, and export subsidies, that are frowned upon today, if not actively banned, by international institutions such as the World Trade Organisation. Chang, Ha-Joon, *Kicking away the ladder: development strategy in historical perspective*, London and New York: Anthem Press, 2002, p. 2.

the creation of an urban working class.<sup>103</sup> However, it had the effect of flooding local markets with grain priced below the cost of production, further undercutting local farmers.<sup>104</sup> Aid recipients developed a taste for food crops such as wheat that were alien to the local environment, further entrenching dependence on imports.<sup>105</sup> Between the early 1950s and the late 1970s, per capita consumption of wheat increased by 63 per cent in the market economies of the ‘Third World’.<sup>106</sup> Many countries, notably in Africa, became major commercial purchasers of US grain.<sup>107</sup>

By the late 1950s, there was growing recognition that food aid policies were helping to create a dangerous dependency on imports in the Global South. A new solution for developing economies was found in the application of science and technology to the task of boosting crop yields — the Green Revolution.<sup>108</sup> While delivering record levels of grain production, these technical supply-side solutions failed to alleviate hunger in the Global South. In fact, as Shiva,<sup>109</sup> Thrupp,<sup>110</sup> Gonzales<sup>111</sup> and others have explored, the Green Revolution exacerbated and entrenched conditions of food insecurity. Access to prescribed technologies — the expansion of irrigation infrastructure, hybridised seeds, synthetic fertilisers and pesticides, and the modernisation of farming techniques — required significant capital investment.<sup>112</sup> This favoured already-wealthy farmers and prejudiced the interests of small farmers and local consumers. The Green Revolution promoted fossil-fuel-reliant industrialised agricultural production, fostered reliance on expensive inputs, converted large tracts of land into cropland for cash crops, displaced

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<sup>103</sup> Friedmann, Harriet, “Distance and durability: Shaky foundations of the world food economy,” *Third World Quarterly* 13, no. 2 (1992): 371-383, p. 371.

<sup>104</sup> Shattuck, Annie, and Eric Holt-Giménez, “Moving from Food Crisis to Food Sovereignty,” p. 7.

<sup>105</sup> Gonzalez, Carmen G., “Trade liberalization, food security and the environment,” p. 436.

<sup>106</sup> Friedmann, Harriet, “Distance and durability,” p. 372.

<sup>107</sup> *Ibid.*

<sup>108</sup> Gonzalez, Carmen G., “Trade liberalization, food security and the environment,” p. 440.

<sup>109</sup> Shiva, Vandana, *The Violence of the Green Revolution: Third World Agriculture, Ecology and Politics*, London: Zed Books, 1991.

<sup>110</sup> Thrupp, Lori Ann, *Cultivating Diversity: Agrobiodiversity and Food Security*, World Resources Institute, 1999, pp. 28-29.

<sup>111</sup> Gonzalez, Carmen G., “Trade liberalization, food security and the environment”.

<sup>112</sup> Gonzalez, Carmen G., “The Global Food Crisis”.

local populations, destroyed ecosystems, and depressed grain prices for smallholders, tenant farmers, and sharecroppers. This also served to enhance the power of multinational companies and suppliers of these inputs. As Susan George highlights, ‘any choice of technology automatically means also the choice of its supplier — the seller — and thus of a long-term partner’.<sup>113</sup> Agrifood, seed, fertiliser and pesticide companies expanded and became increasingly transnational in this period.<sup>114</sup>

Critical scholarship has exposed the many flaws animating the ambitions of former colonies to industrialise. As Rist argues, economic strategies for industrialisation were pursued ‘as if the existence of industrial countries did not radically alter the context in which candidates for industrialization have to operate’.<sup>115</sup> From the perspective of development doctrine, the world was conceived ‘not as a structure in which each element depends upon the others, but as a collection of formally equal “individual” nations’.<sup>116</sup> Paradoxically, the very structures and dynamics of the contemporary global food system were being consolidated by the state-centric pursuit of national economic growth. Governments fixated on their own national economic development were unintentionally conscripting their populations into the service of a larger economic structure — an increasingly industrialised, specialised, monopolised global food system. Rist locates the tunnel vision of developing country governments in the power of economic ideology — that of the ‘self-made man’.<sup>117</sup> Whilst economic ideology was doubtless influential, Rist fails to elaborate on another perhaps more important influence in this regard — that of public international law. The view of the world as a collection of ‘formally equal “individual” nations’<sup>118</sup> was firmly impressed on countries in the Global South by the doctrines and categories of international law — not only ideas about economic

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<sup>113</sup> George, Susan, *How the other half dies*, p. 97.

<sup>114</sup> *Ibid.*

<sup>115</sup> Rist, Gilbert, *The history of development*, p. 75.

<sup>116</sup> *Ibid.*

<sup>117</sup> *Ibid.*

<sup>118</sup> *Ibid.*

individualism. What then of the specific international legal regimes of trade and investment?

a. PSNR and legal dispossession

As the prospect of decolonisation grew more likely, many imperial powers negotiated agreements with new states, procuring undertakings to protect many of the rights acquired under colonial rule. Former colonisers were seeking assurance that their nationals' investments in land, industry and manufacture would be respected and that they would be affording ongoing access to the valuable natural resources of former colonies. These agreements, the first being signed by Germany and Pakistan in 1959, were early examples of bilateral investment treaties under which countries negotiate protections for what is now termed 'foreign direct investment' (FDI).<sup>119</sup> As nationalist movements grew in power, demands to rescind these treaties began to emerge. Attracted by the promise of the new universal international law, nations drew on the right of peoples and nations to self-determination to make a claim for 'permanent sovereignty' over their natural resources (PSNR).

The attempts of nationalist groups and governments in the Global South to use international law to advance their rights provide further support for Pahuja's thesis regarding the false promises of international law. As she explores in detail, their efforts were consistently undermined as they worked their way through international institutions. First, the UN Secretariat and the Commission on PSNR was assigned the task of determining the extent of PSNR within the notion of self-determination. Even this move meant that in practice the right was no longer recognised as the absolute right of a sovereign state — it was a qualified right, the content of which was in part determined by an international institution. This gave international institutions a locus of influence over a

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<sup>119</sup> Bilateral Investment Treaties typically include terms that protect the foreign investor against a 'contractual breach' by the host.

matter that was formerly seen as falling within the exclusive territorial jurisdiction of a sovereign state. As deliberations over the content of the right went on, it came to be counter-balanced by obligations to exercise it in the ‘interests of development’.<sup>120</sup> As a result, the debate over PSNR moved institutional home, from the political organs of the UN into the orbit of influence of the BWIs.<sup>121</sup> Furthermore, in their attempts to articulate these rights as rights of ‘sovereignty’, developing countries conspired in the propertisation of natural resources which came to be discussed almost exclusively as commodities to be exploited.<sup>122</sup> Once propertised, the nationalisation of natural resources implicitly raised the question of compensation.<sup>123</sup> By the time the right had crystallised into Article 4 of General Assembly resolution 1803 (XVII) of 14<sup>th</sup> December 1962, it contained an obligation to pay ‘appropriate compensation’, disputes over which ‘should be made through arbitration or international adjudication’.<sup>124</sup>

A bitter dispute over the appropriate measure of compensation ensued. Developed states preferred what was known as the ‘Hull formula’ of ‘prompt, adequate and effective’, or market-based compensation, determinable internationally.<sup>125</sup> Emergent states argued that any compensation should be ‘appropriate’, economically contextual, historically sensitive and determinable nationally.<sup>126</sup> Attempts to adjudicate these matters stalled. However, between 1959 and 1991, over 400 Bilateral Investment Treaties (BITs) were signed worldwide.<sup>127</sup> Typical provisions of BITs included terms governing compensation for expropriation, the repatriation of profits, dispute settlement procedures,

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<sup>120</sup> Pahuja, Sundhya, *Decolonising International Law*, p. 132.

<sup>121</sup> *Ibid.*

<sup>122</sup> *Ibid.*, p. 125.

<sup>123</sup> *Ibid.*, p. 128.

<sup>124</sup> General Assembly resolution 1803 (XVII) of 14<sup>th</sup> December 1962, “Permanent sovereignty over natural resources,” GA Res. 1803 (XVII) / 17 UN GAOR Supp. (No.17) at 15 / UN Doc. A/5217 (1962).

<sup>125</sup> Pahuja, Sundhya, *Decolonising International Law*, p. 149.

<sup>126</sup> Sornarajah, Muthucumaraswamy, *The international law on foreign investment*, Cambridge: Cambridge University Press, 2010, Section 4.6: “Nationalisation and Compensation”, p. 207.

<sup>127</sup> Geist, Michael A., “Toward a General Agreement on the Regulation of Foreign Direct Investment,” *Law and Policy in International Business* 26, no. 3 (1995) pp. 673 and 684.

national treatment requirements, and ‘most favoured nation’ requirements.<sup>128</sup> All of these provisions served to protect the rights of foreign investors and to limit the ability of developing countries to redistribute land, renationalise industries, or carry out reform that could strengthen the ability of local communities to access land and resources.

A number of scholars have argued that this has enabled subsequent generations of foreign firms to buy up land and resources by investing in the Global South. Described by Georg Schwarzenberger as ‘imperialism writ small’,<sup>129</sup> an increasingly elaborated international legal regime protecting the rights of foreign investors has impeded states who have sought to nationalise industries for their economic benefit.<sup>130</sup> Many of the unexplained ‘constraints’ now seen to impinge on the ability of small farmers to access land and resources would appear to stem directly from the protected rights of international investors. In the Sahel and East Africa, pastoralists have suffered acutely from the privatisation and fencing of common land, and the alienation of pastures for non-pastoral uses.<sup>131</sup> This legal regime has also enabled the vertical integration and the concentration of power in a few very large firms, with national governments increasingly tailoring food regulation to the demands of agribusiness.<sup>132</sup>

#### b. GATT, the ICAs, and comparative disadvantage

As Carmen Gonzales has argued, even on an ideational level, comparative advantage disadvantages the Global South. By de-historicising the relative advantages of nations in the Global North and South, she contends, it ‘relegates these nations to

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<sup>128</sup> Guzmán, Andrew T., “Explaining The Popularity of Bilateral Investment Treaties: Why LDCs Sign Treaties That Hurt Them,” Jean Monnet Archive Papers, 1997, “iv. The Paradoxical Behavior of Developing States”; “B.1. 1. Description & History of BITs,” <http://www.jeanmonnetprogram.org/archive/papers/97/97-12.html> Last accessed 6<sup>th</sup> August 2015.

<sup>129</sup> Schwarzenberger, Georg, *Foreign Investments and International Law*, London: Stevens, 1967, p. 111.

<sup>130</sup> Sornarajah, Muthucumaraswamy, *The international law on foreign investment*, p. 435.

<sup>131</sup> Oxfam, “Causing Hunger: An overview of the food crisis in Africa,” Oxfam Briefing Paper 91, 2006, p. 18.

<sup>132</sup> Trauger, Amy, “Toward a political geography of food sovereignty: Transforming territory, exchange and power in the liberal sovereign state,” *Journal of Peasant Studies* 41, no. 6 (2014): 1131-1152, p. 1133.

economic specialization in their traditional exports — even if this specialization was imposed rather than chosen and even if it is disadvantageous under current market conditions’.<sup>133</sup> In any case, it is now well established that the ability of developing countries to develop as enjoined was seriously curtailed by their inability to ‘join the club’ of the international trade regime.<sup>134</sup> From the middle of the 1950s onwards, it became clear that agricultural products were in practice almost entirely exempt from the most important GATT market access obligations.<sup>135</sup> The ability of the US and the states of the EU to continue subsidising agriculture through policies like Common Agricultural Policy transformed many of these rich countries from net food importers to net food exporters over this period.<sup>136</sup> Meanwhile, poorer countries, forced to lower barriers to entry for manufactured goods made in the North and encouraged to specialise in agricultural exports, were unable to gain access to Northern markets, leaving them in a highly precarious and disadvantaged position.<sup>137</sup> The situation was compounded by a move towards product substitution by industrial economies in the North that reduced demand for exports of the South. Industrial chemists made new sweeteners from grain instead of sugar, and blended once-profitable vegetable oils with soybean oil.<sup>138</sup> The terms of trade for tropical exports declined significantly in the 1950s and 1960s.<sup>139</sup>

The story of GATT, while the most commonly invoked in accounts on the history of international trade, is not the whole story. While the GATT regime was largely unresponsive to the needs of low-income countries in the South, alternatives were developed that sought to implement an active and coordinated food price policy for the

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<sup>133</sup> Gonzalez, Carmen G., “Deconstructing the Mythology of Free Trade,” p. 72.

<sup>134</sup> Humphreys, Stephen, *Theatre of the rule of law*, p. 213.

<sup>135</sup> Gonzalez, Carmen G., “Institutionalizing Inequality: The WTO Agreement on Agriculture, Food Security, and Developing Countries,” *Columbia Journal of Environmental Law* 27 (2002): 440-446.

<sup>136</sup> Between 1950 and 1997, the EU reduced its share of the world import volume of wheat, rice and maize from 62.6 per cent to 16.1 per cent. The EU’s export share increased from 5 to 17.9 per cent. FAO, “Half a Century of Food and Agriculture,” FAO Corporate Document Repository, 2000, <http://www.fao.org/docrep/x4400e/x4400e09.htm> “The 1980s”, Last accessed 17<sup>th</sup> August 2015.

<sup>137</sup> Gonzalez, Carmen G., “Institutionalizing Inequality: The WTO Agreement on Agriculture,” p. 434.

<sup>138</sup> Friedmann, Harriet, “Distance and durability: Shaky foundations of the world food economy,” p. 375.

<sup>139</sup> FAO, “Half a Century of Food and Agriculture,” “The 1960s”.



international market. This was one of the key demands of developing countries who, during the 1970s, sought the establishment of a New International Economic Order (NIEO) through the United Nations Conference on Trade and Development. Their efforts culminated in the establishment of International Commodity Agreements (ICA) which regulated prices of key commodities including tin, rubber, coffee, wheat and cocoa.<sup>140</sup> While this conferred some benefits on some developing countries, wealthier states benefited even more from these arrangements. The International Wheat Agreement (IWA) went into effect in 1949 and brought wheat-exporting and wheat-importing nations together to coordinate the market to ensure supply and prices.<sup>141</sup> The agreement took the form of a long-term multilateral futures contract between importers and exporters with the former promising to buy, and the later to sell fixed quantities of wheat in each year of the agreement's life. IWA exporting countries included the United States, Canada, and Australia, which, combined, accounted for more than 75 per cent of world wheat exports at the time.<sup>142</sup> The agreement helped to ensure significant stability in terms of world wheat prices and production between 1949 and 1970.<sup>143</sup>

Taken together, development prescriptions issued and entrenched through international legal instruments and institutions in the 1950s and 1960s served to exacerbate reliance on industrialised, specialised and increasingly unprofitable agricultural methods in countries in the Global South. At the same time, the same legal order operated to consolidate the power of industrialised nations in the North, particularly the US, over the trade in grain.<sup>144</sup> Much of the TWAIL literature is concerned with how

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<sup>140</sup> For a detailed exploration into the mechanics and significance of these instruments see Chimni, Bhupinder S., *International Commodity Agreements: A Legal Study*, London: Routledge, 1987.

<sup>141</sup> Winders, Bill, "The Food Crisis and the Deregulation of Agriculture," p. 88.

<sup>142</sup> McCreary, Ian, "Protecting the Food Insecure in Volatile International Markets: Food Reserves and Other Policy Options," Canadian Foodgrains Bank Occasional Paper, March 2009, p. 15.

<sup>143</sup> Harbury, C. D., "An Experiment in Commodity Control: The International Wheat Agreement, 1949-1953," *Oxford Economic Papers* 6, no. 1 (1953): 82-97.

<sup>144</sup> For further discussion of what Friedman and McMichael term the 'Second Food Regime', see Friedmann, Harriet, "The political economy of food: the rise and fall of the postwar international food order," *American Journal of Sociology* (1982): S248-S286.

Western nations were established as ‘exemplars of the future’,<sup>145</sup> — and how ‘backward nations’ were persuaded to ‘modernise’ in a manner that replicated the institutional structures of ‘developed’ states while also occasioning the subordination of Southern populations to the needs of those states. However, other work, notably by Amy Trauger, would suggest that this leaves the violence of the legal category of the developmental ‘state’ itself underweighted.<sup>146</sup> Newly empowered by international law, unelected but *now sovereign* elites were able to exercise unprecedented power over lands defined by the arbitrarily drawn borders of the colonists. The ability of people to determine their economic existence and to meaningfully exercise food sovereignty — to put this in the terms of contemporary discourse — was subordinated to the sovereignty of the nation-state.

## ii. Economic imperialism, law, and the state

A radical shift in thinking on the most appropriate institutional and legal frameworks for achieving economic development was brought about in the 1980s. As per the mandates of the neoliberal policy agenda, it was argued that the (developmental) state should refrain from ‘interfering’ with the economy. In effect, it should self-dismantle, and focus on ‘getting prices right’ by promoting fiscal discipline, removing distortions created by state intervention, and promoting liberalised trade with as few barriers to entry and exit as possible. Owing to the radical free market prescriptions that ensued, and to the manner in which these economic prescriptions were imposed on countries in the Global South, critics have likened this second iteration of development doctrine to a new form of imperialism — economics imperialism. As Susan George, Joseph Stiglitz, and Naomi Klein have all explored, a series of radical free market reforms were first put into practice

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<sup>145</sup> Pahuja, Sundhya, *Decolonising International Law*, p. 56.

<sup>146</sup> Trauger, Amy, “Toward a political geography of food sovereignty”.

via ‘experiments’ in Southern economies, most notably in South America.<sup>147</sup> As discussed at the end of Chapter Two, many of the policies were also implemented on home soil, in both the US and in the UK. However, extreme tactics including the financing of military coups and capitalising on wars and natural disasters were used to impose ‘economic shock therapy’ on other countries worldwide, as per the dictates of the ‘Washington Consensus’ — as this free market doctrine became known. Making markets ‘free’ involved rigorous and forcible interventions on the part of the US and, to a lesser extent, the UK governments, only this time into the economic and social affairs of other countries. Globally disseminating and maintaining a new consensus regarding desirable economic policy became a central vehicle through which countries in the North sought to sustain power and influence beyond their territories — in the countries of the Global South. It is true that this was also the case in the earlier period, given that development doctrine in the 1950s and 1960s was also premised on ‘science’ of economic growth. However, during the post-war period of what is often termed ‘embedded liberalism’, emerging states were still able to direct economic policy toward the realisation of social ends. As George, Stiglitz and Klein have all demonstrated, in the 1980s, the rise of a newly hegemonic free market doctrine severely circumscribed what limited room for manoeuvre governments in developing countries had left.

Before proceeding with an analysis of how this impacted on agriculture, food security and price volatility in the Global South, it is necessary to reinforce two points. Firstly, economics became imperial in a number of other aspects at this juncture. As Ben Fine has explored, economics began ‘colonizing other disciplines’<sup>148</sup> at this time.<sup>149</sup> Alternative economic perspectives were increasingly ostracised as a result of the

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<sup>147</sup> George, Susan, *A Fate Worse Than Debt*; Klein, Naomi, *The Shock Doctrine: The Rise of Disaster Capitalism*, London: Macmillan, 2007; Stiglitz, Joseph, *Globalization and its Discontents*, London and New York: Penguin Books, 2002.

<sup>148</sup> Fine, Ben, “‘Economic imperialism’: a view from the periphery,” *Review of Radical Political Economics* 34, no. 2 (2002): 187-201, p. 187.

<sup>149</sup> As Gary Becker has put it, “‘Economic imperialism’ is probably a good description of what I do.” See Becker, Gary, in Swedberg, R., (Ed.), *Economics and Sociology, Redefining their boundaries: Conversations with economists and sociologists*, Princeton: Princeton University Press, 1990, pp. 27-46.

ascendency of neoclassical economics.<sup>150</sup> Importantly, however, the dominance of neoclassical views of economics was not confined to a disciplinary take-over. The spread of economic tools of analysis to understand and analyse broader phenomena on a conceptual level was translated into policies and administrative practices have sought to restructure society to suit the needs of the market. Promoting market efficiency became the overriding objective. Second, under this new economic paradigm, the attention of the international economic institutions shifted from the establishment of an administrative state to the core institutions of private law.<sup>151</sup>

#### a. Agricultural liberalisation

Dependence on oil and the widespread reliance on foreign capital to fund industrialisation left many countries that had followed earlier iterations of development doctrine vulnerable to changes in international commodity and financial markets.<sup>152</sup> This was leveraged by the BWIs into strict conditions on the loans which it began extending to these countries, ostensibly to rescue them from this predicament. The philosophy behind ‘structural adjustment’ involved ‘putting exporters first, liberalising imports, privatisation and fiscal reform’.<sup>153</sup> Typically, the package of reforms introduced under structural adjustment consisted of trade liberalisation, the privatisation of industry and public services, deregulation, curtailment of government expenditures, elimination of barriers to direct foreign investment, financial liberalisation, and enforcement of private property rights.<sup>154</sup> By the mid-1980s, two-thirds of African countries and nearly three-quarters of Latin American countries had agreed to implement structural adjustment programs.<sup>155</sup>

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<sup>150</sup> Fine, Ben, “Economic imperialism’: a view from the periphery”.

<sup>151</sup> Trubek, David, and Alvaro Santos (Eds), *The New Law and Economic Development*, p. 2.

<sup>152</sup> Rist, Gilbert, *The history of development*, p. 115.

<sup>153</sup> World Bank, “*Adjustment in Africa: reforms, results, and the road ahead*,” A World Bank Policy Research Report, Washington DC: World Bank, 1994, p. 4.

<sup>154</sup> Gonzalez, Carmen G., “Deconstructing the Mythology of Free Trade,” p. 67.

<sup>155</sup> Peet, Richard, *Unholy Trinity*, p. 75.

The IMF and World Bank also made agricultural liberalisation a condition of loans.<sup>156</sup> In order to maximize the revenues available to service the foreign debt, developing countries were instructed to expand agricultural commodity exports.<sup>157</sup> They were further instructed to devalue their currencies in order to make their exports more competitive. However, as many countries in the South were urged into a similar strategy at the same time, this resulted in oversupply of exports in which they were specialising — cash crops and tropical commodities.<sup>158</sup> As George explains, this economic strategy ultimately depressed the export earnings of developing countries by glutting world markets with competing export commodities from multiple debtor nations.<sup>159</sup> At the same time, subsidised products from the Global North continued to flood developing country markets at prices far below the local price of production, devastating rural livelihoods, depressing domestic food production, and accelerating migration to urban areas.<sup>160</sup> A multi-country analysis of the effects of structural adjustment policies carried out in 2001 found that the aggressive shift to export production diverted land from food crops to cash crops and also inflicted serious environmental and ecological damage by accelerating the expansion of industrial agriculture.<sup>161</sup>

Importantly, the benefits of export growth were found to have gone primarily to multinational corporations to the detriment of domestic producers.<sup>162</sup> Small-scale farmers were particularly affected due to the removal of production subsidies and forced reliance on more expensive forms of private credit.<sup>163</sup> Government-controlled marketing boards that had acted as intermediaries between small farmers and multinational companies during the 1950s and 1960s were disbanded. Also discouraged and progressively

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<sup>156</sup> Winders, Bill, "The Food Crisis and the Deregulation of Agriculture," p. 90.

<sup>157</sup> Gonzalez, Carmen G., "The Global Food Crisis," p. 469.

<sup>158</sup> Robbins, Peter, *Stolen Fruit: The Tropical Commodities Disaster*, p. 30.

<sup>159</sup> George, Susan, *A Fate Worse Than Debt*.

<sup>160</sup> Madeley, John, *Food For All: The Need For A New Agriculture*, London: Zed Books, 2002, p. 120.

<sup>161</sup> Structural Adjustment Participatory Review International Network (SAPRIN), "The Policy Roots of Economic Crisis and Poverty: A Multi-country Participatory Assessment of Structural Adjustment," SAPRIN Report, Washington, November 2001, [http://www.saprin.org/SAPRIN\\_Synthesis\\_11-16-01.pdf](http://www.saprin.org/SAPRIN_Synthesis_11-16-01.pdf) Last accessed 7<sup>th</sup> July 2015.

<sup>162</sup> *Ibid*, p. 5.

<sup>163</sup> *Ibid*, p. 15.

dismantled were national grain reserves.<sup>164</sup> This left individual farmers with limited bargaining power to negotiate with large agribusiness, and resulted in declining terms of trade.<sup>165</sup> This disassembly was justified by the positioning of ‘market technologies’ — commodity futures and derivatives — as an improved tool for price (and risk) regulation.<sup>166</sup> However, many small farmers were unable to afford the minimum transaction required on futures markets — the minimum value for a contract for coffee in 2002 being \$18,000.<sup>167</sup> Divested of their former means of assistance and protection, many small farmers were left without protection in their dealings with large agribusiness firms, and were forced to compete unassisted in increasingly volatile international markets.

Financial liberalisation opened up the economies of developing countries to destabilising flows of international capital. These changes also divested governments of the ability to control the price of food domestically. A coercive relationship with the BWIs led to an increasingly coercive relationship with global commodity markets. As George has argued, ‘[a] nation loses its freedom of decision when it gears its production to exports whose prices it does not control in exchange for imports of the vital foods whose prices it does not control either’.<sup>168</sup> Concentration of market power and corporatisation in agriculture also gathered speed with the lifting of capital controls. Agricultural firms enlarged by merging and creating strategic partnerships with other companies in other countries and sectors — agribusiness, chemical and biotechnologies. This was critical to the emergence of what some are calling a ‘Third Food Regime’ — differentiated from the post-war global food order by a dominant role for global

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<sup>164</sup> Murphy, Sophia, “Grain Reserves: A Smart Climate Adaption Policy,” in Ben Lilliston and Andrew Ranallo (Eds), “Excessive Speculation in Agriculture Commodities: Selected Writings From 2008-2011,” IATP, April 2011, p. 18, <http://www10.iadb.org/intal/intalcdi/PE/2011/08247.pdf> Last accessed 13<sup>th</sup> June 2015.

<sup>165</sup> Robbins, Peter, *Stolen Fruit: The Tropical Commodities Disaster*, p. 31.

<sup>166</sup> Donaldson, Graham, “Food Security and the Role of the Grain Trade,” *American Journal of Agricultural Economics* 66, no. 2 (1984): 188-193, p. 190.

<sup>167</sup> *Ibid.*

<sup>168</sup> George, Susan, *How the other half dies*, p. 233.

corporations profiting from agri-food chains.<sup>169</sup> Significantly, these changes created a critical new source of vulnerability by exposing both the agricultural investments of small farmers and the broader economies of low-income countries in the South to the practices of financial speculators. The ability of countries to pursue alternative economic agendas to those advised by the BWIs has come to be substantially impeded by both speculative attacks on the currencies of ‘renegade’ nations and by the threat of capital ‘flight’. As both Isaac and Frank have explored, the policy prescriptions of the BWIs with respect to managing exchange rates have been a ‘virtual invitation to speculators’<sup>170</sup> who have made vast profits out of mounting attacks on the currencies of countries whose political agendas have strayed from development orthodoxy.<sup>171</sup> With regard to capital flight, as Epstein summarises, ‘[l]egislatures and citizens who want to buck the trend and achieve goals of high employment, egalitarian development and sustainable growth are paralysed by the threat that any policy which lowers the rate of profit will cause capital to be moved to more profitable environs, thereby reducing investment and lowering the community’s standard of living’.<sup>172</sup>

More broadly, as Orford emphasises, structural adjustment programmes impacted radically the ability of debt-burdened states to make social policy. Decisions about wage levels for workers, education policy, health policy, social security provision, provision of services, constitutional reform and levels of unemployment were all affected by the need to meet the demands of the BWIs.<sup>173</sup> Coercive policies of structural adjustment imposed by international economic institutions have thus been a critical factor in the now lamented ‘absence’ of social safety nets, ‘lack’ of investment in agriculture, and ‘poor

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<sup>169</sup> Burch, David, and Geoffrey Lawrence, “Towards a third food regime: behind the transformation,” *Agriculture and Human Values* 26, no. 4 (2009): 267-279.

<sup>170</sup> Isaac, I.I., *Alternative Strategies Towards Sustainable Economic Development for Africa*, Victoria, Canada: Trafford Publishing, 2009, p. 162.

<sup>171</sup> Frank, Ellen, “Capital Flows and Exchange Rate Policy,” *Foreign Policy in Focus*, 1<sup>st</sup> June 1999, [http://fpif.org/capital\\_flows\\_and\\_exchange\\_rate\\_policy/](http://fpif.org/capital_flows_and_exchange_rate_policy/) Last accessed 7<sup>th</sup> August 2015.

<sup>172</sup> Epstein, Gerald, “International Capital Mobility and the Scope for National Economic Management,” in Robert Boyer and Daniel Drache, *States Against Markets: The Limits of Globalization*, London: Routledge, 2005, p. 211.

<sup>173</sup> Orford, Anne, “Locating the International: Military and Monetary Interventions after the Cold War,” *Harvard International Law Journal* 38 (1997), p. 465.

track record' in agricultural production routinely laid at the feet of domestic governments and corrupt elites. While all of this was replaced by alternative legal arrangements facilitating market-based solutions such as private insurance schemes, as analysts at Oxfam have underlined, where private traders have moved in to replace the state, they have sometimes done so on highly unfavourable terms for poor farmers. In many instances, this left farmers more food insecure, and populations more reliant on unpredictable international aid flows.<sup>174</sup> Many of the policies imposed on governments throughout the South via the coercive lending practices of the BWIs were then cemented under rules of free trade agreements (FTAs) and the articles of agreement of the WTO.<sup>175</sup>

b. The Agreement on Agriculture and the demise of the ICAs

In a similar vein to the debate over PSNR, efforts of developing countries to change the past inequities of the global trading order via engagement with international trade law have been consistently frustrated by the operations of the trade regime. In reply to the complaints of developing countries, the Agreement on Agriculture (AoA), negotiated during the Uruguay Round of trade negotiations between 1986 and 1994, purported to mitigate inequities in international agricultural trade by gradually dismantling agricultural subsidies and tariffs in the Northern economies. However, ambiguities in the agreement's key provisions enabled developed countries to maintain high levels of agricultural protectionism. Notably, whilst the AoA's market access provisions required WTO members to convert quantitative restrictions and other non-tariff barriers into tariffs, and to reduce these over time, the absence of specific guidelines on how to do so meant that the majority of developed countries engaged in 'dirty tariffication' — the adoption of tariffs far more trade restrictive than the non-tariff

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<sup>174</sup> "Causing Hunger: An overview of the food crisis in Africa," p. 18.

<sup>175</sup> The Uruguay Round Agreement of Agriculture that came into effect in 1995 had a profound effect on domestic subsidies, price support programs and market access. For an extensive review of the way these rules affect small farm agriculture and food sovereignty, see Rosset, Peter M., *Food is Different: Why We Must Get The WTO Out of Agriculture*, London: Zed Books, 2006.



barriers they replaced.<sup>176</sup> The highest tariffs were for sugar, tobacco, meat, milk products, cereals and, to a lesser degree, fruits and vegetables — precisely the products of particular interest to developing countries.<sup>177</sup> The agreement also allowed countries that subsidised at the time to keep doing so, subject to certain reduction obligations, while prohibiting the introduction of new subsidies. These measures effectively granted exclusive rights to subsidise to those wealthy states in the North already doing so, entrenching existing levels of market distortion.<sup>178</sup> Thus, as Gonzales concludes, the Agreement institutionalised the unfair competitive advantage held by developed-country producers.<sup>179</sup> A 1999 study by the FAO on the impact of the AoA in sixteen developing countries found that the Agreement resulted in an increase in food imports and an accompanying decline in food production.<sup>180</sup>

The shift over the past decade away from the ad hoc-ery of the GATT to the pursuit of what Sylvia Ostry has called ‘detailed legalisms’<sup>181</sup> is often celebrated as a triumph — a move away from the discordant and elitist politics of GATT towards a more inclusive legal framework bringing certainty, predictability, and greater equity to international trade law.<sup>182</sup> However, the harmonisation agreements negotiated under the auspices of the WTO has prejudiced developing countries by preventing them from enacting social policies to improve their economic position globally. The reach of international influence over domestic policy has been extended by the designation policies that impact on trade indirectly as ‘behind the border’ measures equating to ‘trade

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<sup>176</sup> Gonzalez, Carmen G., “Institutionalizing Inequality: The WTO Agreement on Agriculture,” p. 458.

<sup>177</sup> *Ibid.*

<sup>178</sup> *Ibid.*, p. 461.

<sup>179</sup> *Ibid.*, p. 462.

<sup>180</sup> “FAO Symposium on Agriculture, Trade and Food Security: Issues and Options In The Forthcoming WTO Negotiations from the Perspective of Developing Countries”, Geneva, 23<sup>rd</sup>-24<sup>th</sup> September 1999, Session II b: “Experience with the implementation of the Uruguay Round Agreement on Agriculture - developing country experiences (based on case studies)”, Paper no. 3, <http://www.fao.org/docrep/meeting/x3065e.htm> Last accessed 7<sup>th</sup> August 2015.

<sup>181</sup> Ostry, Sylvia, *The Post-Cold War Trading System*, London: University of Chicago Press, 1997, p. 89.

<sup>182</sup> *Ibid.*, p. 101.

distortions'. As scholars including Rorden<sup>183</sup> and Lang<sup>184</sup> have explored, over time, a more radical free market agenda has been institutionalised at the WTO, and has been enforced and reinforced by a compulsory judicialised dispute-settlement regime. The vision of free trade inhering at the outset of the GATT — a vision that saw fully liberalised trade as wholly unadvisable — has been replaced by a radical free trade agenda that has delegitimised the idea that governments can and should conduct economic policy in the pursuit of collective political projects.<sup>185</sup> While agriculture and food security continue to be highly politicised topics, resulting in the prolonged deadlock of negotiations at the Doha Development Round,<sup>186</sup> the free trade agenda continues to be advanced through other regional arrangements relating to 'behind the border' measures, such as the Transatlantic Trade Partnership between the US and the EU, currently under negotiation. The potential impact on developing countries is as yet poorly understood; however, there are fears that hard-won preferential access schemes from which some developing countries have benefited might be undermined by the agreement.<sup>187</sup>

As well as the normalisation of a once-radical liberalisation agenda, the proliferation of 'free market' thinking has served to naturalise conceptions of agricultural price instability. The rise of the free trade agenda further led to the collapse of many of the ICAs. The last wheat agreement was approved in 1967 and lasted only three years.<sup>188</sup> After the failure of these international agreements, the markets for these commodities

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<sup>183</sup> Wilkinson, Rorden, *Multilateralism and the World Trade Organisation: the architecture and extension of international trade regulation*, London: Routledge, 2006.

<sup>184</sup> Lang, Andrew, *World trade law after neoliberalism: Reimagining the global economic order*, Oxford: Oxford University Press, 2011.

<sup>185</sup> *Ibid*, p. 18.

<sup>186</sup> Clapp, Jennifer, "WTO Agriculture Negotiations: Implications for the Global South," *Third World Quarterly* 27 (2006).

<sup>187</sup> Manrique, Gil Manuel, and Marika Lerch, "The TTIP's potential impact on developing countries: A review of existing literature and selected issues," Report for the Directorate - General For External Policies Policy Department, April 2015, pp. 7-8, [http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/549035/EXPO\\_IDA%282015%29549035\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/549035/EXPO_IDA%282015%29549035_EN.pdf) Last accessed 8<sup>th</sup> August 2015.

<sup>188</sup> McCreary, Ian, "Protecting the Food Insecure in Volatile International Markets," p. 15.

exhibited highly levels of price volatility.<sup>189</sup> Following the collapse of the IWA, and the dramatic price spike in 1972-74, prices became dominated by US and European agriculture policies.<sup>190</sup> In the twenty years since, volatility in the prices of agricultural staples has intensified.<sup>191</sup> Importantly, the depreciation of the US dollar during 2007-08, combined with the fact that many currencies are pegged to the US dollar and that grain prices on international commodity markets are denominated in US dollars, are all seen to have contributed to the acute impact of the spikes on developing countries during the global food crisis.<sup>192</sup>

### iii. (International) law and the global food system

As with any market, law is constitutive of the international market in food commodities. On both the domestic and international planes, critical elements of economic exchange — capital, labour, credit, money, liquidity — are creatures of law.<sup>193</sup> Legal rights, principles, institutions, documents, regulations, customs and actors are integral to the operation of the trade in any food stuff. Yet, as this analysis has sought to impress, it is not just the international market in food commodities that has been created and enabled through law; so too has the global food system. The characteristics of that system — in which the production of food is industrialised and specialised, and trade in food is globalised, monopolised and financialised — have everything to do with law. Extending from the colonial period and furthered under the banner of economic development, laws, both domestic and international, have been deeply implicated in driving a shift from a farming system controlled by local peasants based on resources

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<sup>189</sup> Winders, Bill, "The Food Crisis and the Deregulation of Agriculture," p. 90.

<sup>190</sup> McCreary, Ian, "Protecting the Food Insecure in Volatile International Markets," p. 14.

<sup>191</sup> Vargas, Mónica, and Olivier Chantry, "Ploughing through the meanders in food speculation," GRAIN Report, February 2011, p. 13.

<sup>192</sup> FAO, "Food Outlook," FAO Global Market Analysis, November 2010, <http://www.fao.org/docrep/013/al969e/al969e00.pdf> Last accessed 8<sup>th</sup> August 2015.

<sup>193</sup> Kennedy, David, "Law and the Political Economy of the World," *Leiden Journal of International Law* 26 (2013): 7-48, p. 8.

produced on the farm to one dependent on seeds, fertilizers, pesticides and machinery manufactured by multinational corporations headquartered in the developed world.<sup>194</sup> The muscular monetarism and the ‘expert’ knowledge practices of the BWIs could not have been put into practice were it not for facilitative legal regimes carrying them to fruition.

Of vital significance, however, is the point that law has not just been an instrument to translate colonial policies or economic ideologies into practice. Law has exerted its own influence into the mix. Legal forms and legal regimes have a life of their own. Norms of property, contract and nation-state structure particular agencies and empower people and governments to particular ends; imparted legal consciousness conditions how economics is practised and shapes the space for politics. Since the period of European colonialism, legal norms of property and contract have been utilised to facilitate modes of market transaction that result in the replacement of existing social ties with new market relationships. This has created new vulnerabilities, making more and more people newly dependent on the market for the means of survival. Rights of private ownership, the power to exclude others from land and resources, and the ability to engage in contractual relationships in which the interests of the contracting parties are paramount anticipate and produce a certain type of individualistic agency that is progressively naturalised. Over time, people have increasingly come to relate to one another, to the natural world, and to the production of food as *homines economici* — as self-interested, calculative market agents. This has left a lasting legacy. In fact, Southern investors and companies are now challenging their Northern rivals in the competition for control of the global food system. As the FAO has emphasised, levels of FDI are not as high as typically portrayed. In most countries, domestic investors acquire more agricultural land than foreign ones.<sup>195</sup> The expansion of agro-food corporations from emerging states confirms private agro-power is

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<sup>194</sup> Gonzalez, Carmen G., “Trade liberalization, food security and the environment,” p. 436.

<sup>195</sup> Lowder, Sarah K., Brian Carisma and Jakob Scoet, “Who invests in agriculture and how much? An empirical review of the relative size of various investments in agriculture in low-and middle-income countries,” ESA Working Paper No. 12-09, Rome: FAO, 2012, <http://www.fao.org/3/a-ap854e.pdf> Last accessed 7<sup>th</sup> August 2015.

also becoming polycentric.<sup>196</sup> Brazilian-based firms JBS and Brazil Foods, which rank at the top of global market share for meat and grains, are consolidating their positions through direct acquisitions of agro-food interests in the North.<sup>197</sup>

As David Kennedy has underlined, law is the link binding centres and peripheries to one another and structuring their interaction.<sup>198</sup> The ability of populations in the Global South to exercise meaningful control over the politics of food, over access to food, and over the price of food, has been substantially impeded as a result of a complex interaction between different legal regimes — notably those for trade and for investment. Law enables parties to transact far and wide, across vast distances, with people whom they will never know in person. It also facilitates the expansion of types of market enterprise. The much maligned power of large commercial agribusiness companies are made possible only through law. Webs of contractual relationships allow these enterprises to expand both vertically and horizontally into new markets — growing wheat, harvesting wheat, selling wheat, manufacturing bread, sourcing and refining fuel, modifying and patenting seeds, and selling agricultural insurance. ‘Global value chains’, as they are commonly designated, are only possible by virtue of property and contract law and thanks to other facilitative legal regimes such as bankruptcy law, company law, tax laws and creative tax lawyers, employment law, and law regulating the use of payments systems.

As well as linking economies in the North and South, law — and perhaps public international law above all — has functioned to simultaneously enable and disguise neo-colonial practices of interference with the economies and societies of countries in the Global South. It has been ‘the vernacular through which power and wealth justify their

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<sup>196</sup> Margulis, Matias E., “Trading Out of the Global Food Crisis? The World Trade Organization and the Geopolitics of Food Security,” *Geopolitics* 19, no. 2 (2014): 322-350, p. 326.

<sup>197</sup> *Ibid.*

<sup>198</sup> *Ibid.*, p. 7.

exercise and shroud their authority'.<sup>199</sup> As I will discuss below, NGOs, activists, journalists, human rights lawyers and other members of civil society remain inspired by the promise of international law — the promise of an inclusive, egalitarian, universal world order — and continue to issue their demands to tackle hunger in its terms. They remain largely insensitive to the fact that food insecurity and food price volatility are not natural phenomena to which law only responds — that they are, to a significant extent, the outcome of a proliferation of legal rules and regulations governing economic interactions among states and between states and their citizens. Taken together, particularly since the 1980s, what much of this law — general principles of public international law, particular regimes on international trade and investment law, and domestic legal concepts and norms — has done is to inhibit the kind of politics in which markets might play a subordinate role to the needs of human beings to access food. It has, in the characterisation of Wendy Brown, ‘undone the demos’<sup>200</sup> — dismantling meaningful opportunities for people to shape their lives, cultures, social practices and food systems in accordance with their wants.

#### IV. INTERNATIONAL LEGAL SOLUTIONS

In recent years, there has been a growing recognition that the prescriptions of the BWIs and the operations of international legal regimes on trade and investment have served to the detriment of countries in the Global South. Overwhelmingly, however, these interventions are seen to be a function of policy — development policy, economic policy, trade policy. While it is acknowledged that many of these interventions have been iterated under the auspices of international law, this does not dissuade would-be reformists from a belief in the transformative potential of rewritten rules. International lawyers, scholars, human rights activists and a broad array of critics of the dictates of

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<sup>199</sup> *Ibid.*

<sup>200</sup> Brown, Wendy, *Undoing the demos*.

development doctrine continue to position law as the solution to malfunctioning markets and inequities in the global food system. International law is also being positioned as the solution to new challenges that are regarded as a threat to food security in the post-crisis context, such as the ‘race for land acquisition and food production’,<sup>201</sup> commonly denoted the ‘global land grab’.<sup>202</sup> Managing these flows of investment and curbing excessive levels of FDI is continually positioned as a critical new challenge for the international community to respond to, as evidenced in the HLTF’s Comprehensive Framework for Action.<sup>203</sup> Another such challenge is the lack of investment in agriculture — perhaps the most oft-cited, and most under-interrogated, underlying ‘cause’ of the recent food crisis.<sup>204</sup>

International legal solutions to these challenges for food security come in four main guises: the proliferation of soft-law principles and guidelines, such as principles to promote responsible investment in agriculture;<sup>205</sup> a call for the harmonisation of international trade law with human rights obligations;<sup>206</sup> the promotion of the rule of law as a means by which domestic laws in developing countries can be strengthened; and the empowering of the food insecure via the fulfilment of a human right to adequate food. My aim in this chapter has been to shift the overwhelming focus on law as a solution to the global food crisis and the longer-standing ‘challenge’ of food insecurity. As I have

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<sup>201</sup> Martin, A., and M. M. Ayalew, “Acquiring land abroad for agricultural purposes: ‘Land grab’ or agri-FDI?” Report of the surrey international law centre and environmental regulatory research group, Rochester: Social Science Research Network, 2011, p. 4.

<sup>202</sup> Since 2008, there is a growing concern that private investors from regions including the Gulf States, China and the Republic of Korea, are taking over the use of agricultural land in developing countries. In Africa, foreign investors have shown a particular interest in crops such as rice, wheat and oilseed; in South Asia, they have targeted the large-scale production of rice and wheat. See “Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources,” A discussion note prepared by FAO, IFAD, UNCTAD and the World Bank Group to contribute to an ongoing global dialogue, Extended Version, 25<sup>th</sup> January 2010, [http://siteresources.worldbank.org/INTARD/214574-1111138388661/22453321/Principles\\_Extended.pdf](http://siteresources.worldbank.org/INTARD/214574-1111138388661/22453321/Principles_Extended.pdf) Last accessed 28<sup>th</sup> June 2015, Introduction, pp. 1-2.

<sup>203</sup> *Ibid.*

<sup>204</sup> “Foreign direct investment – win-win or land grab?” FAO document, <ftp://ftp.fao.org/docrep/fao/meeting/018/k6358e.pdf> Last accessed 28<sup>th</sup> June 2015, p. 1.

<sup>205</sup> “Principles for Responsible Agricultural Investment,” FAO, [http://www.fao.org/economic/est/issues/investments/prai/en/#.VZEpt\\_NwbGg](http://www.fao.org/economic/est/issues/investments/prai/en/#.VZEpt_NwbGg) Last accessed 28<sup>th</sup> June 2015.

<sup>206</sup> *Ibid.*, p. 91.

sought to demonstrate, law — not just development policy and institutional practice — is also part of the problem when it comes to the struggles of the food insecure. Overall, my critique of extant approaches to tackling hunger through law is precisely the point that these legal solutions fail to adequately consider the significance of the constitutive role of law in enabling the functioning of the global food system. I will now offer a few final reflections on what this might mean for the regulatory strategies of NGOs and for the widespread drive for the legal empowerment of vulnerable groups.

With regard to the proliferation of soft-law regulatory guidelines and principles seeking to make markets more responsive to the needs of the hungry, the immediate critique is that they lack any binding force. Upon closer scrutiny, many of these texts display a marked ambivalence concerning precisely how investors can acquire land ‘responsibly’. Recommendations such as those of the HLTF are fraught with tensions. For example, governments are instructed to balance the provision of social safety nets for vulnerable groups with the ‘efficient use of resources’.<sup>207</sup> They are enjoined to ‘reduce constraints to an enabling environment that encourages private sector growth’,<sup>208</sup> and to promote increased agricultural trade and more open trading environments.<sup>209</sup> They are also repeatedly advised that ‘more liberalized international markets contribute to global food and nutrition security’.<sup>210</sup> Yet, as this chapter has demonstrated, these market ‘solutions’ are precisely the measures that have hitherto operated to the disadvantage of food insecure people in developing countries. Comparable dynamics inhere in the response to calls for the realignment of trade law to promote food security. WTO officials are now working alongside experts from the FAO, WFP, and World Bank in inter-agency panels advising the G8 and G20 on policies to address food price volatility and improve agricultural market information.<sup>211</sup> However, Margulis’s search of WTO records relating

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<sup>207</sup> HLTF on the Global Food Security Crisis, “Updated Comprehensive Framework for Action,” p. 21.

<sup>208</sup> *Ibid*, p. 29.

<sup>209</sup> *Ibid*, p. 28.

<sup>210</sup> *Ibid*, p. 27.

<sup>211</sup> Margulis, Matias E. “Trading Out of the Global Food Crisis?” p. 334.



to the period between 2008 and 2010 suggests that the Global Food Crisis did not feature in the organisation's regular inter-state work.<sup>212</sup> Only one record exists of a discussion among states on that subject: a 2009 presentation by a group of Least Developed Countries at the meeting of a minor WTO sub-committee.<sup>213</sup> Overall, he concludes, there appears to have been little attempt within the WTO to go beyond the pro-liberalisation, pro-trade integration discourse when it comes to global hunger and malnutrition. Along similar lines, the G20 recently declared that 'a more stable, predictable, distortion-free, open and transparent trading system, including as regards agriculture, has a critical role to play to promote food security'.<sup>214</sup> The neoclassical economic logic implicit in this framing is that trade liberalisation reduces market volatility and spurs economic development.<sup>215</sup>

The drive to liberalise markets in spite of the detrimental impact that such an approach has had on developing country populations continue to inform strategies advanced by the international community to tackle hunger. That being said, since the 1990s, critical scholars have been debating the emergence of a new paradigm in law and development which some have suggested could be 'a more chastened form of neoliberalism'.<sup>216</sup> While markets remain the main mechanism for production and distribution of resources within societies,<sup>217</sup> it is widely recognised — particularly since the global financial crisis — that markets can fail. The 'post-Washington consensus', as it is sometimes called, has inspired shift from radical calls for deregulation to one of 'appropriate regulation'.<sup>218</sup> In line with this trend, the World Bank,<sup>219</sup> along with groups

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<sup>212</sup> Author's search of declassified WTO documents, WTO news releases and media reporting, *Ibid*, p. 336.

<sup>213</sup> This is a summary report presented by African countries describing a workshop organised by a Geneva-based NGO, the Centre for Socio-Economic Development (CSEND), made to the WTO's Sub-Committee on Least Developed Countries. *Ibid*.

<sup>214</sup> G20 Leaders Declaration, Los Cabos, Mexico, 19<sup>th</sup> June 2012, <http://www.g20.utoronto.ca/2012/2012-0619-loscabos.html> Last accessed 8<sup>th</sup> August 2015.

<sup>215</sup> Margulis, Matias E., "Trading Out of the Global Food Crisis?" p. 333.

<sup>216</sup> Trubek, David, and Alvaro Santos (Eds), *The New Law and Economic Development*, p. 3.

<sup>217</sup> *Ibid*, p. 6.

<sup>218</sup> *Ibid*, p. 7.

such as the World Justice Project, has been actively promoting ‘rule of law reform’ since the 1990s. It has been argued that reforming domestic legal systems, strengthening the independence of the judiciary, supporting civil society, and implementing human rights laws are all vital tools for ensuring ‘equitable’ economic growth. As the Bank underlined in 2003, ‘without the rule of law, economic growth and poverty reduction can be neither sustainable nor equitable’.<sup>220</sup> The potential that such reforms — notably the strengthening of private property rights — might hold in terms of bettering the lives of the vulnerable has been further explored by a number of legal academics.<sup>221</sup> Closer scrutiny of these postulated solutions, however, reveals that the ‘post’ Washington consensus has not yet moved beyond a drive towards market liberalisation. Nor, it would seem, has the tendency to prioritise the needs of financial investors above those of the food insecure been displaced. In fact, critiques of this particular legal ‘solution’ to challenges such as hunger and poverty go well beyond charges of inefficacy and extend further than tensions within their purported objectives. In a now substantial body of literature from critical academics, it has been argued that rule of law reform is the new guise of a familiar prescription on how ‘less civilised’ countries should conduct policy.<sup>222</sup>

Scholars including Humphreys,<sup>223</sup> Krever,<sup>224</sup> Newton,<sup>225</sup> Pahuja,<sup>226</sup> and Trubek and Santos,<sup>227</sup> have all argued that the imperialism of economics has given way to the

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<sup>219</sup> World Bank, “Legal and Judicial Reform: Strategic Directions”, Washington DC: The World Bank, 2003, [http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/10/24/000160016\\_20031024092948/Rendered/PDF/269160Legal0101e0also0250780SCODE09.pdf](http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/10/24/000160016_20031024092948/Rendered/PDF/269160Legal0101e0also0250780SCODE09.pdf) Last accessed 9<sup>th</sup> August 2015.

<sup>220</sup> *Ibid*, p. 1.

<sup>221</sup> De Soto, Hernando, *The mystery of capital: Why capitalism triumphs in the West and fails everywhere else*, New York: Basic books, 2000; Trebilcock, Michael J., and Ronald J. Daniels, *Rule of law reform and development: charting the fragile path of progress*, Edward Elgar Publishing, 2009.

<sup>222</sup> Humphreys, Stephen, *Theatre of the Rule of Law: Transnational Legal Intervention in Theory and Practice*, Cambridge: Cambridge University Press, 2010, p. 7.

<sup>223</sup> *Ibid*.

<sup>224</sup> Krever, Tor, “The legal turn in late development theory: the rule of law and the World Bank’s development model,” *Harvard International Law Journal* 52, no. 1 (2011).

<sup>225</sup> Newton, Scott, “Law and development, law and economics and the fate of legal technical assistance,” in Julia Arnscheidt, B. van Rooij and Jan Michiel Otto (Eds), *Lawmaking for development: explorations into the theory and practice of international legislative projects*, Leiden: Leiden University Press, 2008, pp. 23-52.

‘rule of law’ as the primary vehicle for the dissemination of ‘development’ prescriptions. In the place of conditionality, or sometimes supplementing it, Humphreys argues, rule of law ‘indicators’<sup>228</sup> are being operationalised to promote ‘the deliberate re-engineering, at a legal-structural level, of the economic, political and social basics of countries throughout the world’.<sup>229</sup> It is important to stress the ‘re’ of Humphreys’s characterisation. All of the economic reforms instilled into developing countries under the dictates of development doctrine have been contingent upon the engineering of suitable legal regimes to carry them to fruition. Yet, there is something novel about the openness with which law is now being called upon to create the ideal social conditions for markets. Precisely via a call for more regulation, it would seem, governments and societies worldwide are to be policed by law in the interests of the market. Based on how such interventions have manifested in the past, far from being a solution the international promotion of the rule of law may further entrench the very market entitlements that impede the poor and the hungry from accessing sufficient food.

Last but not least, the human right to adequate food has a prominent place in discussions of hunger and food security. During his time as Special Rapporteur on the Right to Food, Olivier De Schutter drew attention to key failings of the global food system inherited from the 20<sup>th</sup> century. His work has identified many of the factors conditioning food insecurity and price volatility that I have outlined in this chapter. The recommendations that he has made regarding the need to invest in sustainable agriculture, to diversify economies in agriculturally dependent countries, to establish social protection schemes, and to democratise food systems, are consistent with the demands of groups

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<sup>226</sup> Pahuja, Sundhya, *Decolonising International Law*, Chapter Five: Development and the Rule of (International) Law.

<sup>227</sup> Trubek, David M., “The ‘Rule of Law’ in Development Assistance: Past, Present, and Future,” in Trubek and Santos (Eds), *The New Law and Economic Development*, pp. 74-93, and Santos, Alvaro, “The World Bank’s Uses of the ‘Rule of Law’ Promise in Economic Development,” p. 253.

<sup>228</sup> See for example the World Bank’s Worldwide Governance Indicators, available at <http://info.worldbank.org/governance/wgi/index.aspx#home> Last accessed 9<sup>th</sup> August 2015.

<sup>229</sup> Humphreys, Stephen, *Theatre of the Rule of Law*, p. 8.

such as La Via Campesina advocating for food sovereignty.<sup>230</sup> The work of De Schutter, and of the broader human rights community, has done much to specify the particular needs of the hungry and to offer them a powerful vocabulary for articulating their claims for a more equitable global food system. The formalisation of human rights as legal entitlements is regarded by many in the human rights community as a key facet of their power. Yet, as a number of critical analysts have argued there are significant limitations to this power. While the substantive content of particular rights is elaborated in the work of rapporteurs and national and international courts and tribunals, this cannot overcome the indeterminacy of human rights. For Koskenniemi, human rights, ‘like any legal vocabulary, is intrinsically open-ended; what gets read into it (or out of it) is a matter of subtle interpretative strategy’.<sup>231</sup> Duncan Kennedy adds that ‘rights provide only a *langue*, used to produce an infinite variety of particular arguments and particular regimes of positive law, as *parole*’.<sup>232</sup> More often than not, what results is an interpretation of the content of the right that favours the party most able to defend and enforce its interests. As China Miéville, surmises, drawing on Marx, ‘[b]etween equal rights, force decides’.<sup>233</sup>

An extensive body of scholarship continues to be elaborated debating the merits of attempting to utilise human rights law to achieve social — and economic — justice. I have not yet engaged sufficiently with this work to advance a comprehensive critique of why I remain sceptical about the potential for human rights law to fulfil the expectations many place on it. In this thesis, I will confine my caution against the widespread faith in the advancement of human rights law as a solution to hunger to two points only. Firstly, a lot of the work on human rights tends to assume the market system as the primary means for accessing food. As Makau Mutua — along with many others — has argued, the human rights movement is ‘at its core, and in many of its details, liberal and

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<sup>230</sup> De Schutter, Olivier, “Final report: The transformative potential of the right to food”.

<sup>231</sup> Koskenniemi, Martti, “The Politics of International Law – 20 Years Later,” *European Journal of International Law* 20, no. 1 (2009): 7-19, p. 9.

<sup>232</sup> Kennedy, Duncan, “Three Globalizations of Legal Thought,” p. 67 referencing Martha Minnow, “Interpreting Rights: An Essay for Robert Cover,” *Yale Law Journal* 96 (1987) p. 1860.

<sup>233</sup> Miéville, China, *Between Equal Rights: A Marxist Theory of International Law*, Leiden: Brill, 2005.

European’.<sup>234</sup> It is, he contends, ‘indebted to a certain model of liberal political (and market) democracy’.<sup>235</sup> There is no overt prescription for a market economy in international human rights law. However, the rights protected under that framework and the values it promotes, such as individual freedom and choice, would appear to presuppose one. The legal regime upon which modern market structures are based — private property rights, contractual entitlements, and criminal and tort laws that penalise interference with those rights — has been demonstrated by Amartya Sen to be adept at producing hunger and famine ‘with a vengeance’.<sup>236</sup> Far from providing a radical tool for change, then, under international human rights law, people are expected to fight for their rights within the very same systems and structures that have entrenched their vulnerability. Secondly, many of the current efforts to strengthen the human right to adequate food are largely being carried out in the absence of a convincing explanation of how this will empower the food insecure while existing entitlements that prohibit access to land and to resources, and that conspire against the affordability of food, remain in place. Is it possible to strengthen economic access to food for these populations without weakening the entitlements of others — multinational companies, financial speculators? Can improvements to infrastructure, agricultural production techniques, social protections and education translate into food security when the price of basic staples can double in a day, drop a month later, and out-price the World Food Programme? Can a right to adequate food ‘trump’ a contract for the sale of 100 tonnes of wheat to make a profitable price an affordable one? As long as these questions continue to go unaddressed, further elaboration of the law seeking to ground a human right to adequate food may be of little practical use for the hungry. For these reasons, at least, I find the faith placed in human rights law as a solution to hunger to be misplaced.

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<sup>234</sup> Mutua, Makau, *Human Rights: A Political and Cultural Critique*, Philadelphia, PA: University of Pennsylvania Press, 2008, p. 3.

<sup>235</sup> *Ibid.*

<sup>236</sup> Sen, A., *Poverty and Famines: An Essay on Entitlement and Deprivation*, p. 4.

## CONCLUSION

In this chapter, I have sought to demonstrate that narratives that locate responsibility for the suffering caused by the 2007-08 global food crisis in the failure of domestic governments distract from the role that international regimes of governance have played in this context. Importantly, I have argued that law and not just policy and institutional practice has actively contributed to the production of food insecurity and grain price volatility. Public international law, the international trade and investment regimes, and domestic legal restructuring, have all contributed to the construction of a global food system that profoundly disadvantages Southern populations in their ability to command access to food. Yet approaches to the problem of hunger continue, as with responses to the phenomenon of food commodity speculation, to represent law as exclusively remedial. The constitutive role of law in enabling market operations and entrenching inequalities between North and South remains widely neglected.

## Conclusion

The global crises in food and finance in 2007-08 have prompted calls for the use of regulation to tackle an array of socially damaging market trends. More broadly, law is being posited as the solution to problems as diverse as a lack of transparency in financial markets, financial ‘over-complexity’, inequities in the international trading system, land-grabbing, and a lack of credit for small farmers. Of particular significance for my research, NGOs and campaigners concerned about the impact of food commodity speculation on grain prices have gravitated towards regulation as a tool to constrain speculative trading practices. Equally, the acute impact of the grain spikes on the food insecure — people residing predominantly in low-income countries in the Global South — has inspired renewed efforts by the international community to use law to adjust markets to the needs of vulnerable populations.

The overall question that I have sought to explore in this thesis is whether this focus on regulatory solutions is an adequate strategy when the role of law and the state in constituting markets is taken into account. My conclusion is that there are serious impediments to the ambitions of those enjoining governments to use regulation as envisaged. The ability of the state to regulate the market in the interests of the food insecure, and in the interests of society in general, is likely to be impeded by the proliferation of a body of constitutive law that is working to the opposite effect — laws that are actively working against social interests to promote the efficient operation of

market mechanisms. As my investigation into the linkages between financial speculation, global hunger and law has helped to illustrate, laws entrenching the market and facilitating speculative behaviours appear to be progressively ‘economizing the social’,<sup>1</sup> to use the characterisation of Wendy Brown. I will finish my analysis by arguing this point.

In Part I, I will provide an overview of the main arguments that I have elaborated throughout the chapters of my thesis. In Part II I will address some of the tensions between the constitutive law of the market and the regulatory ambitions of NGOs and campaigners. In Part III I will focus in on some of the constitutive law of the market and consider what this law might be effectuating in society. In Part IV I will present my final argument as to why regulation may not be an adequate strategy for tackling food commodity speculation and meeting the ‘challenge’, as it is characterised, of food insecurity.

## I. SUMMARY OF ARGUMENTS

### i. World Hunger and the Global Food Crisis

In Chapter One I sought to engage with the thinking underlying contemporary approaches to tackling hunger. I concluded that dominant strategies centred on achieving food security and fulfilling the right to adequate food suffered from a critical limitation. Although these approaches manifest as a comprehensive set of tools to address the problem of hunger, this work is being carried out in the absence of a convincing diagnosis of what is animating the ‘food insecurity’ in the first instance. Taking steps to remedy this, I suggested that one of the main causes of hunger for people in the 21<sup>st</sup> century is the global food system itself. I argued that this industrialised, specialised,

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<sup>1</sup> Brown, Wendy, *Undoing the Demos*, p. 62.



monopolised market structure in which poor countries' consumers are forced to compete with richer ones for access to food has to be understood as a producer of hunger and poverty for a significant proportion of the world's population. The events of the global food crisis, wherein spikes in the prices of staple foods were transmitted globally and impacted most acutely on vulnerable groups, testified to this fact. Importantly, however, the particular form of the global food crisis occasioned a previously unthinkable prospect. Claims that financial traders engaged in practices of food commodity speculation were responsible for the price volatility suggested that a new obstacle had arisen, further undermining access to food by the food insecure. No longer solely the expression — or product — of a commodified global food order, the grain spikes of 2007-08 and 2010-11 intimated that the price of food had become a commodity in its own right.

## ii. Food Commodity Speculation

In Chapter Two I explored debates that have emerged out of claims that the practice of food commodity speculation 'caused' the global food crisis. I noted that, while NGOs and campaigners have amassed a compelling body of evidence on the existence of a causal link between grain price volatility and speculative practices, this evidence has been refuted by economists arguing that such a causal connection is impossible. Engaging with the common claim of campaigners that pricing dynamics in commodity markets have been altered through 'financialisation', I turned to history to explore the processes whereby commodity futures contracts were transformed into an asset in their own right. I then drew on evidence from contemporary market practice and other theories of value to critique the foundational assumptions of market behaviour that inform dominant economic thinking on commodity price formation. I concluded that neoclassical economic theory is fundamentally unable to account for the possibility that processes of financialisation could have altered the mode in which actors transact in markets.

Moving on to consider the significance of speculation from a broader framework of explanation, I argued that the shift to a financialised economy brought about under the neoliberal policy agenda had affected a fundamental shift in mode of capital accumulation. This conspired to make speculating on commodities in contravention of so-called ‘fundamental’ values the economically rational thing to do. Performed over time into a market logic of speculation, market actors are being formatted into a mode of trading that is increasingly dissociated from the underlying productive economy. The drive to keep finding ways to ‘profit without producing’ also serves to inspire efforts to develop new financial products and to evade regulations. These, I suggested, were some of the hallmarks of a speculative market logic that is differentiated from the longer-standing logic of *homo economicus* not by the object of market transactions — profit-making being common to both — but by the preferred mode of realising profit — in the case of markets, through ‘speculative multiplications’.<sup>2</sup>

### iii. Regulation

Chapter Three provided an analysis of the market reforms in the US and in Europe that are attempting to give effect to the G20 commitment to develop new regulations for the OTC derivatives market. I focused my analysis on those provisions that NGOs hope will restrain ‘excessive’ levels of speculation in commodity derivatives. Comparing the two regimes, I assessed the likelihood that regulatory provisions could shield food prices from speculative interference. After explaining a number of challenges that have arisen with the efforts to implement the reforms, I concluded that the provisions offered slim hope for the project of tackling food commodity speculation. Upon closer inspection, the regulations were revealed to be largely constructed on an understanding of financial market dynamics informed by neoclassical economic theory. Position limits — the key measure that campaigners have fought to ensure is not weakened by industry opposition

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<sup>2</sup> Lapavistas, Costas, *Profiting Without Producing*, p. 38.

— treat speculatively-conditioned food price volatility as a function of market monopoly. As I argued in Chapter Two, this is not the most persuasive explanation of the market movements. In a second set of arguments I concluded that the regulations were also limited as they introduced old rules to new markets, fundamentally failing to take into account the large constituency of interests and the drive to maintain financial pathways to profit — a function of speculative market logic — that would conspire in their evasion. Extending my analysis beyond the extant reforms into a broader critique of financial regulation, I intimated critical limitations to regulation as an apparatus of reform in the current political climate.

#### iv. ‘OTC’, ‘Financial’ Innovation, and Food Commodity Speculation

In Chapter Four I sought to move away from the almost universal tendency within the discourse on food commodity speculation to conceptualise law as the solution to socially harmful behaviour in this context. Practices of food commodity speculation are widely portrayed as taking place in a realm beyond regulatory reach — in a ‘legal black hole’ or ‘regulatory void’. First challenging the notion that derivative instruments were developed spontaneously as a response to ‘forces’ of liberalisation, I challenged this prevalent portrayal, tracing the origins of the OTC market to a legal fiction known as off-shore finance. I then suggested that the label ‘OTC’ might function in a similar vein. This appellation generates an impression of the OTC market as an unregulated, private, global market that operates beyond the regulatory capacities of the state. While there is much about these markets that would corroborate this account, upon closer scrutiny, the operations of, and, indeed, *the very existence of* these markets was revealed to be critically dependent on legal vindication by public laws and legal institutions of the state. I then ventured to suggest what the utility of this legal fiction might be. I argued that the label ‘OTC’ serves to distance governments from the socially damaging activities taking place with the OTC market. The legal fiction of OTC also performs the myth of the self-

regulating market and, in doing so, conspires in the presentation of speculative economic behaviour as natural and necessary — as something that can best be managed with a light regulatory touch. In a third suggestion, I argued that the label ‘OTC’ conditions a false sense of these markets as something novel — something arising out of a constellation of novel technological ‘forces’ and opportunistic subjectivities — and not something that informed by longer-standing logics of capitalism.

In the final sections of the chapter, I sought to develop a better understanding of what some of the often overlooked constitutive law in the OTC arena actually does. Challenging the characterisation of derivative instruments as ‘financial’ technologies, I drew attention to some of the earlier and, I argued, more critical legal innovations that have enabled the trade in these financial products to develop. The dissociative state which is a hallmark of speculative logic was shown to have been partially conditioned by legal innovations. Private property rights, contractual rights, and their recalibration has been influential in conditioning a subjectivity in which the exercise of those rights is increasingly detached from a sense of the other interests affected by their exercise. I then pointed to a range of further legal innovations that have served to enable a more speculative trade in these contracts. Far from merely enabling a pre-formed speculative agency, contractual standardisation, options structures, collateral and techniques of rehypothecation have to be understood as partly conditioning that agency. Finally, I argued that both economic and legal theory enable speculative agency inasmuch as they conceptualise derivatives transactions as taking place between two individual agents. This fundamentally fails to account for the pricing signal communicated to broader society.

v. The ‘Global’ Food Crisis, the Global Food System, and (International) Law

With Chapter Five the focus shifted to the constitutive role of law in facilitating the operations of the global food system. I began by exploring the highly localised and differentiated impact of what was portrayed as a ‘global’ food crisis. Contesting prevalent perceptions of the relationship between law, food insecurity, and food price volatility, I probed the significance of law for these phenomena affecting food. Beginning with the period of European colonialism, I argued that law was a critical tool in restructuring colonised societies in accordance with the civilising mission of 19<sup>th</sup>-century public international law. These interventions laid the foundations for the elaboration of the global food system, giving rise to new vulnerabilities and restrictions that impacted on the ability of populations to access adequate food. I then explained the critical contribution of public international law in enabling the perpetuation of neo-colonial practices of economic ‘development’. Since the period of decolonisation, I argued, legally sanctioned interventions in the domestic economies of countries in the Global South have further prejudiced access to food and exacerbated conditions of price volatility in international commodity markets. Significantly, however, the role of law in this context goes beyond that of a mere instrument, as it is typically understood in critical literature on international development. Legal regimes, both domestic and international, have created new linkages between the ‘core’ and the ‘periphery’, they have empowered monopolistic agribusiness companies, and they have helped to condition self-interested calculative market agencies. All of this has created a wealth of market entitlements that actively impede the ability of poorer populations to access sufficient food. Moving on to scrutinise the international legal solutions purporting to respond to food insecurity in the post-crisis context, I highlighted a number of problematic tensions informing these strategies, particularly the ongoing drive towards a liberalised global economic order. I further noted the arguments of other critical scholars who have been arguing that it is precisely through this rhetoric of the need for more law that undue influence over the economies in the Global South is being sustained. I concluded by suggesting that the

widespread faith in human rights law as a means of tackling hunger might be misguided, owing to a failure to explain how the strengthening of these entitlements at law can overcome the exclusionary effect of other legal rights — of the very same market entitlements that are entrenched by virtue of other legal regimes.

## II. THE OTHER LAW

In this thesis, I have questioned contemporary preoccupations with legal solutions to the global food crisis and food insecurity, focusing instead on the constitutive role of law in giving rise to these phenomena. I will now seek to put these two differing discourses concerning the role of law in markets into conversation with each other. I will further reflect on the significance of what the operations of the constitutive law in the market imply for the ambition to curb ‘excessive’ speculation and to use law to tackle food insecurity and food price volatility.

### i. Constitutive law and the market

The first question to address in this analysis is what is meant by the ‘constitutive’ law within the market. Constituting something is commonly understood to mean instituting, establishing, or enacting it.<sup>3</sup> To argue that something is constitutive of something else suggests that the constitutive component is elemental to the thing being constituted; that it is essential to the nature, or the character of that thing. In simple terms, then, the constitutive law in the market is the law that enables the market to exist. This, of course, leads into the much debated question of what is a market. Julia Black provides an excellent overview of competing economic and sociological perspectives on this question

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<sup>3</sup> “Constitutive,” <http://www.thefreedictionary.com/constitutive> Last accessed 31<sup>st</sup> July 2015.

in her article, “Seeing, Knowing, and Regulating Financial Markets”.<sup>4</sup> I will not rehearse these debates here. Sticking with the classic economic definition, which understands markets as mechanisms of exchange between competing buyers and sellers resulting in the efficient allocation of scarce resources,<sup>5</sup> the constitutive law of the market is the law that enables people to engage in market exchange. It is the law that enables them to buy and sell commodities, or to carry out financial transactions, such as speculating in markets for food commodities. As concerns in what this law consists of and where it is to be found, much of this constitutive market law can be found in the terms in legal contracts. These terms, as Black argues, ‘will be the terms, for the most part, on which markets operate’.<sup>6</sup> However, as Michel Foucault has underlined, the laws constituting the market extend far beyond individual contracts setting terms for instant market transactions. Economic life, he emphasises, ‘takes place within a juridical framework which fixes the regime of property, contracts, patents, bankruptcy, the status of professional associations and commercial societies, the currency, and banking, none of which are given by nature...but are the contingent creations of legislation’.<sup>7</sup>

A number of important points extend from Foucault’s reminder. The first is that the scheme of laws giving rise to any given market is broad and takes a variety of forms. The conditions of possibility for markets are created via the interactions between a plurality of different legal regimes, institutions and agencies. A second point is that, although much of the constitutive law of the market is conceptualised as private law, this private law is created and vindicated by the state. As discussed earlier, in the context of the market for OTC derivatives, private legal regimes can only operate with the support of public institutions. Third, in order for new markets like the OTC market to emerge, this requires the ‘redefinition of the juridical institution and of the necessary rules of right

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<sup>4</sup> Black, Julia, “Seeing, Knowing, and Regulating Financial Markets: Moving the Cognitive Framework from the Economic to the Social,” *LSE Law, Society and Economy Working Papers* 24 (2013).

<sup>5</sup> *Ibid*, p. 5.

<sup>6</sup> *Ibid*, p. 21.

<sup>7</sup> Foucault, Michel, *The Birth of Biopolitics: Lectures at the Collège de France 1978-1979*, Senellart Michel (Ed.), trans. Graham Burchell, New York: Picador, 2004, p. 161.

in a society...the redefinition, broadly speaking, of law'.<sup>8</sup> Before a new market can emerge, a facilitative body of market law must be developed to enable its operations. Thus, the existence, form, functioning, and development of any market are the product of consistent interventions by the state and its legal institutions.

The argument that markets are constituted by law is by no means a novel one. It has been suggested by Karl Polanyi,<sup>9</sup> expanded on by Max Weber,<sup>10</sup> and explored further by the Legal Realists,<sup>11</sup> by institutional sociologists,<sup>12</sup> and by theorists from Science and Technology Studies.<sup>13</sup> There is an emerging body of contemporary scholarship that is probing more deeply into the significance of law in facilitating market transactions from numerous perspectives. This includes a revived interest in the notion of 'economic constitutionalism',<sup>14</sup> an emerging body of work on the constitutive law necessary for the operations of 'global' and 'virtual' markets,<sup>15</sup> and scholarship on the legal theory of finance.<sup>16</sup> As Julia Black has noted, '[t]here is absolutely no novelty to an institutionalist (though there is to an economist) in claiming that markets are constituted by the state, including law and the legal system'.<sup>17</sup> And what holds for institutionalists presumably also holds for lawyers. It is curious, then, that in much legal writing from public law perspectives that touches on markets, almost no mention is made to the role of law in

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<sup>8</sup> *Ibid.*

<sup>9</sup> Polanyi, Karl, *The great transformation: The political and economic origins of our time*, Beacon Press, 1944.

<sup>10</sup> Weber, Max, *Economy and society: An outline of interpretive sociology*, California: University of California Press, 1978.

<sup>11</sup> Llewellyn, Karl N., "The effect of legal institutions upon economics," *The American Economic Review* 15, no. 4 (1925): 665-683; Hale, Robert L., "Coercion and distribution in a supposedly non-coercive state," *Political Science Quarterly* (1923): 470-494.

<sup>12</sup> Fligstein, Neil, *The Architecture of Markets*.

<sup>13</sup> Callon, Michel, *The Laws of the Markets*.

<sup>14</sup> Möschel, W., "The Proper Scope of Government Viewed from an Ordoliberal Perspective: The Example of Competition Policy," *Journal of Institutional and Theoretical Economics* 157 (2001): 3-13. For a critical review of economic constitutionalism see Gerber, D. J., *Law and Competition in Twentieth Century Europe: Protecting Prometheus*, Oxford: Oxford University Press, 2008.

<sup>15</sup> Harvey, Rachel, "The legal construction of the global foreign exchange market"; Harvey, Rachel, "The sub-national constitution of global markets," in Saskia Sassen, *Deciphering the global: Its spaces, scales and subjects*, London and New York: Routledge, 2013, pp. 201-219.

<sup>16</sup> Pistor, Katharina, "A legal theory of finance," *Journal of Comparative Economics* 41, no. 2 (2013): 315-330.

<sup>17</sup> Black, Julia, "Seeing, knowing, regulating," p. 14.



enabling market operations. Furthermore, while many private lawyers and legal academics are experts in and, indeed, are the very agents extending and recalibrating ‘rules of right’ to develop new market instruments, they often appear indifferent to how their actions relate to the state and its legal institutions.

Importantly, while for some the constitutive role of law in the market is old news, conceptions of newer financial markets, such as the OTC derivatives market, evidence greater nescience in this regard. Modern global markets, particularly financial markets, are imagined to operate autonomously, to exist beyond the jurisdictional reach of states, and to be capable of ‘self-regulation’. This perception is garnered, not only by the arguments of neoclassical-inspired economists and the veneration of their claims under the neoliberal policy agenda, but also, and perhaps counterintuitively, by the arguments of neoliberalism’s critics. Opponents of the neoliberal political programme and its potent manifestation in the ‘Washington Consensus’ have railed against deregulation, privatisation, and liberalisation — the ‘hollowing out’ of the nation state<sup>18</sup> — all of which is said to have left society to the machinations of a ‘chronically unstable, contradictory and crisis-ridden’ capitalism.<sup>19</sup> What they have failed to mention, however, is that ‘deregulation’ is nothing of the sort. It involves a shift from centralised regulatory mechanisms to institutions of private law — institutions that remain crucially dependent on the state for their operation. The vital point that law, markets, economy, and politics are mutually constitutive, that they comprise a ‘singular figure in which economic processes and institutional frameworks call on each other, support each other, modify and shape each other in ceaseless reciprocity’,<sup>20</sup> appears to have been drowned out in the clamour for more regulation.

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<sup>18</sup> Jessop, Bob, “Hollowing out the ‘nation-state’ and multilevel governance,” *A Handbook of Comparative Social Policy*, Cheltenham: Edward Elgar Publishing, 2004, pp. 11-25.

<sup>19</sup> Peck, Jamie, and Adam Tickell, “Jungle law breaks out: neoliberalism and global-local disorder,” *Area* (1994): 317-326, p. 317.

<sup>20</sup> Foucault, Michel, *The Birth of Biopolitics*, p. 164.

ii. Already regulated

At this juncture I wish to expand on the distinction between regulatory law and constitutive law in the market. As discussed in Chapter Three, regulation typically involves governing by restriction. It seeks to effect amendments or adjustments to what is *already there*. The market is taken as a given. Regulatory law for the market typically seeks to change how people act in markets; to create permissions and prohibitions; to offer incentives; to say what can be done, when, by whom, and according to what rules. There is, then, an important contrast with constitutive law, in that constitutive law *brings what is there into being*. Constitutive law is not confined to specifying how markets transactions are to be transacted — it is a prerequisite to the very possibility of a market transaction. Yet, and the crucial significance of this has to be impressed, the constitutive law in the market *also serves a regulatory function*. The constitutive law also informs how people act within markets, creates permissions and prohibitions, and offers incentives and disincentives for behaviour. Finally, constitutive law mandates what can be done, when, by whom, and according to what framework of rules and expectations.

The significance of this for NGOs and other campaigners is that the market ‘phenomena’ that they are seeking to remedy through the application of law are, to a significant extent, themselves products of law. Speculative trading practices, a lack of access to food, food price volatility, financial complexity, land-grabbing, and, more broadly, hunger and poverty are conditioned by legal regimes that are already in place and that have been put in place and sustained by governments. This, at least in my estimation, is what Amartya Sen demonstrates through his analysis of ‘entitlements’, as discussed in Chapter One. Famines and longer-term food deprivation are not naturally occurring events or states. They are the outcomes of a legal order in which land can be privately owned and people excluded from using it, in which food is first and foremost a commodity to be bought and sold, and in which rights of private ownership and

contractual rights to trade can all be exercised without consideration for the need of human beings for food for their survival. The same applies to practices of food commodity speculation and its impact on grain price volatility. By determining what can be done, when, by whom, and according to what rules in financial markets, law creates a permissive space for speculative practices. These behaviours are allowed and even encouraged to proliferate. Over time, what results from this ‘economic-institutional ensemble’<sup>21</sup> is a market logic of speculation. All of this suggests that developing *additional regulatory regimes* might not be necessary if adjustments were made to some of the constitutive law enabling market operations in the first instance. Rather than focusing on the powers of centralised regulatory agencies, an alternative approach could be to focus on the *powers of dispersed regulatory agents* already operational within the market — powers endowed by the constitutive law in the market.

Another insight gleaned from focusing on the constitutive role of law in the market is a more enlivened sense of the limitations of regulation as a solution to problematic aspects of markets. What seems to result from superimposing new regulations on the market structure without contemplating the significance of the legal regimes already in place is the displacement of problematic market behaviours. Regulatory categorisations often appear arbitrary and quickly become outdated; substantial resources are poured into projects that result in games of regulatory cat and mouse. Equally, attempts to make markets fairer by facilitating access for poor countries and consumers often manifest in a modicum of corrective action and a largely untouched status quo. Inequitable market foundations and structures, and deeper organising logics that prompt regulatory evasion, speculative behaviour, and exploitative practices of accumulation remain in place and at work. Attempting to devise tools and techniques to socialise this institution further entrenches market arrangements as the only available means for facilitating the production and consumption of food. Regulation also helps legitimise inequitable market structures by fostering the notion of a ‘win-win’ solution. It creates the illusion that it is

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<sup>21</sup> *Ibid*, p. 167.

possible to simultaneously maintain profitable financial markets and to protect society from profit-seeking speculative behaviours; that we can retain the benefits of a liberalised trade in agricultural commodities and insulate the food insecure from price volatility; that respecting, protecting and fulfilling the right to adequate food can be achieved all the while upholding existing private property rights and contractual claims over land and productive resources. A focus on regulatory solutions elides the possibility that realising both sets of such goals may be unachievable; that these goals might, in fact, be in tension with one another.

### III. WHAT THE OTHER LAW DOES

Gathering together some of the insights developed in Chapters Four and Five, I will now look more closely at how the constitutive law that enables the market actively contributes to food insecurity and food price volatility, and how it facilitates speculative behaviours. More broadly, I will now consider how this body of law might be impacting on society. I will then further elaborate on why I see this as likely to undermine efforts to respond to problematic trends within markets with regulatory solutions.

The dynamics that I discuss below are based on my analysis of markets for commodity derivatives and for underlying food commodity markets. However, some of the following observations may also ring true for law's operation in markets more generally. That being said, markets are multi-faced, complex institutions and can be markedly influenced by local cultures and customs. While my arguments may intimate some general tendencies in the dynamic between legal norms, market functions, social relations, and human behaviours, I do not claim that they have universal validity. My aim here is to register what the constitutive law in the market could be creating within society, how that impacts on the needs of the hungry, and how, in turn, this could affect

regulatory aspirations. I offer these suggestions as a springboard for further research into these dynamics.

i. Market entitlements

In *The Great Transformation*,<sup>22</sup> Polanyi placed great emphasis on the role of the state in instituting new market relationships and in creating a centralised economy. It was Weber who argued for the inherent dependency of the rise of the capitalist economy on ‘formal rational law’ — the form of law characteristic of Western modernity.<sup>23</sup> As my discussion in Chapter Five further underlined in the context of European colonialism, over time, legal norms of property and contract facilitate modes of market transaction that result in the replacement of existing social ties with new market relationships. What Polanyi and Weber further helped to demonstrate is that although markets are not naturally occurring social forms, over time, the constitutive body of law facilitating market operations can make them appear as such. Law can function to obscure the arbitrary and violent means by which rights were originally distributed and assigned in society. Background norms of property and contract become social norms; society no longer remembers or sees the force or political wrangling used to establish private property rights over land or resources, or to create a new generation of rights over commodities as financial assets. Increasingly, markets are seen to operate as sites of freedom in which human beings follow their natural inclinations to pursue profit in their own self-interest.

Beyond merely enabling commodity markets to function, the legal structures that create the market also create *market entitlements* that actively prevent many poorer groups within society from accessing sufficient food. Those who have lost out in the push

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<sup>22</sup> Polanyi, Karl, *The Great Transformation*, p. 43.

<sup>23</sup> Weber, Max, *Economy and society: An outline of interpretive sociology*, California: University of California Press, 1978.

for an industrial revolution, or in the march towards ‘civilisation’ and modernity, continue to lose out as a result of the legal rights that entrench the distribution of resources forged through these ‘advances’. No matter what the social stakes, property rights that exclude other people from accessing land and resources are respected, protected, and fulfilled by governments and by courts. The exercise of property rights and contractual rights is rarely subject to question, even when they are elaborated into more ‘exotic’ financial instruments. Forwards contracts, exchange-traded futures contracts, OTC derivatives, and the plethora of financial instruments enabling securitisation and collateralisation have all been elaborated by lawyers adapting and extending these basic legal building blocks. Significantly, while many such financial products are seen to be of dubious social merit, these developments appear possessed of a kind of legal fortitude that enables them to weather social disapproval. Perhaps because they have their basis in some of law’s most unquestioned and long-established institutions, derivatives seem to be treated with deference by the judiciary and by the legislature. Certainly, there has been no great objection or even close interrogation of the legal forms giving rise to novel financial products since the claim of the financial services industry to be able to use them to manage risk took hold. Through their proliferation, these new legal forms can be seen to be governing more and more aspects of social life — agricultural production, access to credit, the value of a country’s currency, oil prices, food prices, etc. In spite of the monumental significance that they have had in altering modes of accumulation and in the rise of financial complexity, the legal schemes enabling these paradigmatic shifts have been subject to remarkably little critical scrutiny.

Market entitlements constitute critical barriers to prospects of regulatory reforms that could address food commodity speculation, or improve the lives of the food insecure. It is no longer possible to ban derivatives, to question the exercise of rights of ownership over resources or contractual rights over financial assets, or to put the needs of the hungry above the rights of investors. To do so would be considered tyranny — a trespass on individual liberty — as these rights are now seen to be part of the natural order of things.

Other modes of regulating access to land, resources and food that present alternatives to ‘free’ markets and pricing mechanisms seem unrealisable. The possibility of fixing a ‘just’ price for wheat<sup>24</sup> — either through social legislation or an instrument such as an international commodity agreement — seems unworkable, impossible even. The constitutive law of the market affects a kind of imaginative lock-in — an implicit constraint on reformist ambitions.

## ii. Market subjectivities

Overwhelmingly, private legal regimes are seen to be merely facilitating the pre-formed economic ambitions of ‘economic man’. However, as Lang and others have argued, law has to be understood as part of a broader set of structuring mechanisms that help to constitute *homo economicus* and his operative rationality.<sup>25</sup> In this thesis, I have suggested that legal norms of property and contract, and the kinds of social relationships that they structure, have to be understood to be anticipating and producing this kind of market subjectivity. Assuming and empowering this subjectivity via facilitative legal norms and regimes would appear to bring it to life and entrench it as a mode of being. Increasingly, a calculative self-interested mode of engagement with others is what is expected of human beings — both when transacting in markets and, increasingly, in other aspects of social life.

Importantly, market subjectivities partially conditioned through law appear to be sensitive to changes in that law. As well as interposing a new layer of entitlement between food and human beings seeking to gain access to it, legal innovations are also

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<sup>24</sup> The ‘just price’ was ‘a price which would neither “disgust” merchants nor “wound” consumers. It was a regular feature in market exchanges throughout the 18<sup>th</sup> and 19<sup>th</sup> centuries. Kaplan, S. L., *Bread, Politics and Political Economy in the Reign of Louis XV*, The Hague: Martinus Nijhoff, 1976, Vol. 1, pp. 58-59.

<sup>25</sup> Lang, Andrew T.F., “The Legal Construction of Economic Rationalities?” *Journal of Law and Society* 40, no. 1, (2013): 155-71.

responsible for the reconditioning of market subjectivities. Through what might be designated as ‘legal plasticity’ — the adaption and innovation of basic institutions of property and contract — one might even say a form of neuroplasticity is occasioned. Neuroplasticity refers to changes in neural pathways and synapses due to changes in behaviour, environment, neural processes, thinking, and emotions — as well as to changes resulting from bodily traumas.<sup>26</sup> Legal instruments enabling market actors to transact speculatively, thereby altering the environments, imperatives, and experience of transacting in financial markets have a corresponding impact on the mental processes of those transacting. Alongside the new pathways to financial profit, also forged through legal innovations have been new market subjectivities that are impressed with the need to keep those pathways open, or, in the event of their closure, to develop new ones. Another significant and constantly shifting hurdle, then, for regulators to surmount.

### iii. Market expansion

As well as endowing certain market actors with entitlements, the constitutive law in the market also allows markets to expand. Prior to the development of the legal regimes necessary to processes of commodification and market exchange, people tended to obtain resources necessary to their survival through relationships of proximity and trust. Law was critical to the restructuring of social relations through which large-scale market operations and such a thing as a state economy became possible. Today, law makes possible the existence of markets for food and financial assets that span the globe. As well as enabling markets to expand geographically, the creative elaboration of private rights into new contractual structures spans new temporalities (futures contracts), expands participation by enrolling new types of actors in the market via the elaboration of new contractual structures (commodity index funds), and can help to lower transaction costs and make trading more efficient (commodity options). Law is also a prerequisite to the expansion of types of market enterprise. Large commercial operations staffed by

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<sup>26</sup> “Neuroplasticity”, <https://en.wikipedia.org/wiki/Neuroplasticity> Last accessed 2<sup>nd</sup> August 2015.



hundreds of people working in disparate fields across numerous continents are made possible only through law.

In creating these new inter-linkages, however, law is also helping to condition new forms of dislocation and dissociation. As legal regimes enabling market transactions are progressively elaborated, people are alienated not only from their land and from the fruits of their labour but also from a sense of what their market transactions produce. Consumers purchasing a loaf of bread in a supermarket are often wholly ignorant of the circumstances in which the wheat it contains was grown and harvested — where it was produced, who produced it, whether the producers were paid a fair wage, and whether that wage enables the producers to feed themselves. Such consumers are not likely to be reflecting on the fact that, by purchasing that bread, they are exercising demand for grain that might — taken together with the purchases of their fellow shoppers at Tesco — ultimately result in making the grain unaffordable for poor consumers in Ethiopia or Bangladesh if markets are ‘tight’. Equally, Chinese investors negotiating a contract for the purchase of farmland in Africa from an office in Beijing are not required to look beyond the acceptability of those contractual terms to anyone other than themselves and the government lawyers and officials with whom they are negotiating. As the laws enabling market transactions are standardised and the trade of a given commodity routinised, what can result is the kind of radically dissociative market trading evident in practices of food commodity speculation. Not only are the parties to such contracts dissociated from the interests of others extending from the food commodities that they are buying and selling, they are detached from a sense that what they are trading is food at all.

Crucially, legal institutions appear insensitive to the *market power* that is being created through the making and interlinking of markets. As discussed in Chapter Five, linking the economies of the ‘core’ and the ‘periphery’ has enrolled those with less market power into a highly disadvantageous dynamic with market actors with greater

power. It has created the means by which the weak can (continue to) be exploited by the strong, intensifying the inequities in their relationship. Yet, all that is visible in the eyes of the law is a web of contractual relationships between ‘equals’ — nation states; consenting contractual partners. Furthermore, with the development of new contractual structures that create interlinkages between commodity markets and financial markets — between the financialised economy and the productive one — new forms of market power have emerged, influencing food prices in novel ways. While it is understood that the interests of poorer consumers are prejudiced by those of richer ones as a result of such connections, the precise nature of this process remains poorly understood. As the debate concerning the causal significance of food commodity speculation in the grain spikes in 2007-08 and 2010-11 would attest, there is a great need to question still-dominant thinking on how commodity prices are formed in contemporary markets. The influence that derivative instruments can exert on processes of value formation is still being investigated. This leads regulators into a familiar trap —that of knowing what they do, and even knowing why they do what they do, but not knowing *what what they do does*. The problems inherent in regulating complex markets without interrogating the constituents of that complexity have been demonstrated throughout this thesis. What largely transpires is regulatory evasion, and yet more financial and legal complexity.

#### iv. Market myths

As the characteristics of *homo economicus* have been progressively naturalised, private legal regimes are increasingly seen to be merely facilitative of this pre-existing market rationality. Thus, another market myth emerges — the myth of the self-regulating market. As a result of an enabling body of law that allows individuals to contract bilaterally, instantaneously, and outside of established exchanges, markets have emerged that are widely understood to operate independently of law and the state. As explored in Chapter Four, law is integral to the existence and functioning of the OTC market, whilst

simultaneously enabling it to appear as ‘self-regulating’. The label ‘OTC’ operates as a legal fiction — a statement iterated in partial awareness of its untruth that, over time, creates the perception that this market really is a global private market unregulated by the state. The apparent insensitivity of economists and lawyers to the fact that they are engaged in the production of a legal fiction would testify to the power of the mystifications created by such legal regimes.

Governments and all manner of public agencies and actors benefit from this distancing which absolves them of responsibility for the undesirable social consequences of activities within such markets. Financial speculators are cast as an anomaly — lone rangers or mavericks taking the ordinary mode of market behaviour to an unhealthy extreme. They are outcasts operating in a ‘lawless’ arena to which the state and law are called to respond. More precisely, to draw on Fleur Johns’s recent scholarship, they are consigned to exogeneity, a non-legal zone that seems to surpass legal grasp or comprehension.<sup>27</sup> These ‘unruly’ behaviours are seen to take place in the ‘myth of the dangerous dark’,<sup>28</sup> to quote Susan Marks. Lawyers are gainfully employed in perpetuating this myth from both sides — many operating inside the ‘dark’ markets, others charging in with their regulatory ‘light’. Private lawyers write new contracts to enable a type of market transaction; regulators respond, crafting regulations and principles to constrain certain financial behaviours and govern markets for the social good. But then more lawyers begin work on the instruments to circumvent the regulations — ‘block futures’ to take the functionality of OTC derivatives, or new legal structures to enable subsidiarisation, or to relocate activity to another jurisdiction. While ‘OTC’ may be a myth, from a lawyer’s perspective, it is a profitable one.

The constitutive law of the marketplace lends itself to the reproduction of false separations: between offshore and onshore; between regulated futures markets and OTC

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<sup>27</sup> Johns, Fleur, *Non-legality in international law: unruly law*, Cambridge: Cambridge University Press, 2013, p. 10.

<sup>28</sup> Marks, Susan, “Four Human Rights Myths,” in Kinley, Sadurski and Walton (Eds.), *Human Rights: Old Problems, New Possibilities*, Edward Elgar Publishing, 2013, p. 231.

derivative markets; between public and private spheres; between domestic and international planes; and between political and economic issues. This occurs because the constitutive law in the market is seen as being neutral — as merely facilitating the desires of those transacting. It is positioned in opposition to the interventionist ‘public’, in spite of its reliance on public institutions for its form, function, and efficacy. All of these mythical separations inspire elaborate efforts to defend society from predatory financial practices, to ponder the future directions of ‘globalisation’, to lament the subjugation of social life to the demands of profit, and to claim helplessness in the face of monumental market powers like Cargill, or incidents of speculative ‘frenzy’. It allows events such as the global food crisis and the global financial crisis to be studied in minute detail, but studied separately. In spite of all of the political choices, the economic assumptions, the legislation, the treaties, the contracts, the legal innovations, the rehypothecations, the entitled actions and the profitable extractions involved, the law creating the myth of the self-regulating market somehow eviscerates responsibility for what this law begets in society. It is as if the activities of financial traders operating in the OTC arena were only the result of their own self-serving choices, and not the consequence of other choices — political ones. The same applies for the domestic governments so frequently found at fault for failing to protect the food insecure. It is interesting to note that, while responsibility for socially prejudicial practices in the OTC arena is disavowed by gesturing to a global realm beyond regulatory reach, responsibility for the acute vulnerability of Southern populations to commodity price volatility is foisted on the governments of the countries concerned. In both cases, the same governments who have been active in the creation of these markets, and in elaborating the legal regimes that facilitate their operations, are miraculously in the clear. In terms of the implications for regulatory ambitions, those ambitions have, hitherto, been largely misdirected. NGOs, campaigners and the media have become embroiled in the condemnation of greedy speculators and a project of defending regulations from attempts by the financial services industry to water them down — even battling in court to do so. Yet, all of this legal drama functions to distract from the pervasive normality of speculative practices, and

from the fact that the OTC market and its operations have always been firmly within governmental grasp.

Taken together, then, what does the constitutive law of the market effectuate within society and how might this operate, as I have sought to demonstrate, to impede efforts to regulate markets for the betterment of society? I will now suggest that what much of this constitutive law effects is what Brown and Foucault each identify as the *regulation of society by the market*.<sup>29</sup>

#### IV. FOOD COMMODITY SPECULATION, HUNGER, AND THE GLOBAL FOOD CRISIS: WHITHER REGULATION

Economising the social, or regulating society by the market, means economics imperialism. It means regulating society based on what is good for markets and not what is good for people. It means prioritising market and transactional efficiency and conducting cost-benefit analysis so that economic values concerning how to optimally deal with scarce resources come before social values — concerns about fairness, justice, quality of life, friendship, and love. The realisation of profit becomes a model of social relations, so that the individual's relationship with himself, with time, with those around him, and with the group, is conducted on this basis.<sup>30</sup> People become, as Brown argues, always and everywhere *homo economicus*.<sup>31</sup>

The regulation of society commensurate with market interests has been ongoing since the 19<sup>th</sup> century — since 'The Great Transformation'. Through legal regimes facilitating market transaction, human beings have gradually been structured into a mode

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<sup>29</sup> Foucault, Michel, *The Birth of Biopolitics*, p. 145.

<sup>30</sup> *Ibid*, p. 242.

<sup>31</sup> Brown, Wendy, *Undoing the demos*, p. 33.

of self-interested, calculative engagement with those around them. However, the restructuring of society to complement the efficient operation of markets has been significantly intensified and accelerated since the 1980s, under the neoliberal policy agenda. As Feher, Foucault and Brown all argue, centralised governance of the market in the interests of society is replaced by a new mode of neoliberal governance — a governing rationality — that ‘transmogrifies every human domain and endeavour, along with humans themselves, according to a specific image of the economic’.<sup>32</sup> Under neoliberalism, individual liberty is seen to be paramount and can only be achieved in the context of ‘free markets’. However, the project of ‘freeing’ markets has involved consistent interventions by the state to elaborate legal regimes for markets that function as alternatives to centralised regulation. Processes of liberalisation and deregulation did not involve the removal of law; rather its reconfiguration. The removal of centralised capital controls would have been impossible without the availability of a private law alternative: financial derivatives to protect industry from new forms of financial risk. Banks and other financial institutions were only permitted to ‘self-regulate’ — i.e. to be afforded the chance to operate under less scrutiny from centralised agencies — due to the use of all manner of financial instruments to collateralise and securitise loans, calculate outstanding obligations, and hedge against speculative transactions. A political vision of what is best for society — a vision underpinned by a set of economic assumptions about how people will behave in markets — has been transposed into a mode of market governance elaborated from some of law’s most basic institutions, property rights and contract law, into a private regime of regulation that governs in the interests of the market. Overt government regulation of the economy has been transposed into an array of largely contractual private law mechanisms and techniques, which are used as tools of public governance. As Brown underlines, the state is, for its part, being ‘privatized, enfolded, and animated by market rationality in all of its own functions’.<sup>33</sup>

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<sup>32</sup> Brown, Wendy, *Undoing the demos*, p. 10.

<sup>33</sup> *Ibid*, p. 40.

This crystallisation of a constitutive body of legal rules to give effect to prescriptions of market freedom has been extended to the broader global economy. Trade liberalisation and the free movement of capital are effectively constitutionalised in the WTO's Articles of Agreement and judicialised via the decisions of its dispute settlement procedure. They are also enshrined in regional trade agreements, such as the North American Free Trade Agreement, legislated as one of the 'four freedoms' of the EU, and further entrenched via the protection of the rights of foreign investors by the international investment regime. What appears to be emerging is a neoliberal economic constitution in which market rights and freedoms are protected from any form of encroachment or interference by the state. In contrast with the stated aims of advocates of 'economic constitutionalism',<sup>34</sup> market rights, rather than social rights, it would appear, are increasingly entrenched as inviolable entitlements that are immunised from governmental power. As the domain of the market expands and market entitlement are crystallised, non-market forms are being crowded out. Human beings are tangled in a web of legal relations that facilitate markets and debilitate other ways of being. Fewer people than ever have access to 'the commons', and fewer people too have the possibility of growing their own food. As Saskia Sassen argues in her book, *Expulsions*, law is a vital constitutive element in producing what she describes as 'elementary extractions' and social 'expulsions'.<sup>35</sup> In countries both rich and poor, she argues, people are being forced out of society, and their lives regulated according to market imperatives.<sup>36</sup> Yet, alongside this highly destructive impact, these legal regimes also have a creative dimension. An economic agency assumed by economic theory, empowered by law, and elaborated into new financial products not only creates new markets, it produces new market mindsets that seek to evade regulation, that keep finding profitable pathways to profit, to further commoditise and financialise the natural world and human relationships.

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<sup>34</sup> Möschel, W., "The Proper Scope of Government Viewed from an Ordoliberal Perspective"; Gerber, D. J., *Law and Competition in Twentieth Century Europe*.

<sup>35</sup> Sassen, Saskia, *Expulsions*, Cambridge Mass: Harvard University Press, 2014, pp. 1-2.

<sup>36</sup> *Ibid.*

Here then, in the legal empowerment of an imagined *homo economicus* and the restructuring of his environment in line with a vision of ‘free’ markets, is where an important part of the explanation for the grain spikes in 2007-08 and 2010-11 can be located. Equally, the ongoing difficulties of the food insecure have also been further entrenched by this mode of governing society according to market imperatives. These developments have provoked widespread concern. Yet, the primary mode of responding has been the elaboration of regulations that leave many of the market entitlements, liberalised market conditions, and market subjectivities of the pre-crisis order intact. Neoclassical economic theory has been questioned, but many of its operative assumptions continue to inform regulatory strategies. The need to address ‘excessive’ volumes of financial speculation has been repeatedly iterated, but the factors giving rise to speculative market logic remain under-interrogated. Doubts have been cast on the likelihood that liberalised commodity markets can function to suit the needs of the food insecure, yet the drive to liberalise markets is intact and at work.

Regulation purports to protect society from the excesses of the market and to improve the situation of the food insecure but fails to touch or even to acknowledge the role that other legal regimes are playing in giving expression to market excess, and in actively excluding and prejudicing the poor and hungry. For these reasons, in my view, regulation is not an adequate strategy for tackling the phenomenon of food commodity speculation or addressing long-standing inequities in (market) access to food. As the domain of the market continues to expand, all the while enabled by laws that many treat as inconsequential or invisible, it is increasingly unclear whose society, and what kind of society, are left for regulation to protect.





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